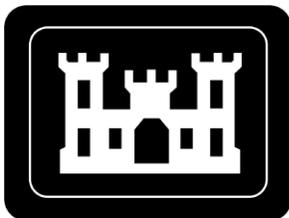

REVISION 0

**ST. LOUIS DOWNTOWN SITE ANNUAL
ENVIRONMENTAL MONITORING DATA
AND ANALYSIS REPORT FOR
CALENDAR YEAR 2019**

ST. LOUIS, MISSOURI

JULY 6, 2020



**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

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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
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
<i>CFR</i>	<i>Code of Federal Regulations</i>
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	<i>Environmental Monitoring Guide for the St. Louis Sites</i>
EMICY19	<i>Environmental Monitoring Implementation Plan for the St. Louis Downtown Site for Calendar Year 2019</i>
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	<i>Multi-Agency Radiation Survey and Site Investigation Manual</i>
MDA	minimum detectable activity
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
NCRP	National Council of Radiation Protection and Measurements
NESHAP	National Emissions Standards for Hazardous Air Pollutants
NRC	U.S. Nuclear Regulatory Commission
ORP	oxidation reduction potential
PDI	pre-design investigation
QA	quality assurance
QAPP	quality assurance program plan

ACRONYMS AND ABBREVIATIONS (Continued)

QC	quality control
QSM	<i>Department of Defense (DoD)/Department of Energy (DOE) Consolidated Quality Systems Manual (QSM) for Environmental Laboratories</i>
Ra	radium
RA	remedial action
RL	reporting limit
RME	reasonably maximally exposed
Rn	radon
ROD	<i>Record of Decision for the St. Louis Downtown Site</i>
RPD	relative percent difference
SAG	<i>Sampling and Analysis Guide for the St. Louis Sites</i>
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
USACE	U.S. Army Corps of Engineers
USCS	unified soil classification system
USEPA	U.S. Environmental Protection Agency
VP	vicinity property
VQ	validation qualifier
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)
NTU	nephelometric turbidity unit
pCi/L	picocurie(s) per liter
WL	working level
yd ³	cubic yard(s)

EXECUTIVE SUMMARY

This annual Environmental Monitoring Data and Analysis Report (EMDAR) for calendar year (CY) 2019 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 2019, 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 2019* (EMICY19) (USACE 2018a) was conducted as planned during CY 2019. 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 EMICY19 (USACE 2018a). 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 0.7 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 2019 was the 21st 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; July 18, 2016 and June 11, 2018 (MSD 2006, 2008, 2010, 2012, 2014, 2016, 2018). This authorization expires July 23, 2020 (MSD 2018). During CY 2019, no exceedances of the MSD limits occurred at the SLDS.

GROUND-WATER MONITORING

Ground water was sampled during CY 2019 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 EMICY19. 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 EMICY19 and in Section 4.0 of this EMDAR. For those stations where an analyte exceeded the ground-water criteria at least once during CY 2019 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 2019, four hydrostratigraphic unit (HU)-A monitoring wells (B16W06S, B16W08S, DW19RS, and DW21) were sampled (Figure 4-3). B16W06S and B16W08S were sampled in the fourth quarter for arsenic, cadmium, and radionuclides (Ra-226, Ra-228, thorium [Th]-228, Th-230, Th-232, uranium [U]-234, U-235, and U-238). DW19RS was sampled for arsenic, cadmium, and radionuclides in the first, second, third, and fourth quarters. DW21 was sampled for arsenic and cadmium in the third quarter. Trend analysis was conducted for arsenic in B16W06S and DW21, cadmium in DW21, and total U in B16W08S. 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 DW21 (Figure 4-4) and a statistically significant upward trend for total U in B16W08S (Figure 4-5). No statistically significant trends in arsenic concentrations in B16W06S or cadmium concentrations in DW21 were identified. Because the majority of their historical results were near or below their detection limits (DLs), a trend analysis was not performed for cadmium, Th-228, or Th-230 in B16W06S or B16W08S.

During CY 2019, six HU-B (Mississippi Alluvial Aquifer) monitoring wells (B16W06D, B16W07D, B16W08D, DW16, DW18, and DW19RD) were sampled. Mann-Kendall Trend Tests were conducted for COCs that exceeded the ILs in HU-B wells during CY 2019: arsenic in DW16 and DW18. The results of the Mann-Kendall Trend Tests for arsenic indicate statistically significant upward trend in DW16 and DW18.

In addition, trend analysis was not conducted for DW19RS or DW19RD because the Mann-Kendall Trend Test is performed only at those wells where data have been collected for at least six sampling events. Only four sampling events have occurred since the installation of DW19RS and DW19RD in March 2019.

Potentiometric surface maps were created from ground-water elevations measured in May 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. Comparison of Figure 4-7 (May) with Figure 4-9 (November) indicates ground-water flow patterns in HU-A differ for the wet and dry season

conditions during CY 2019. The May 10, 2019 map indicates a reversal of the typical flow direction in HU-A, with ground water flowing southwest, away from the Mississippi River. The reversal is a result of well-above-normal precipitation during the previous weeks, with the Mississippi River exceeding flood stage during this time. These conditions led to increased localized recharge near the river banks (i.e. increased bank storage) that is reflected in higher than normal water levels reported for the shallow wells located near the banks of the Mississippi River.

In HU-B, ground-water flow and direction are strongly influenced by river stage, which indicates a hydraulic connection to the Mississippi River (Figures 4-8 and 4-10). The flow direction at the site is generally north-northeast toward the Mississippi River. The high river conditions occurring in May 2019 did not cause significant ground-water flow direction changes in areas more than approximately 600 ft from the river bank, although the water levels measured in the HU-B wells at the SLDS in May 2019 were higher than typically reported for previous years. Localized ground-water mounding was observed in the vicinity of the three HU-B wells B16W06D, B16W07D, and B16W08D, likely due to increased recharge from the river and increased seepage from overlying HU-A in that area.

On May 29, 2019, an artesian effect was observed in a flush mount well at the SLDS, HU-B well B16W09D. Flowing artesian wells occur when pressure in the aquifer forces ground water above the ground surface so that the well will flow without a pump. Between June 3 and June 17, artesian effects were observed in three additional flush mount HU-B wells at the SLDS, B16W06D, DW17, and DW14. The flowing artesian conditions were in response to major flooding and the continued rise in the river gage height for the Mississippi River at St. Louis through May and early June of 2019. The river crested on June 8, 2019. By late June, the artesian effects had ceased in all four wells.

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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) 2019 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 2019, and provide analysis of the CY 2019 environmental monitoring data results. This EMDAR presents the following information:

- Sample collection data for various media at the SLDS and interpretation of CY 2019 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 2019* [EMICY19] [USACE 2018a]);
- 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 2019, the following USACE SLDS documents were finalized:

- *CY 2018 Fourth Quarter Laboratory QA/QC Report for the FUSRAP St. Louis Radioanalytical Laboratory & Associated Satellite Laboratories* (January);
- *St. Louis Downtown Site Annual Environmental Monitoring Data and Analysis Report for CY 2018* (June 14);
- *CY 2019 First Quarter Laboratory QA/QC Report for the FUSRAP St. Louis Radioanalytical Laboratory & Associated Satellite Laboratories* (June);
- *CY 2019 Second Quarter Laboratory QA/QC Report for the FUSRAP St. Louis Radioanalytical Laboratory & Associated Satellite Laboratories* (August);
- *Pre-Design Investigation Summary Report and Final Status Survey Evaluation for the Accessible Soil within the St. Louis Downtown Site Vicinity Property City Property (DT-2) North of McKinley Bridge* (August 12);
- *Post-Remedial Action Report and Final Status Survey Evaluation Addendum for the Accessible Soil within the St. Louis Downtown Site Plant 1 Former Building 17 Area* (September 25);
- *Post-Remedial Action Report for the Accessible Soils within the St. Louis Downtown Site Heintz Steel and Manufacturing Vicinity Property (DT-6) and Midwest Waste Vicinity Property (DT-7)* (September 30);
- *CY 2019 Third Quarter Laboratory QA/QC Report for the FUSRAP St. Louis Radioanalytical Laboratory & Associated Satellite Laboratories* (October); and
- *Environmental Monitoring Implementation Plan for the St. Louis Downtown Site for Calendar Year 2020* (December 23).

1.3.1 St. Louis Downtown Site Calendar Year 2019 Remedial Actions

During CY 2019, RAs were performed at the following SLDS properties (Figure 1-2): Destrehan Street, Gunther Salt North VP (DT-4), Gunther Salt Kiesel, and Plant 7 West (henceforth referred to as Plant 7W). RAs at Destrehan Street, Gunther Salt North VP (DT-4), and the Gunther Salt Kiesel continued throughout the year. RAs at Plant 7W resumed in and continued through the fourth quarter. A total of 9,626 yd³ of contaminated material were shipped from the SLDS via railcar to US Ecology in Michigan for proper disposal. Additionally, loadout activities were performed at Plant 6.

Multi-Agency Radiation Survey and Site Investigation Manual (MARSSIM) (DOD 2000) Class 1 verifications were performed at Gunther Salt North VP (DT-4) (survey unit [SU]-4 and SU-5), Gunther Salt Kiesel (SU-3), Plant 1 Building 10 (SU-1), Plant 7W (SU-7) and Destrehan Street (SU-6) during CY 2019. MARSSIM Class 2 verifications were performed at Gunther Salt Kiesel structures. No MARSSIM Class 3 verifications were performed during CY 2019. 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.

Characterizations/pre-design investigations (PDIs) were performed at Lange-Stegmann (DT-9) during CY 2019.

No monitoring wells were decommissioned in CY 2019.

In accordance with the Metropolitan St. Louis Sewer District (MSD) authorization letter for the SLDS, 2,119,984 gallons of excavation water were discharged in CY 2019. Since the beginning of the project, 32,427,729 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 2019.

All radiological air monitoring required through implementation of the EMICY19 (USACE 2018a) was conducted as planned during CY 2019. 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 0.7 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 2019 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 National Council of Radiation Protection and Measurements (NCRP) estimates that the total naturally occurring background radiation dose equivalent due to gamma exposure is 51 mrem per year, 20 mrem per year of which originates from sources on earth and 31 mrem per year of which originates from cosmic sources (NCRP 2009). The background monitoring locations for the SLS (Figure 2-1) are reasonably representative of background gamma radiation for the St. Louis metropolitan area (Appendix B, Table B-2).

Gamma radiation was measured at the SLDS during CY 2019 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 (Appendix B, Table B-2).

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 (Appendix B, Table B-3).

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., $\mu\text{Ci/mL}$). Particulate air monitors were located in predominant wind directions at excavation and loadout area perimeter locations (Figure 2-2), 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 daily on working days.

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

The SLDS CY 2019 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 4.1 computer code (USEPA 2020) to demonstrate compliance with the 10 mrem per year ARAR in 40 *CFR* 61, Subpart I.

CY 2019 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. The background monitoring locations for the SLS (Figure 2-1) are reasonably representative of background radon concentrations for the St. Louis metropolitan area. 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 a properly certified off-site laboratory for analysis (Appendix B, Table B-4). Recorded radon concentrations are listed in pCi/L and are compared to the value of 0.5 pCi/L average annual above-background concentration as listed in 40 *CFR* 192.02(b)(2).

CY 2019 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 (Figure 2-2). 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 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 a properly certified off-site laboratory for analysis (Appendix B, Table B-4).

CY 2019 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 2019 at five 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-8 (for each monitoring period) to provide additional quality control (QC) of monitoring data. A summary of TLD monitoring results for CY 2019 at the SLDS is shown in Table 2-1. TLD data are contained in Appendix B, Table B-2, of this EMDAR.

Table 2-1. Summary of SLDS Gamma Radiation Data for CY 2019

Monitoring Location	Monitoring Station	First Quarter TLD Data		Second Quarter TLD Data		Third Quarter TLD Data		Fourth Quarter TLD Data		CY 2019 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-2	17.5	0.0	16.8	0.0	20.0	0.0	21.4	0.2	0.2
	DA-3	16.3	0.0	18.9	0.0	19.9	0.0	21.2	0.0	0.0
	DA-7	19.2	0.0	19.3	0.0	21.5	1.1	23.9	2.8	3.9
	DA-8	17.7	0.0	19.8	0.6	23.8	3.5	23.8	2.7	6.8
	DA-8 ^c	19.2	0.9	19.0	0.0	22.4	2.1	22.3	1.1	---
	DA-9	15.7	0.0	20.3	1.2	23.4	3.1	23.5	2.4	6.7

Table 2-1. Summary of SLDS Gamma Radiation Data for CY 2019 (Continued)

Monitoring Location	Monitoring Station	First Quarter TLD Data		Second Quarter TLD Data		Third Quarter TLD Data		Fourth Quarter TLD Data		CY 2019 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	18.5	---	18.0	---	21.9	---	22.5	---	---

^a All quarterly data reported from the vendor have been normalized to exactly one quarter's exposure above background.

^b CY 2019 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 2019 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 2019 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 2019

Monitoring Location	Average Concentration ($\mu\text{Ci}/\text{mL}$) ^a	
	Gross Alpha	Gross Beta
Destrehan Street/Plant 7W	3.31E-15	2.90E-14
Gunther Salt (DT-4)	4.06E-15	2.46E-14
Plant 6 Loadout	3.30E-15	2.90E-14
Background Concentration (BA-1) ^b	3.91E-15	1.98E-14

^a Average concentration values for the sampling period by location.

^b 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. Five detectors were co-located with the TLDs at locations shown on Figure 2-2. One additional detector was located at Monitoring Station DA-8 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 0.00 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 2019

Monitoring Location	Monitoring Station	Average Annual Concentration (pCi/L)		
		01/03/19 to 07/01/19 (Uncorrected) ^a	07/01/19 to 01/06/20 (Uncorrected) ^a	Average Annual Concentration ^b
SLDS	DA-2	0.2	0.2	0.0
	DA-3	0.2	0.2	0.0
	DA-7	0.2	0.2	0.0
	DA-8	0.2	0.2	0.0
	DA-8 ^c	0.28	0.2	---
	DA-9	0.2	0.2	0.0
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 2019 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 2020). 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 2019

Monitoring Location	Monitoring Station	Average Annual Concentration (pCi/L)			WL ^c
		01/03/19 to 07/01/19 ^a	07/01/19 to 01/06/20 ^a	Annual Average ^b	
Plant 1, Building 26	DI-1	0.20	2.30	1.25	0.005
DT-4 North, South Storage Building	DI-2	1.12	1.30	1.21	0.005

^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 2019. 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 inlets 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, 17D3-022C, 18D1-393C, and 18D1-657C. 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, 2018). 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; June 23, 2014; and July 18, 2016, 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; July 23, 2016; July 23, 2018, respectively (MSD 2008, 2010, 2012, 2014, 2016). On June 11, 2018, the MSD issued an extension to the special discharge authorization for the SLDS that remains in effect until July 23, 2020 (MSD 2018). The results obtained from these monitoring activities are presented and evaluated with respect to the discharge limits described in the EMICY19 (USACE 2018a).

Section 2.2.2 of the EMICY19 outlines the parameters and annual average discharge limits for the excavation-water discharges at the SLDS (USACE 2018a). 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 2019, 2,119,984 gallons of excavation water from 17 batches were discharged to MSD manholes 17D4-353C, 17D3-022C, 18D1-393C, and 18D1-657C. 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 2019 excavation-water discharges is provided in Table 3-1. All excavation-water discharge monitoring required through implementation of the EMICY19 was conducted as planned during CY 2019. The evaluation of monitoring data demonstrates compliance with all MSD criteria.

Table 3-1. Excavation Water Discharged at the SLDS in CY 2019

Quarter	Number of Discharges	Number of Gallons Discharged ^a	Total Activity (Ci)		
			Thorium ^b	Uranium (KPA) ^c	Radium ^d
1	3	749,157	2.8E-06	1.7E-04	4.5E-06
2	3	441,553	1.9E-06	5.8E-05	2.3E-06
3	5	580,714	7.1E-06	1.6E-04	6.3E-06
4	6	348,560	4.3E-06	9.8E-05	3.5E-06
Annual Totals	17	2,119,984	1.6E-05	4.8E-04	1.7E-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

During CY 2019, ten ground-water monitoring wells were sampled at the SLDS. 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 2019 sampling at the SLDS are presented in Appendix D, Table D-1. The SLDS ground-water analytical sampling results for CY 2019 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 2019 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 2019 Ground-Water Monitoring Results for the St. Louis Downtown Site

Trend analysis of the COCs detected in HU-A ground water indicates a statistically significant downward trend in arsenic concentrations in HU-A well DW21 and a statistically significant upward trend for total uranium in HU-A well B16W08S. No other significant changes in the concentrations of the COCs occurred in shallow ground water during CY 2019.

During CY 2019, two COCs (arsenic and total uranium) were detected at concentrations above the ROD ground-water criteria in HU-B ground water. The arsenic concentration exceeded the investigative limit (IL) (50 µg/L) in the second quarter sample from HU-B well DW16 (68 µg/L). The arsenic concentration also exceeded the IL in the second quarter and fourth quarter samples from HU-B well DW18 (64 µg/L and 86 µg/L, respectively). The concentration of total U

exceeded the IL (20 µg/L) in all four quarterly samples collected in CY 2019 from DW19RD, the HU-B replacement well for DW19. The total U concentrations detected in the CY 2019 samples from DW19RD varied from 29.6 µg/L (May 2019) to 66.5 µg/L (November 2019). The average total U concentration detected at DW19RD (50.4 µg/L) is similar to the concentration detected in the final sample collected at DW19 prior to its decommissioning (54.8 µg/L in August 2015).

The Mann-Kendall Trend Test results indicate a statistically significant upward trend in arsenic concentrations in DW16 and DW18. Trend analysis could not be conducted for total U in DW19RD because only four sampling events have occurred at DW19RD since its installation in March 2019. The Mann-Kendall Trend Test is performed only at those wells where data have been collected for at least six sampling events. No other significant changes in the concentrations of the COCs occurred in HU-B ground water during CY 2019.

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 2019, ten monitoring wells (four HU-A and six HU-B) were sampled for radionuclides and inorganic COCs at the SLDS. Two new ground-water monitoring wells were installed at the SLDS in CY 2019: DW19RS and DW19RD. These wells were installed in March 2019 as replacement wells for DW19. Ground-water sampling at the SLDS was conducted on February 20 and March 26 (first quarter); May 13 (second quarter); August 8 (third quarter); and November 12, 13, and 14 (fourth quarter) of CY 2019. The CY 2019 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 2019 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 on April 25, 2019. Appendix E also includes the drilling logs, as-builts, and monitoring well certification reports for the two new monitoring wells at the SLDS (DW19RS and DW19RD).

Table 4-1. Screened HUs for SLDS Ground-Water Monitoring Wells in CY 2019

Well ID	Screened HU
B16W06D ^a	HU-B
B16W06S ^a	HU-A
B16W07D ^a	HU-B
B16W08D ^a	HU-B
B16W08S ^a	HU-A
B16W09D	HU-B
B16W12S	HU-A
DW14	HU-B
DW15	HU-B
DW16 ^a	HU-B
DW17	HU-B
DW18 ^a	HU-B
DW19RD ^{a,b}	HU-B
DW19RS ^{a,b}	HU-A
DW21 ^a	HU-A

^a Wells sampled in CY 2019.

^b Replacement wells for DW19 were installed and developed in March 2019.

4.2.1 Evaluation of HU-A Ground-Water Monitoring Data

The results of the CY 2019 ground-water sampling of HU-A ground water at the SLDS are summarized in Table 4-2. During CY 2019, four HU-A monitoring wells (B16W06S, B16W08S, DW19RS, and DW21) were sampled. B16W06S and B16W08S were sampled in the fourth quarter for arsenic, cadmium, and radionuclides (Ra-226, Ra-228, thorium [Th]-228, Th-230, Th-232, U-234, U-235, and U-238). DW19RS was sampled for arsenic, cadmium, and radionuclides in the first, second, third, and fourth quarters. DW21 was sampled for arsenic and cadmium in the third quarter.

Table 4-2. Analytes Detected in HU-A Ground Water at the SLDS in CY 2019

Analyte	Units	Station ^a	Minimum Detected	Maximum Detected	Mean Detected	Frequency of Detection
Arsenic	µg/L	B16W06S	190	190	190	1/1
		DW19RS	5.7	10	7.8	3/4
		DW21	75	75	75	1/1
Cadmium	µg/L	B16W06S	0.31	0.31	0.31	1/1
		B16W08S	0.37	0.37	0.37	1/1
		DW21	2.7	2.7	2.7	1/1
Ra-226	pCi/L	DW19RS	8.16	8.16	8.16	1/4
Th-228	pCi/L	B16W06S	0.73	0.73	0.73	1/1
		B16W08S	0.31 J	0.31 J	0.31	1/1
Th-230	pCi/L	B16W06S	1.71 J	1.71 J	1.71	1/1
		B16W08S	1.27 J	1.27 J	1.27	1/1
		DW19RS	0.61 J	1.86 J	1.24	2/4
U-234	pCi/L	B16W08S	2.98	2.98	2.98	1/1
		DW19RS	2.2	3.11	2.6	4/4
U-238	pCi/L	B16W08S	2.76	2.76	2.76	1/1
		DW19RS	1.5	2.71	2.2	4/4
Total U ^b	µg/L	B16W08S	8.3	8.3	8.3	1/1
		DW19RS	4.5	8.2	6.5	4/4

^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 2019 are listed in Table 4-2. The remaining SLDS COCs (Th-232 and U-235) were not detected in the four HU-A ground-water wells monitored during CY 2019. Trend analysis was conducted for arsenic in B16W06S and DW21, cadmium in DW21, and total U in B16W08S. Because total U values are calculated using the U-234 and U-238 values, the trends in their values should be the same as the total U trend results. Therefore, it was not necessary to perform a separate trend analysis for each of these isotopes for B16W08S. Because the majority of their historical results were near or below their detection limits (DLs), a trend analysis was not performed for cadmium, Th-228, or Th-230 in B16W06S or B16W08S. In addition, trend analysis was not conducted for DW19RS because the Mann-Kendall Trend Test is performed only at those wells where data have been collected for at least six sampling events. Only four sampling events have occurred since the installation of DW19RS in March 2019.

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 DW21 (Figure 4-4) and a statistically significant upward trend for total U in B16W08S (Figure 4-5). No statistically significant trends in arsenic concentrations in B16W06S or cadmium concentrations in DW21 were identified. Expanded versions of the time-versus-concentration plots for arsenic in DW21 and Total U in B16W08S are provided on Figure 4-6.

4.2.2 Evaluation of HU-B Ground-Water Monitoring Data

During CY 2019, 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 2019 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 2019

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	B16W07D	30	30	30	0	1/1
				B16W08D	16	16	16	0	1/1
				DW16	15	68	41.5	1	1/2
				DW18	64	86	75	2	2/2
				DW19RD	7.5	27	17.4	0	4/4
Cadmium	5	NA	µg/L	B16W06D	0.5	0.5	0.5	0	1/1
				B16W08D	0.41	0.41	0.41	0	1/1
				DW16	0.48	0.7	0.59	0	2/2
				DW18	0.53	0.53	0.53	0	1/2
DW19RD	0.4	1	0.6	0	3/4				
Ra-226	NA ^c	5 ^d	pCi/L	DW19RD	1.21	1.21	1.21	0	1/4
Th-228	NA	NA	pCi/L	DW19RD	0.43 J	0.43 J	0.43 J	NA	1/4
Th-230	NA	NA	pCi/L	B16W06D	0.52	0.52	0.52	NA	1/1
				B16W07D	0.88	0.88	0.88	NA	1/1
				B16W08D	1.41 J	1.41 J	1.41 J	NA	1/3
				DW16	1.84 J	1.84 J	1.84 J	NA	1/1
				DW19RD	1.58 J	1.58 J	1.58 J	NA	1/4
U-234	NA	NA	pCi/L	B16W06D	0.22 J	0.22 J	0.22 J	NA	1/1
				B16W08D	0.25 J	5.73	3.0	NA	2/3
				DW16	1.26	1.26	1.26	NA	1/1
				DW19RD	10	20.6	15.7	NA	4/4
U-235	NA	NA	pCi/L	B16W08D	0.83 J	0.83 J	0.83 J	NA	1/3
				DW19RD	0.55 J	1.03	0.76	NA	3/4
U-238	NA	NA	pCi/L	B16W08D	6.55	6.55	6.55	NA	1/3
				DW16	0.71	0.71	0.71	NA	1/1
				DW19RD	9.84	22.1	16.8	NA	4/4
Total U ^e	20	NA	µg/L	B16W06D	0.4	0.4	0.4	0	1/1
				B16W08D	0.6	19.9	10.3	0	2/3
				DW16	2.2	2.2	2.2	0	1/1
				DW19RD	29.6	66.5	50.4	4	4/4

^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.

During CY 2019, one inorganic SLDS COC, arsenic, was detected at concentrations above its ROD ground-water criteria in HU-B ground water. The concentration of arsenic exceeded the IL (50 µg/L) in the May 2019 samples from DW16 (68 µg/L) and DW18 (64 µg/L) and the November 2019 sample from DW18 (86 µg/L). The time-versus-concentration plots for arsenic in DW16 and DW18 are provided on Figure 4-4.

One radiological COC, total U, exceeded its ROD ground-water criteria in HU-B ground water at the SLDS during CY 2019. The concentration of total U exceeded the IL (20 µg/L) in all four quarterly samples collected in CY 2019 from DW19RD, the HU-B replacement well for DW19. The concentration of total U had exceeded the IL in the annual ground-water samples collected from DW19 since installation of the well in CY 1999. On August 3, 2016, DW19 was plugged

and abandoned so that remediation activities could be conducted in that area. In March 2019, after the remediation activities were completed, DW19RD was installed to allow continued assessment of contaminant concentration trends in HU-B in this area. The total U concentrations detected in the CY 2019 samples from DW19RD varied from 29.6 µg/L (May 2019) to 66.5 µg/L (November 2019). The average total U concentration detected at DW19RD (50.4 µg/L) is similar to the concentration detected in the final sample collected at DW19 prior to its decommissioning (54.8 µg/L in August 2015). The total U concentration trends in unfiltered ground water at the SLDS are shown on Figure 4-5.

Based on the time-versus-concentrations plots and quantitative evaluation of trends using the Mann-Kendall Trend Test (Section 4.2.3), two statistically significant trends were identified in HU-B ground water. There are statistically significant upward trends in arsenic concentrations in DW16 and DW18. Expanded versions of the time-versus-concentration plots for arsenic in DW16 and DW18 are provided on Figure 4-6.

Trend analysis could not be conducted for total U in DW19RD because only four sampling events have occurred at DW19RD. The Mann-Kendall Trend Test is performed only at those wells where data have been collected for at least six sampling events. An expanded version of the time-versus-concentration plot for total U in DW19 and its replacement well DW19RD is provided on Figure 4-6.

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 2018. 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 2019. The Mann-Kendall Trend Test was not conducted for those COCs with 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; cadmium in DW21; and total U in B16W08S. For cadmium in DW21, the dataset was restricted to the time period CY 2005 through CY 2019 in order to meet the Mann-Kendall Trend Test requirement that the dataset have a detection frequency greater than 50 percent. A trend analysis was not conducted for cadmium, Th-228, or Th-230 in B16W06S and B16W08S 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 2019: arsenic in DW16 and DW18, and total U in B16W08S.

Trend analysis was not conducted for DW19RS or DW19RD because the Mann-Kendall Trend Test is performed only at those wells where data have been collected for at least six sampling events. Only four sampling events have occurred since the installation of DW19RS and DW19RD in March 2019.

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 range of associated measurement error.

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 DW16, DW18, and DW21; and total U in B16W08S) are provided on Figure 4-6.

Table 4-4. Results of Mann-Kendall Trend Test for SLDS Ground Water in CY 2019

Analyte	Station	HU	N ^a	Test Statistics ^{b,c}		Trend ^d
				S	Z	
Arsenic	B16W06S	HU-A	25	-44	-1.00	No Trend
	DW16	HU-B	26	131	2.87	Upward Trend
	DW18	HU-B	32	287	4.64	Upward Trend
	DW21	HU-A	30	-187	-3.32	Downward Trend
Cadmium	DW21	HU-A	12	13	0.83	No Trend
Total U	B16W08S	HU-A	13	32	1.89	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 DW21, the time period is between January of 1999 and December of 2019. For cadmium at DW21, the dataset was restricted to the period between January of 2005 and December of 2019 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, one well exhibits a significant downward trend for arsenic (HU-A well DW21), 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 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. No other significant changes in the concentrations of the inorganic COCs occurred in HU-A or HU-B ground water during CY 2019.

Radionuclides

The Mann-Kendall Trend Test results indicate there is a significant upward trend for total U in HU-A well B16W08S. As shown in the time-versus-concentration plot for B16W08S on Figure 4-5, the concentration of total U in B16W08S reached its maximum (13.2 $\mu\text{g/L}$) in CY 2002. 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-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, May, August, and November of CY 2019. Potentiometric surface maps were created from the May 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 typically slopes northeast toward the Mississippi River. Comparison of Figure 4-7 (May) with Figure 4-9 (November) indicates ground-water flow patterns in HU-A differ for the wet and dry season conditions during CY 2019. The May 10, 2019 map indicates a reversal of the typical flow direction in HU-A, with ground water flowing southwest, away from the Mississippi River. The reversal is a result of well-above-normal precipitation during the previous weeks, with the Mississippi River exceeding flood stage during this time. These conditions led to increased localized recharge near the river banks (i.e. increased bank storage) that is reflected in higher than normal water levels reported for the shallow wells located near the banks of the Mississippi River. During CY 2019, the HU-A potentiometric surface elevations averaged approximately

6.4 ft higher during the wet season (May) than during the dry season (November). As a result of the flood conditions in May, the largest seasonal differences were observed in the two wells closest to the river (B16W06S and B16W08S), where water levels were approximately 11 ft higher in May than during November.

As shown on Figures 4-8 and 4-10, the ground-water flow patterns 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 flow direction in HU-B is generally north-northeasterly toward the river in both the wet and dry seasons. The high river conditions occurring in May 2019 did not cause significant ground-water flow direction changes in areas more than approximately 600 ft from the river bank, although the water levels measured in the HU-B wells at the SLDS in May 2019 were higher than typically reported for previous years. Localized ground-water mounding was observed in the vicinity of the three HU-B wells B16W06D, B16W07D, and B16W08D, likely due to increased recharge from the river and increased seepage from overlying HU-A in that area. The HU-B ground-water elevations averaged approximately 14.4 ft higher on May 10 than on November 11, 2019; this generally corresponds to the difference in the daily river stage, which was approximately 16.0 ft higher on May 10 (420.7 ft above mean sea level [amsl]) than on November 11 (404.7 ft amsl).

On May 29, 2019, an artesian effect was observed in a flush mount well at the SLDS, HU-B well B16W09D. Flowing artesian wells occur when pressure in the aquifer forces ground water above the ground surface so that the well will flow without a pump. Between June 3 and June 17, artesian effects were observed in three additional flush mount HU-B wells at the SLDS, B16W06D, DW17, and DW14. The flowing artesian conditions were in response to major flooding and the continued rise in the river gage height for the Mississippi River at St. Louis through May and early June of 2019. The river crested on June 8, 2019. By late June, the artesian effects had ceased in all four wells.

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5.0 ENVIRONMENTAL QUALITY ASSURANCE PROGRAM

5.1 PROGRAM OVERVIEW

The environmental quality assurance (QA) program includes management of the QA and QC programs, plans, and procedures governing environmental monitoring activities at 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 a site visit on March 26, 2019, 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 as follows:

- To provide data of sufficient quality and quantity to support ongoing remedial efforts, to aid in defining potential COCs, to meet the requirements of the EMG (USACE 1999a) and the *Sampling and Analysis Guide for the St. Louis Sites* (SAG) (USACE 2000), and to support the ROD (USACE 1998a);
- To provide data of sufficient quality to meet applicable State of Missouri and federal concerns (e.g., reporting requirements); and
- 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 EMICY19 outlines the analyses to be performed at each site for various media (USACE 2018a).

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 EMICY19 (USACE 2018a).

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 2017). Accordingly, 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 2018b). 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 2017).

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 2017).

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 radiological and non-radiological analyses or by the normalized absolute difference (NAD) for radiological analyses.

The RPDs for non-radiological analyses are presented in Table 5-1. The RPDs and NADs for radiological analyses are presented in Table 5-2. The overall precision for the CY 2019 environmental monitoring activities was acceptable. See Section 5.9 for the evaluation process.

Table 5-1. Non-Radiological Duplicate Sample Analysis for CY 2019 – Ground Water

Ground-Water Sample Name ^a	Arsenic	Cadmium
	RPD ^b	RPD ^b
SLD215496 / SLD215496-1	11.76	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 MDCs)

Table 5-2. Radiological Duplicate Sample Analysis for CY 2019 – Ground Water

Ground-Water Sample Name ^a	Ra-226		Ra-228		Th-228		Th-230	
	RPD ^b	NAD	RPD ^b	NAD	RPD ^b	NAD	RPD ^b	NAD
SLD215496 / SLD215496-1	NC	NA	*	*	NC	NA	NC	NA
Ground-Water Sample Name ^a	Th-232		U-234		U-235		U-238	
	RPD ^b	NAD	RPD ^b	NAD	RPD ^b	NAD	RPD ^b	NAD
SLD215496 / SLD215496-1	NC	NA	9.91	NA	34.88	0.50	18.71	NA

^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. If the RPD is greater than 30 percent, then the NAD shall be less than or equal to 1.96 to remain within the control limits.

* Not calculated because either the parent or split sample was not analyzed.

NA – not applicable (see RPD)

NC – not calculated (due to one or both concentrations being below MDCs)

5.7.2 Split Samples

Split samples measure accuracy and were collected by the sampling team and sent to a USACE QA laboratory for analysis to provide an independent assessment of contractor and subcontractor laboratory performance. Approximately one split sample was collected for every 20 field samples of each matrix for non-radiological and radiological analytes across the SLS. The RPDs and NADs for non-radiological analyses are presented in Table 5-3. The RPDs and NADs for radiological

analyses are presented in Table 5-4. The overall accuracy for CY 2019 environmental monitoring activities was acceptable. See Section 5.9 for the evaluation process.

Table 5-3. Non-Radiological Split Sample Analysis for CY 2019 – Ground Water

Ground-Water Sample Name ^a	Arsenic	Cadmium
	RPD ^b	RPD ^b
SLD215496 / SLD215496-2	28.33	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 MDCs)

Table 5-4. Radiological Split Sample Analysis for CY 2019 – Ground Water

Ground-Water Sample Name ^a	Ra-226		Ra-228		Th-228		Th-230	
	RPD ^b	NAD						
SLD215496 / SLD215496-2	NC	NA	*	*	NC	NA	NC	NA
Ground-Water Sample Name ^a	Th-232		U-234		U-235		U-238	
	RPD ^b	NAD						
SLD215496 / SLD215496-2	NC	NA	1.23	NA	2.23	NA	6.67	NA

^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. If the RPD is greater than 30 percent, then the NAD shall be less than or equal to 1.96 to remain within the control limits.

* Not calculated because either the parent or split sample was not analyzed.

NA – not applicable (see RPD)

NC – not calculated (due to one or both concentrations being below MDCs)

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 and/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 2019 environmental monitoring activities was acceptable and complete.

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

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

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

where:

- S = Parent Sample Result
- D = Duplicate/Split Sample Result
- U_s = Parent Sample Uncertainty
- U_D = Duplicate/Split Sample Uncertainty

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

Precision is a measure of mutual agreement among individual measurements performed under the same laboratory controls. To evaluate for precision, a field duplicate is submitted to the same laboratory as the original sample to be analyzed under the same laboratory conditions. The RPD and NAD between the two results was calculated and used as an indication of the precision of the analyses performed (Tables 5-1 and 5-2). Sample collection precision was measured in the laboratory by the analyses of duplicates. The overall precision for the CY 2019 environmental monitoring sampling activities was acceptable.

Accuracy provides a gauge or measure of the agreement between an observed result and the true value for an analysis. The RPD and NAD between the two results was calculated and used as an indication of the accuracy of the analyses performed (Tables 5-3 and 5-4). For this report, accuracy is measured through the use of the field split samples through a comparison of the prime laboratory results versus the results of an independent laboratory. The overall accuracy for CY 2019 environmental monitoring sampling 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 EMICY19, 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 2019 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 2019 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 report, MDC is a term generically used to represent both the method detection limit (MDL) for non-radiological analytes and the minimum detectable activity (MDA) for radiological analytes. The closer a measured value to the MDC, the less confidence and more variation the measurement will have. Project sensitivity goals were expressed as quantitation level goals in the SAG. These levels were achieved or exceeded throughout the analytical process.

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

Table 5-5. Non-Radiological Parent Samples and Associated Duplicate and Split Samples for CY 2019 – Ground Water

Ground-Water Sample Name ^a	Arsenic ^b			Cadmium ^b		
	Result	DL	VQ	Result	DL	VQ
SLD215496	27.00	4.00	=	0.20	0.20	U
SLD215496-1	24.00	4.00	=	0.20	0.20	U
SLD215496-2	20.30	0.50	=	0.30	0.30	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.

Table 5-6. Radiological Parent Samples and Associated Duplicate and Split Samples for CY 2019 – Ground Water

Ground-Water Sample Name ^b	Ra-226 ^a				Ra-228 ^a				Th-228 ^a			
	Result	Error	MDC	VQ	Result	Error	MDC	VQ	Result	Error	MDC	VQ
SLD215496	0.71	0.83	1.53	UJ	*	*	*	*	0.09	0.25	0.62	UJ
SLD215496-1	0.36	0.56	1.17	UJ	*	*	*	*	0.06	0.20	0.53	UJ
SLD215496-2	0.78	0.35	0.41	=	*	*	*	*	0.10	0.16	0.23	UJ
Ground-Water Sample Name ^b	Th-230 ^a				Th-232 ^a				U-234 ^a			
	Result	Error	MDC	VQ	Result	Error	MDC	VQ	Result	Error	MDC	VQ
SLD215496	0.10	0.20	0.42	UJ	0.04	0.14	0.39	UJ	16.30	2.04	0.27	=
SLD215496-1	0.12	0.19	0.35	UJ	-0.03	0.14	0.38	UJ	18.00	2.22	0.33	=
SLD215496-2	-0.03	0.18	0.30	UJ	0.02	0.07	0.16	UJ	16.10	1.80	0.19	=
Ground-Water Sample Name ^b	U-235 ^a				U-238 ^a							
	Result	Error	MDC	VQ	Result	Error	MDC	VQ				
SLD215496	0.71	0.38	0.34	J	15.50	1.96	0.24	=				
SLD215496-1	1.01	0.46	0.35	=	18.70	2.27	0.25	=				
SLD215496-2	0.73	0.29	0.13	=	14.50	1.66	0.11	J				

^a Results are expressed in pCi/L. Negative results are less than the laboratory system’s background level.

^b Samples ending in “-1” are duplicate samples. Samples ending in “-2” are split samples.

* Data for analyte not available from laboratory analysis. Ra-228 assumed to be in equilibrium with Th-228.

VQ symbols indicate: “=” for positively identified results, “J” analyte was identified as estimated quantity, and “UJ” analyte was not detected and had QC deficiencies.

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 0.7 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 2019 at the SLDS. A comparison of the maximum annual dose from CY 2000 to CY 2019 at the SLDS to the annual average natural background dose of approximately 620 mrem per year is provided on Figure 6-2.

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 2019 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 2019 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

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 2019. 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 2019 dose estimates for the SLDS. The Liquid A exposure pathway was not applicable in CY 2019, 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 2019 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 2019 TEDE for a hypothetical maximally exposed individual near the SLDS is 0.7 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 the following:

- 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 290 m from the assumed line source. Exposure time is 2,000 hours per year (Leidos 2020).
- 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 (Leidos 2020).
- 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 2020).
- Exposure from Rn-222 (and decay chain isotopes) was calculated using ATD monitoring data at the site locations representative of areas accessible to the public between the source and the receptor. The results at all ATD locations were 0.0 pCi/L, exposure to the receptor from radon (and decay chain isotopes) and did not require estimation using a dispersion factor (Leidos 2020).

Based on the exposure scenario and assumptions described above, a maximally exposed individual working outside at the receptor location facility received 0.7 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 0.7 mrem per year (Leidos 2020). In comparison, the average exposure to natural background radiation in the United States results in a TEDE of approximately 620 mrem per year (NCRP 2009).

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FIGURES

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Path: U:\GPS\EMDAR\SLDS Projects\CY2019\Rev0\Figure 1-1 Location Map of the St. Louis Sites.mxd

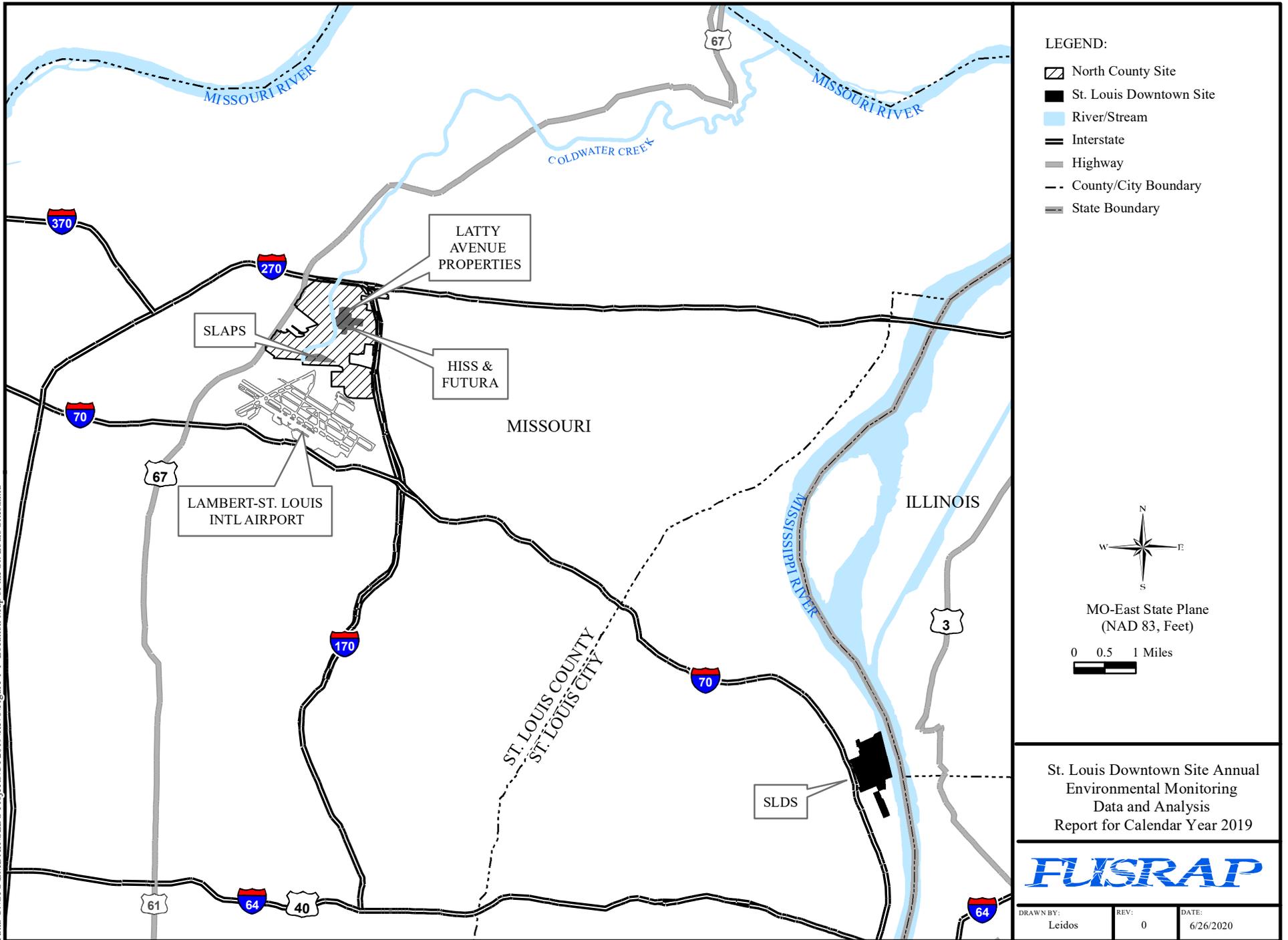
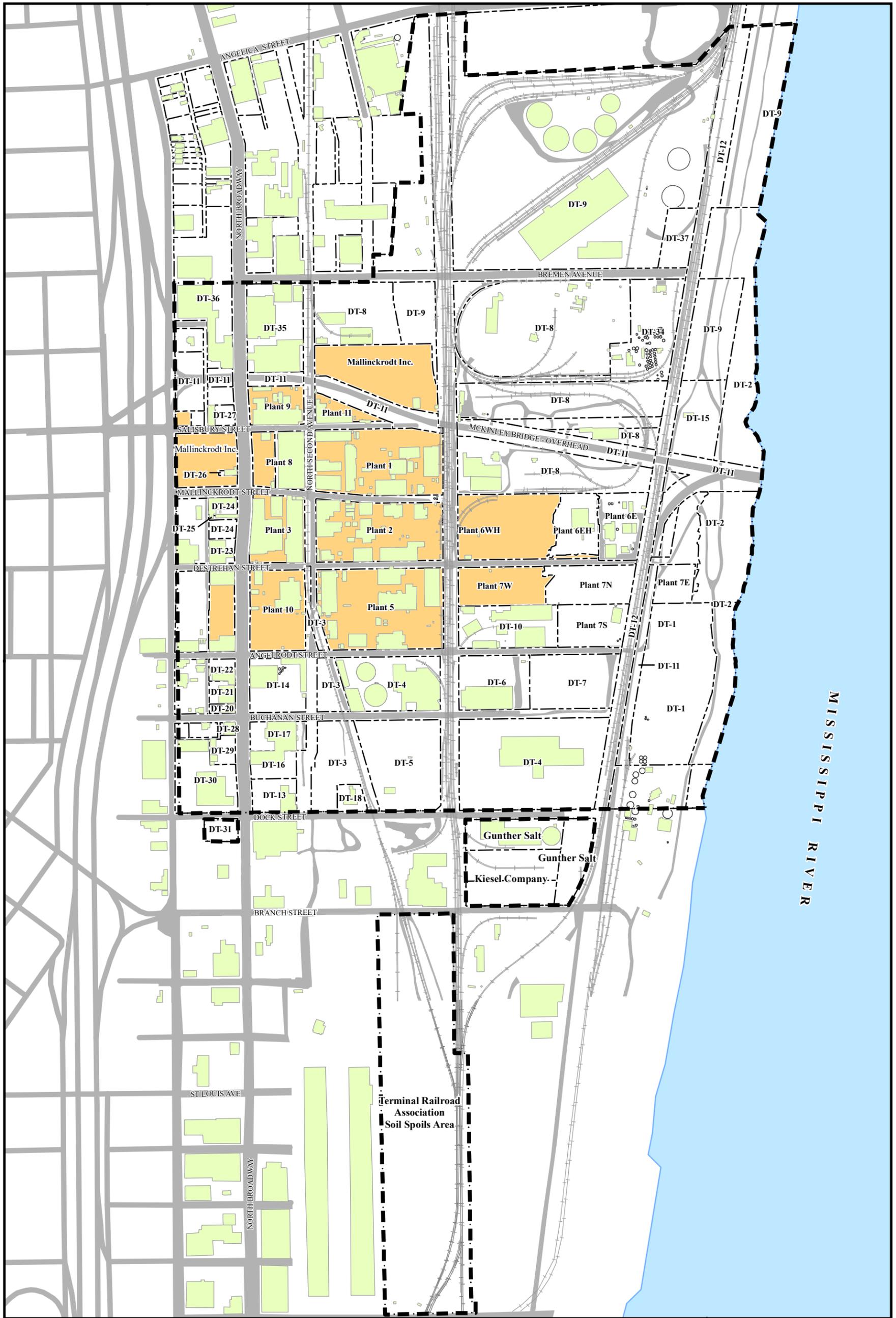


Figure 1-1. Location Map of the St. Louis Sites



LEGEND

- Railroad
- ROD Boundary
- [- - -] Property Boundary
- Mallinckrodt Property
- River/Stream
- Road
- Building
- Tank



MO-East State Plane
(NAD 83, Feet)

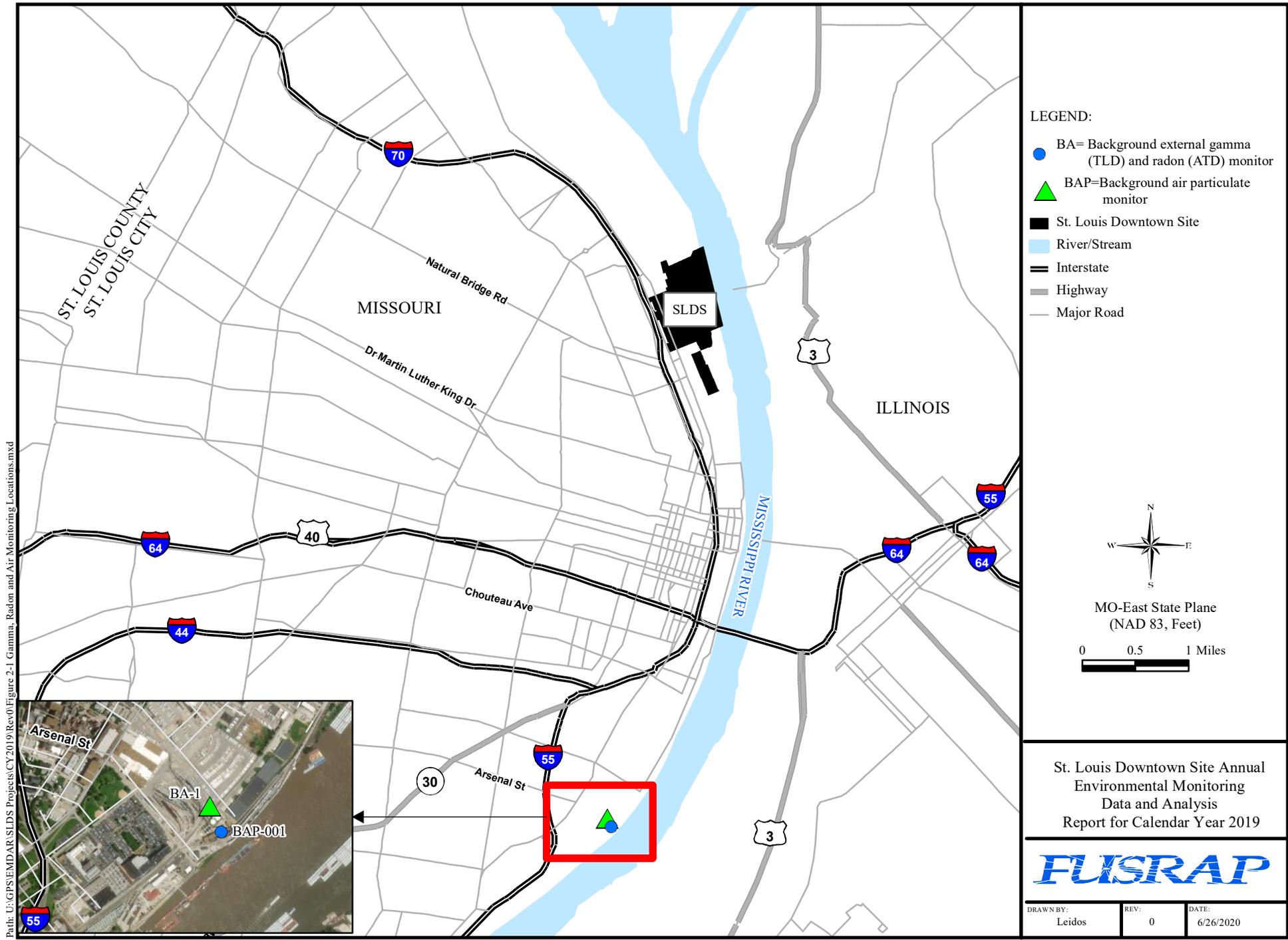
0 250 500
Feet

St. Louis Downtown Site Annual
Environmental Monitoring
Data and Analysis
Report for Calendar Year 2019



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Figure 1-2. Plan View of the SLDS



Path: U:\GPS\EMDAR\SLDS Projects\CY2019\Rev0\Figure 2-1 Gamma, Radon, and Air Monitoring Locations.mxd

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

Path: U:\GPS\EMDAR\SLDS Projects\CY 2019\Rev0\Figure 2-2. Gamma Radiation and Rn Monitoring Locations at the SLDS.mxd

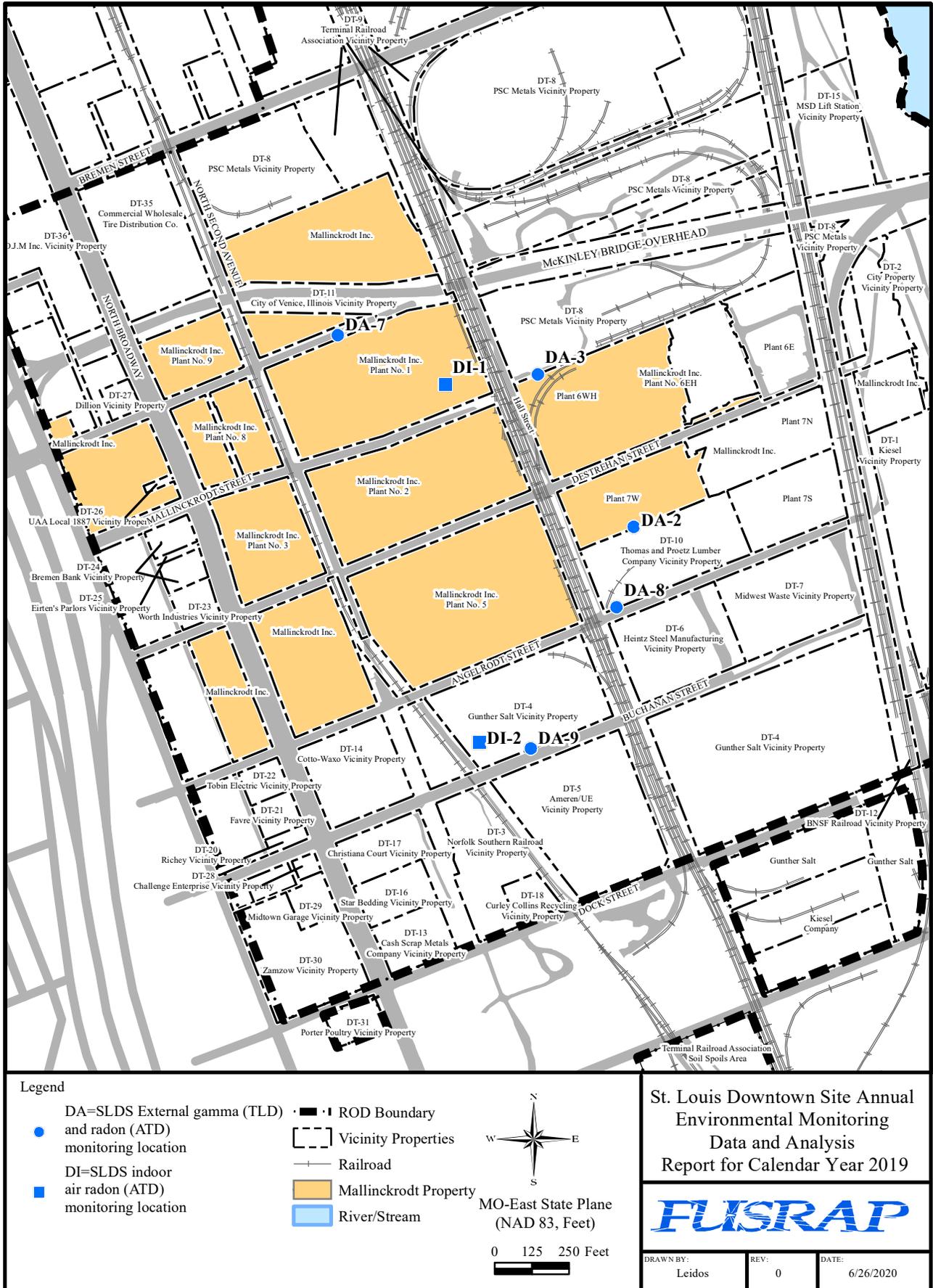


Figure 2-2. Gamma Radiation and Radon Monitoring Locations at the SLDS

Path: U:\GPS\EMDAR\SLDS Projects\CY 2019\Rev0\Figure 3-1 Excavation-Water Discharge Stations at the SLDS.mxd

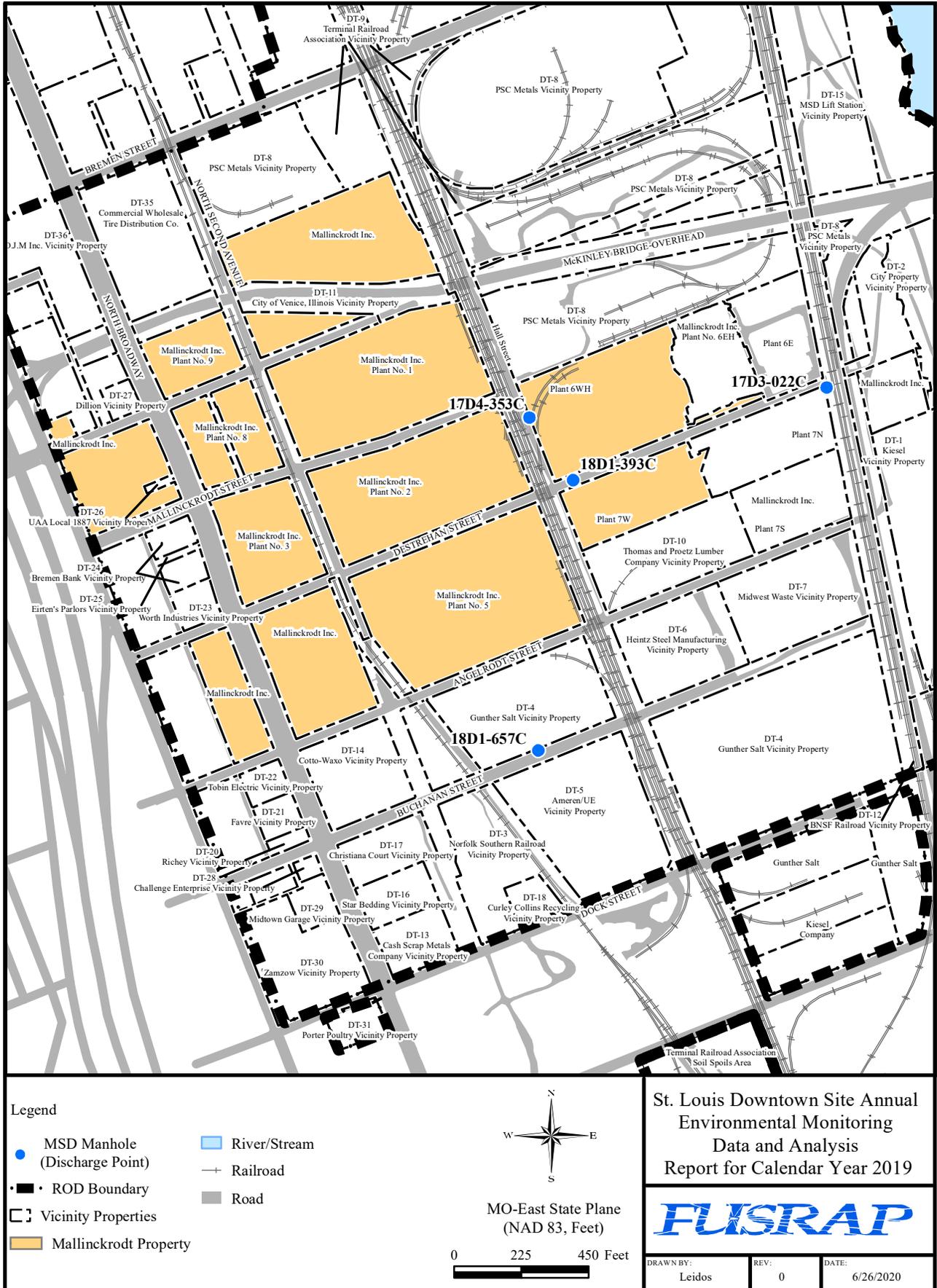
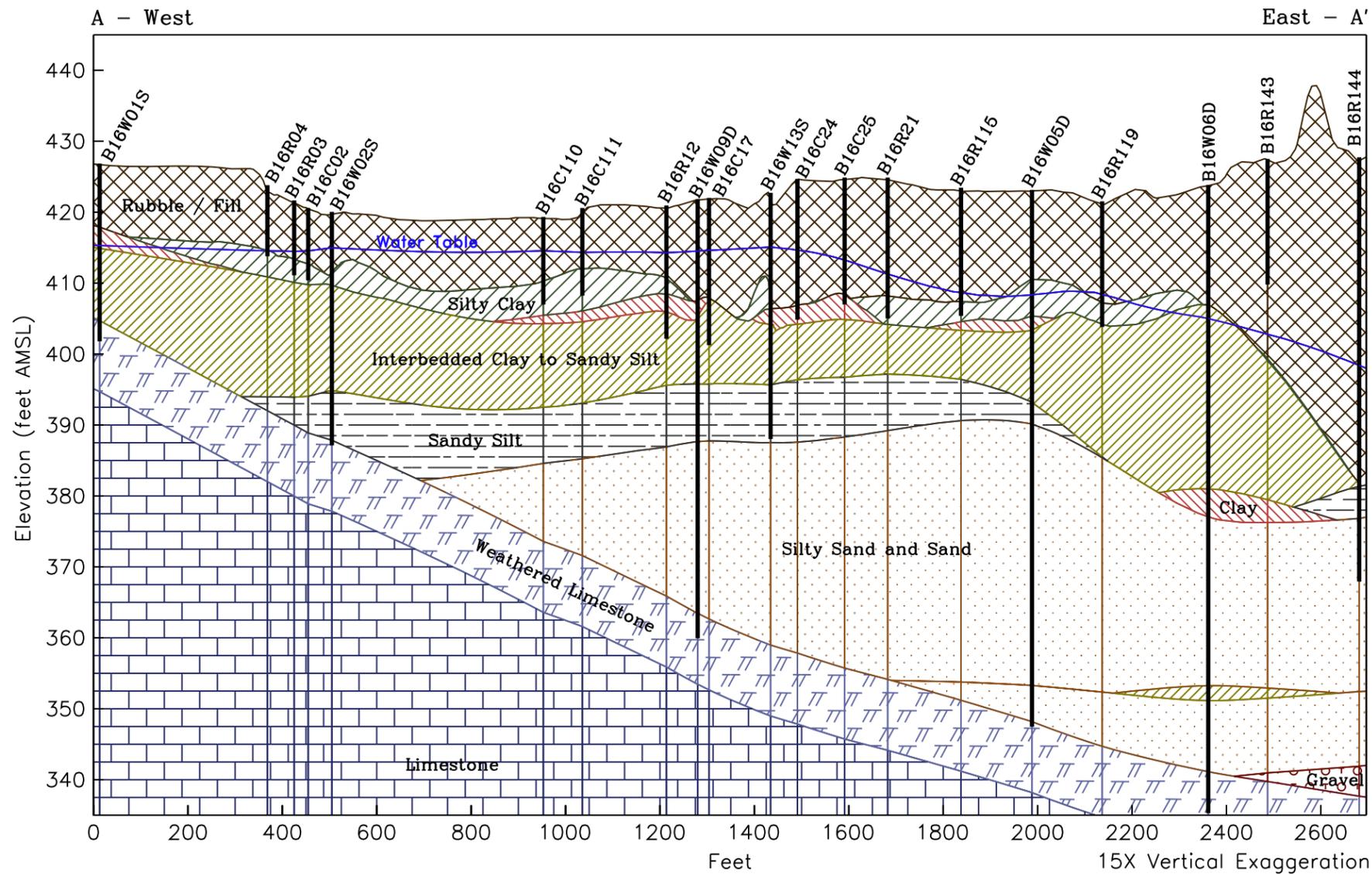


Figure 3-1. MSD Excavation-Water Discharge Points at the SLDS

Unit Designation	Approximate Thickness (ft)	Description
Upper Hydrostratigraphic Unit (HU-A)	0-25	<p>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.</p>
	0-10	<p>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.</p>
	0-5	<p>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.</p>
	0-2.5	<p>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.</p>
Lower Hydrostratigraphic Unit (HU-B)	0-10	<p>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.</p>
	0-50	<p>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.</p>
Limestone Bedrock Unit (HU-C)	Total thickness not penetrated during drilling	<p>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.</p>

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 COLOR DESCRIPTIONS REPRESENT CHROMA, HUE, AND VALUE FROM THE MUNSELL SOIL COLOR CHARTS.							
NOT TO SCALE	<p style="text-align: center;">St. Louis Downtown Site Annual Environmental Monitoring Data and Analysis Report for Calendar Year 2019</p> <table border="1" style="width: 100%; border-collapse: collapse;"> <tr> <td style="width: 33%;">DRAWN BY:</td> <td style="width: 33%;">REV. NO./DATE:</td> <td style="width: 33%;">CAD FILE:</td> </tr> <tr> <td>C.Kaple</td> <td>0 - 06/20/2020</td> <td></td> </tr> </table>	DRAWN BY:	REV. NO./DATE:	CAD FILE:	C.Kaple	0 - 06/20/2020	
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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



St. Louis Downtown Site
Annual Environmental Monitoring
Data and Analysis Report for
Calendar Year 2019

Drawn By: R. Smith

Date: 03/24/1999, revised 01/28/2020

File: SLDSGlg01XSectA.sho

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

Path: U:\GPS\EMDAR\SLDS Projects\CY2019\Rev0\Figure 4-3 Ground-Water Monitoring Well Locations at the SLDS.mxd

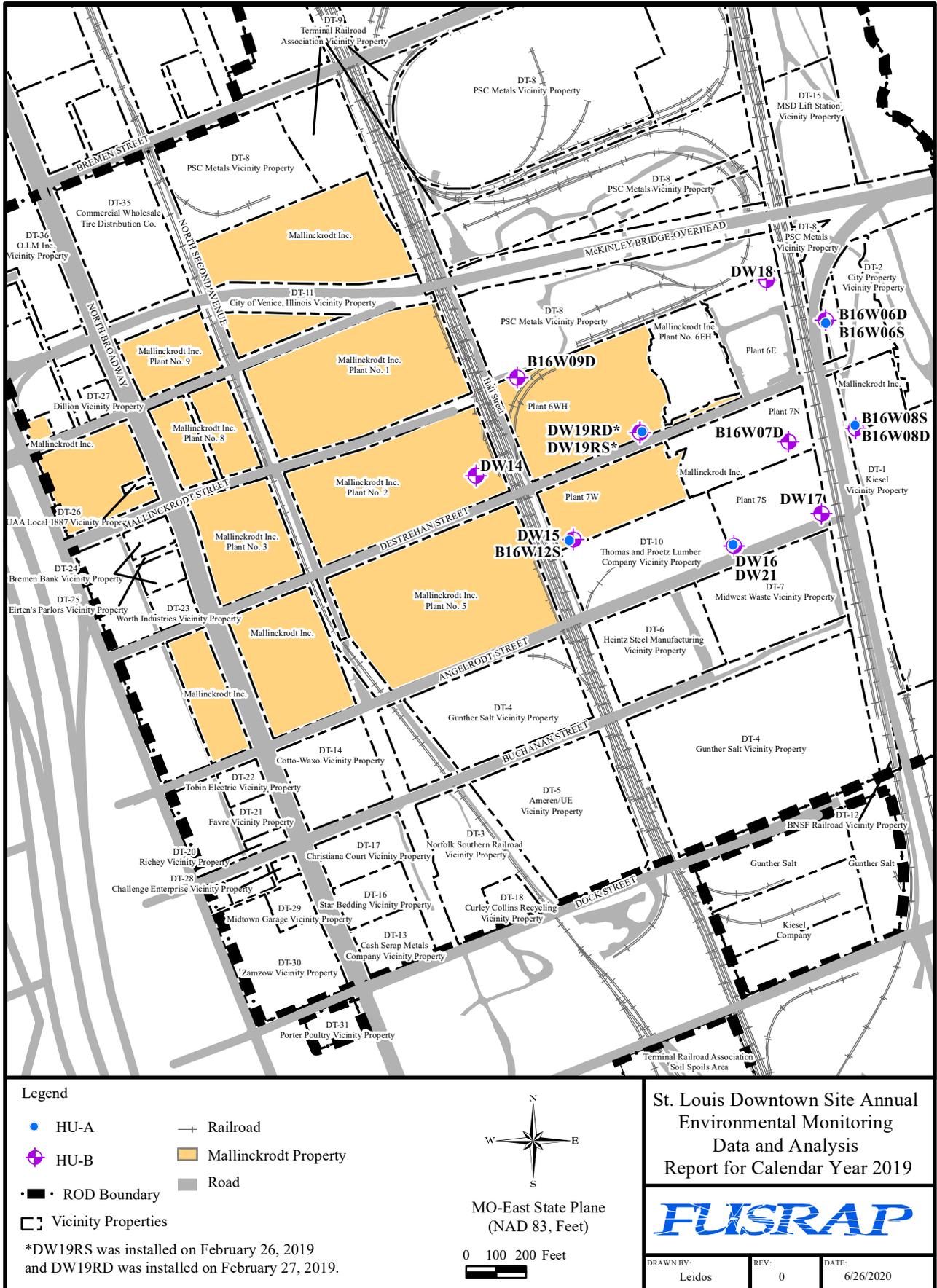


Figure 4-3. Ground-Water Monitoring Well Locations at the SLDS

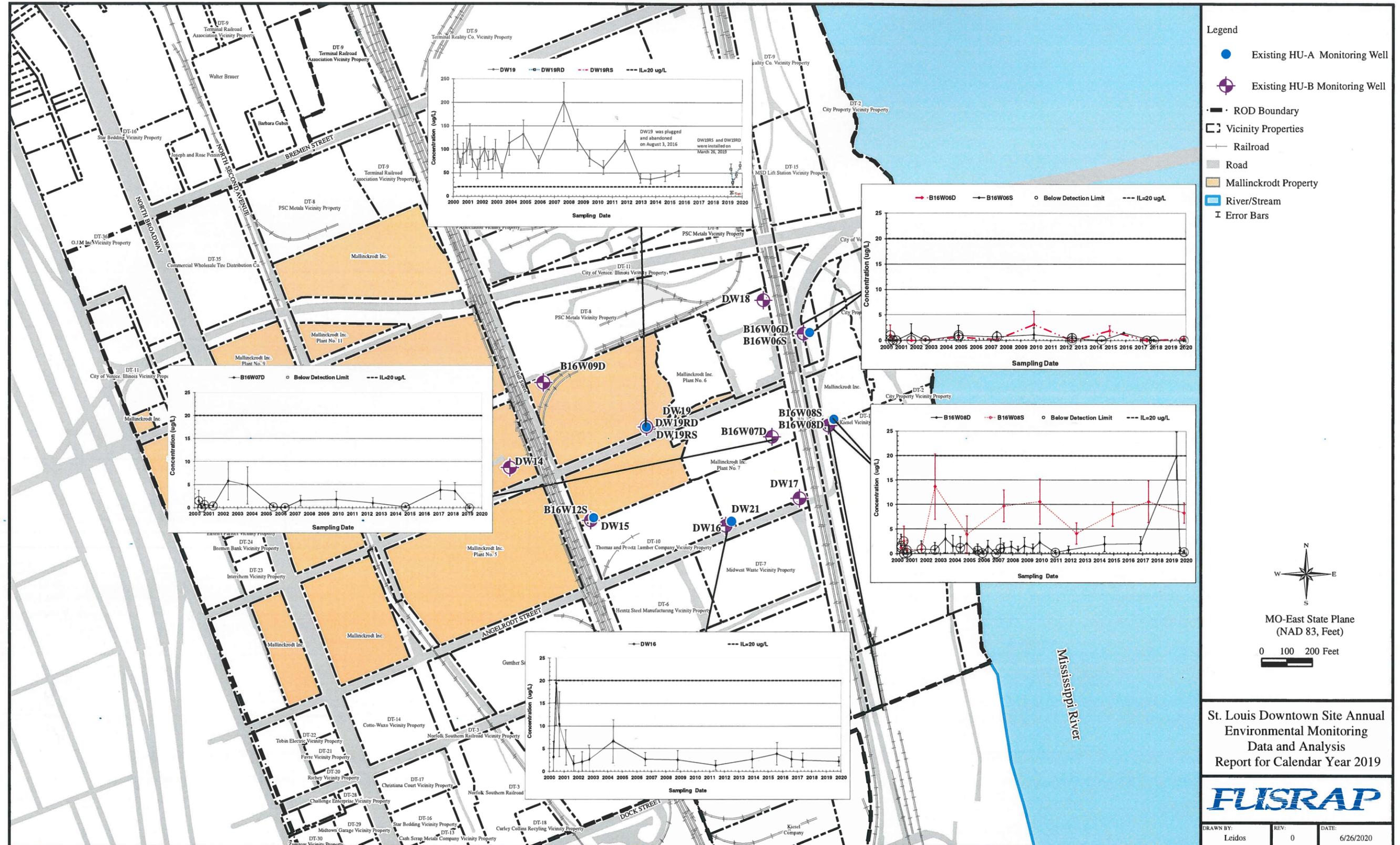
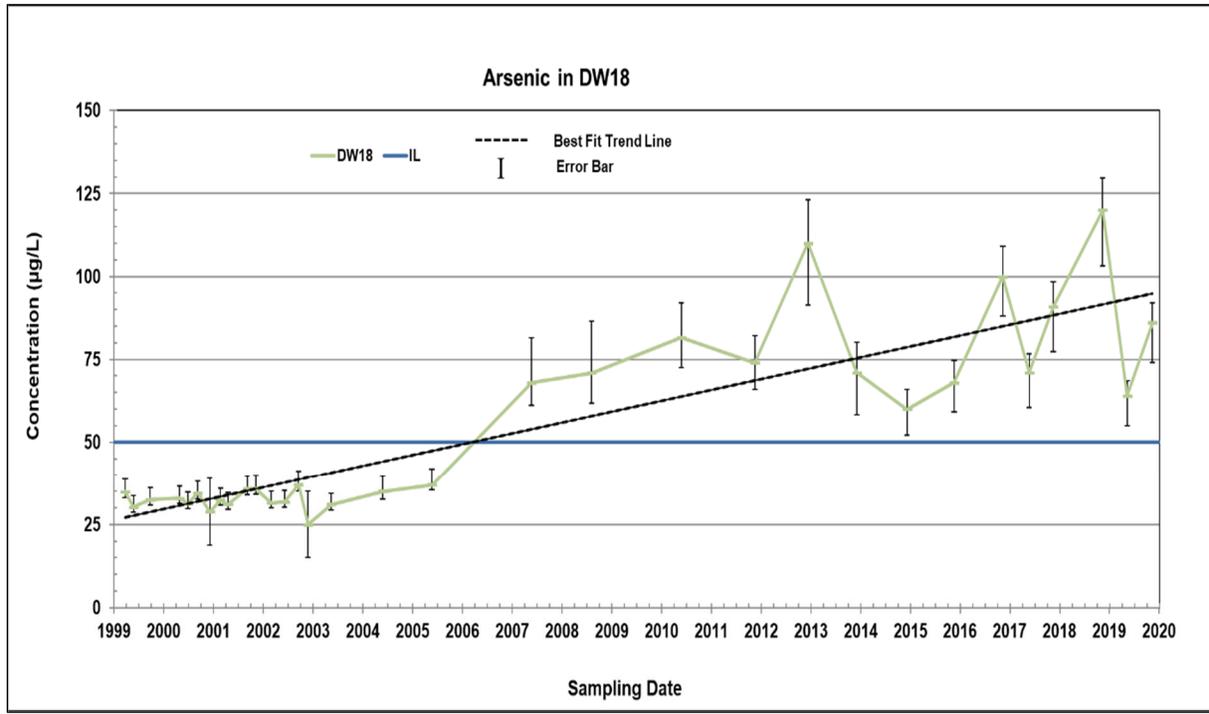
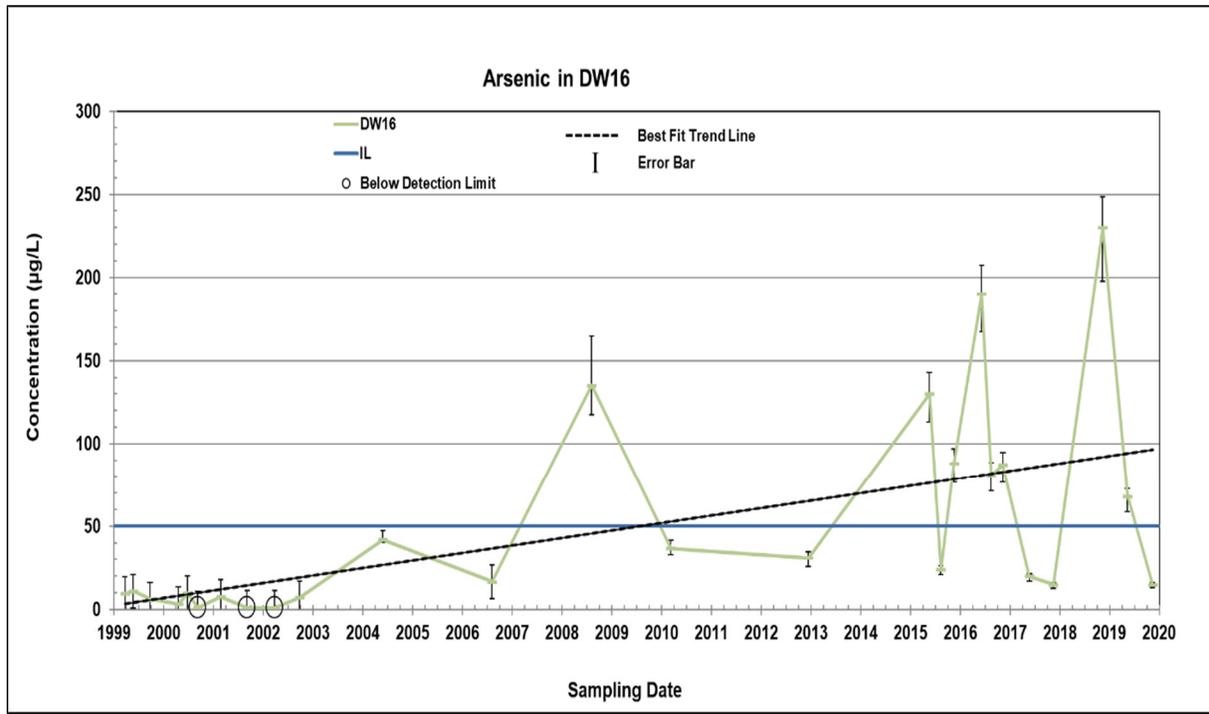


Figure 4-5. Total U Concentration Trends in Unfiltered Ground Water at the SLDS



Notes:

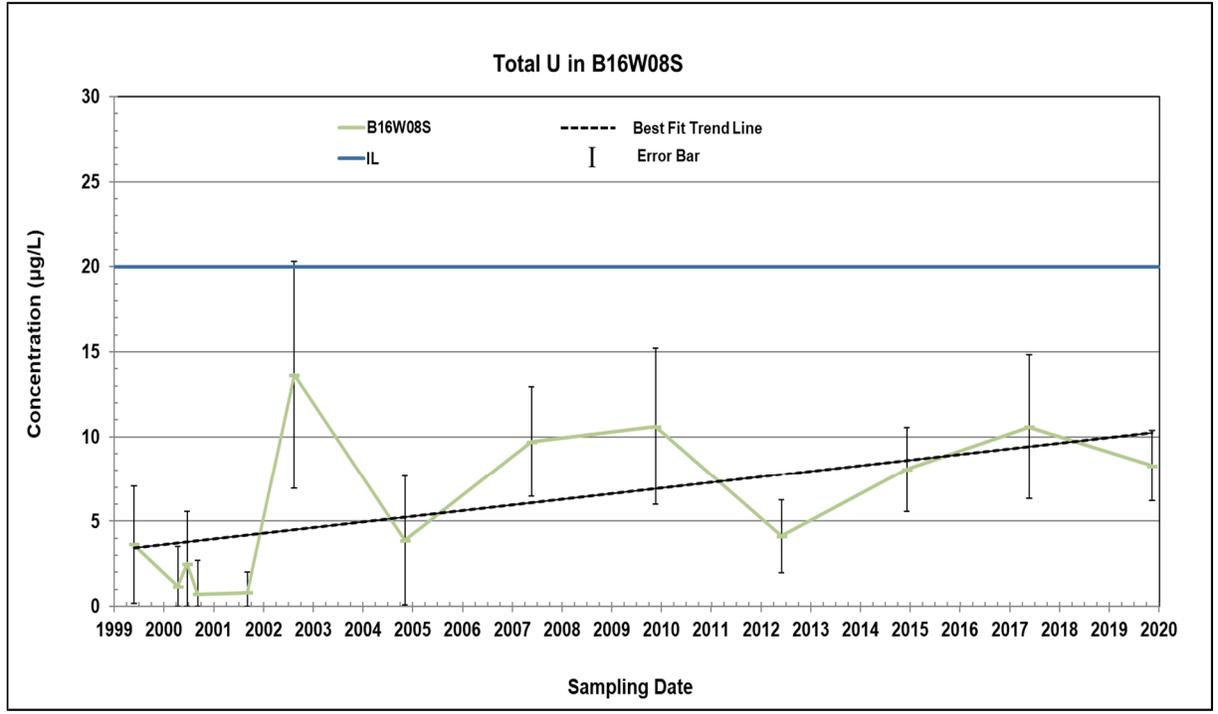
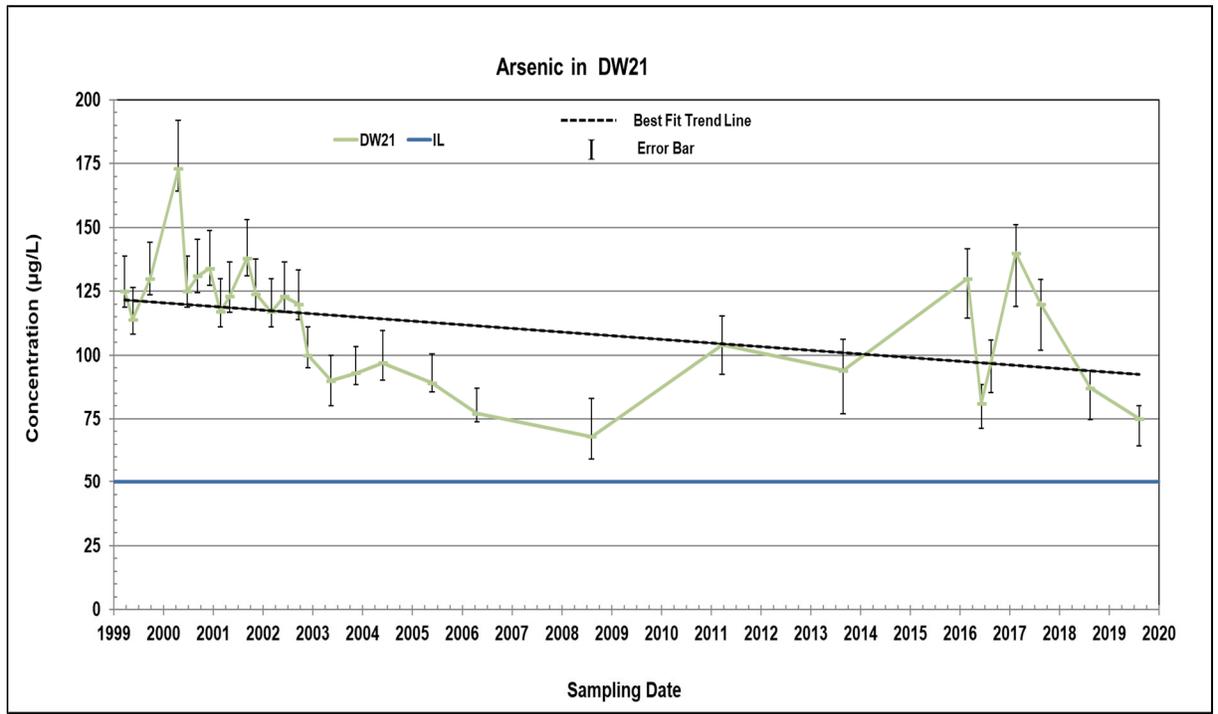
For arsenic results less than 3 times the reporting limit (RL), the error bar represents \pm RL.

For arsenic results exceeding 3 times the RL, the error bar represents the upper and lower control limits on the control spike samples.

Error bars for arsenic 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.

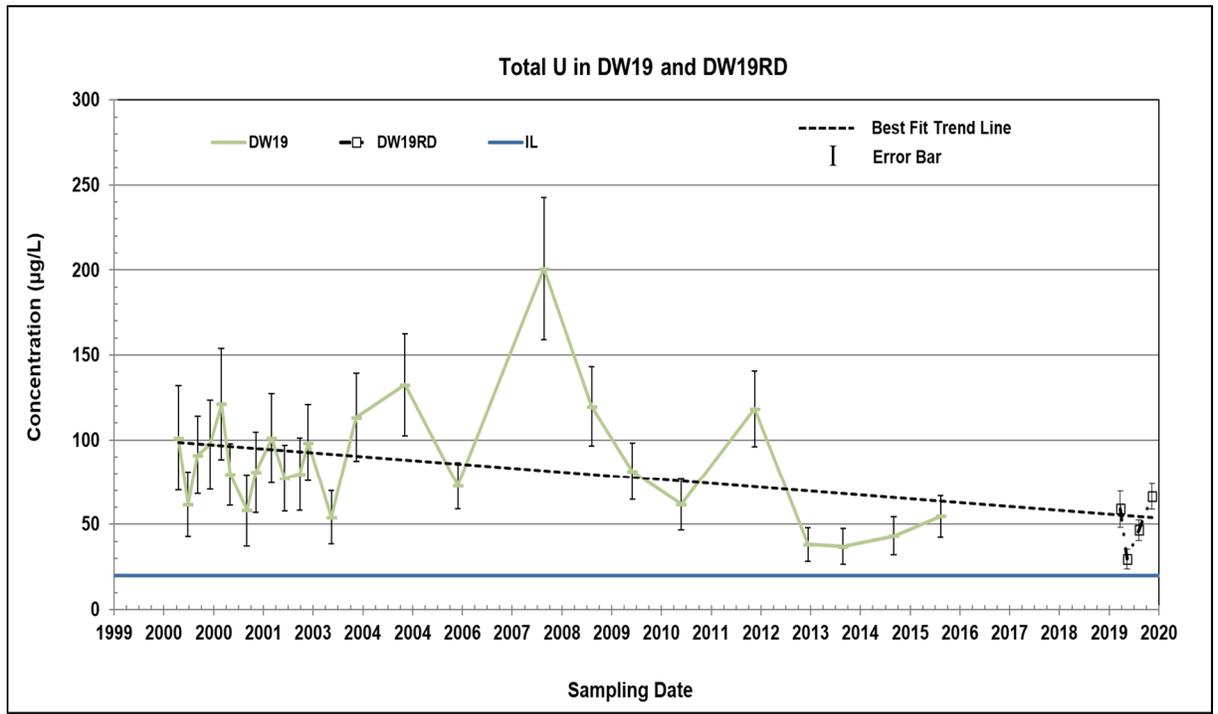
For total U, the error bar represents \pm the sum of the measurement errors for U-234, U-235, and U-238, converted to $\mu\text{g/L}$.

Figure 4-6. Time-Versus-Concentration Plots for Arsenic and Total U in Ground-Water Monitoring Wells at the SLDS



Notes:
 For arsenic results less than 3 times the RL, the error bar represents \pm RL.
 For arsenic results exceeding 3 times the RL, the error bar represents the upper and lower control limits on the control spike samples.
 Error bars for arsenic 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.
 For total U, the error bar represents \pm the sum of the measurement errors for U-234, U-235, and U-238, converted to $\mu\text{g/L}$.

Figure 4-6. Time-Versus-Concentration Plots for Arsenic and Total U in Ground-Water Monitoring Wells at the SLDS (Continued)



Notes:

For cadmium results less than 3 times the RL, the error bar represents \pm RL.
 For cadmium results exceeding 3 times the RL, the error bar represents the upper and lower control limits on the control spike samples.
 Error bars for cadmium 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.
 For total U, the error bar represents \pm the sum of the measurement errors for U-234, U-235, and U-238, converted to µg/L.

Figure 4-6. Time-Versus-Concentration Plots for Arsenic and Total U in Ground-Water Monitoring Wells at the SLDS (Continued)

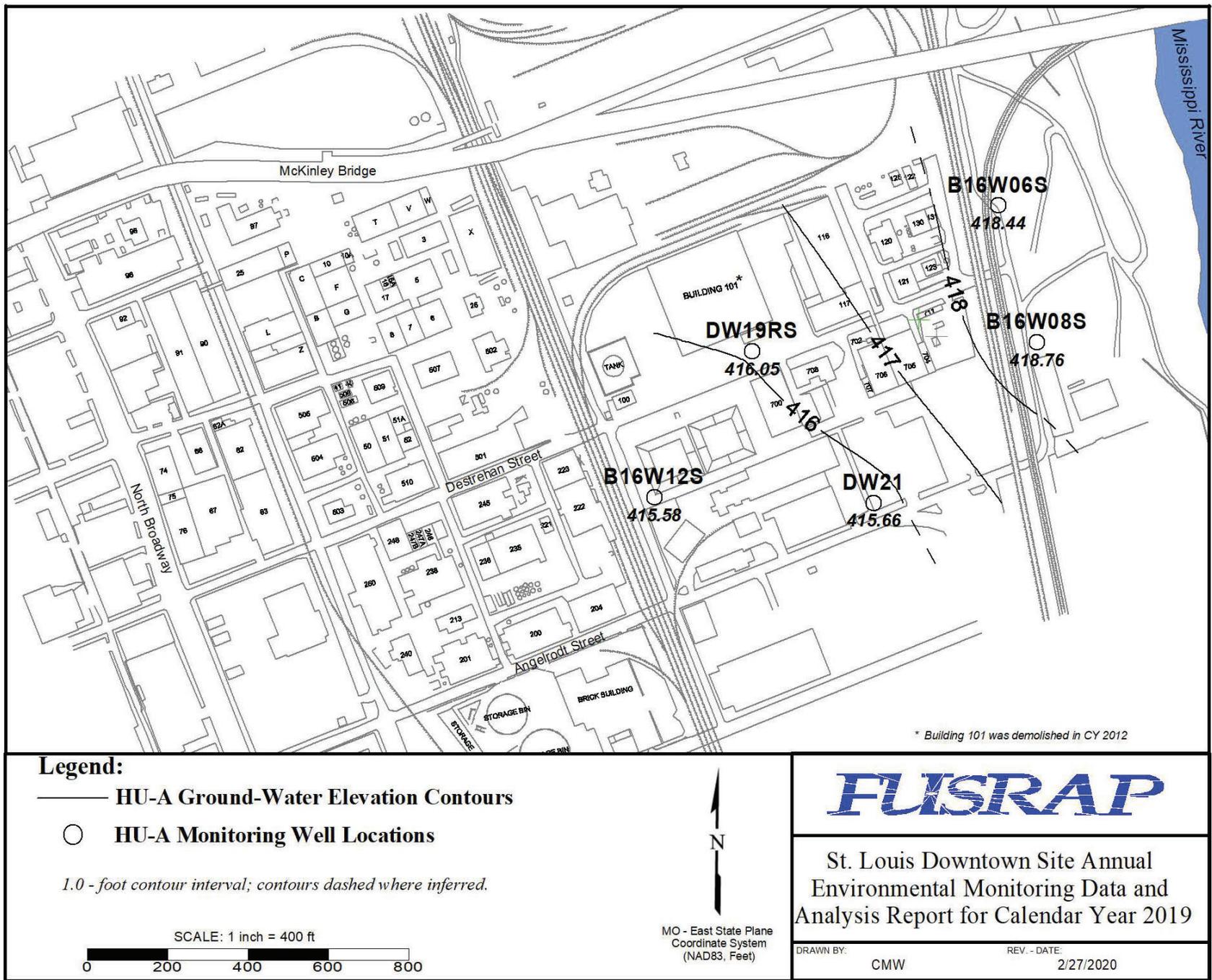


Figure 4-7. HU-A Potentiometric Surface at the SLDS (May 10, 2019)

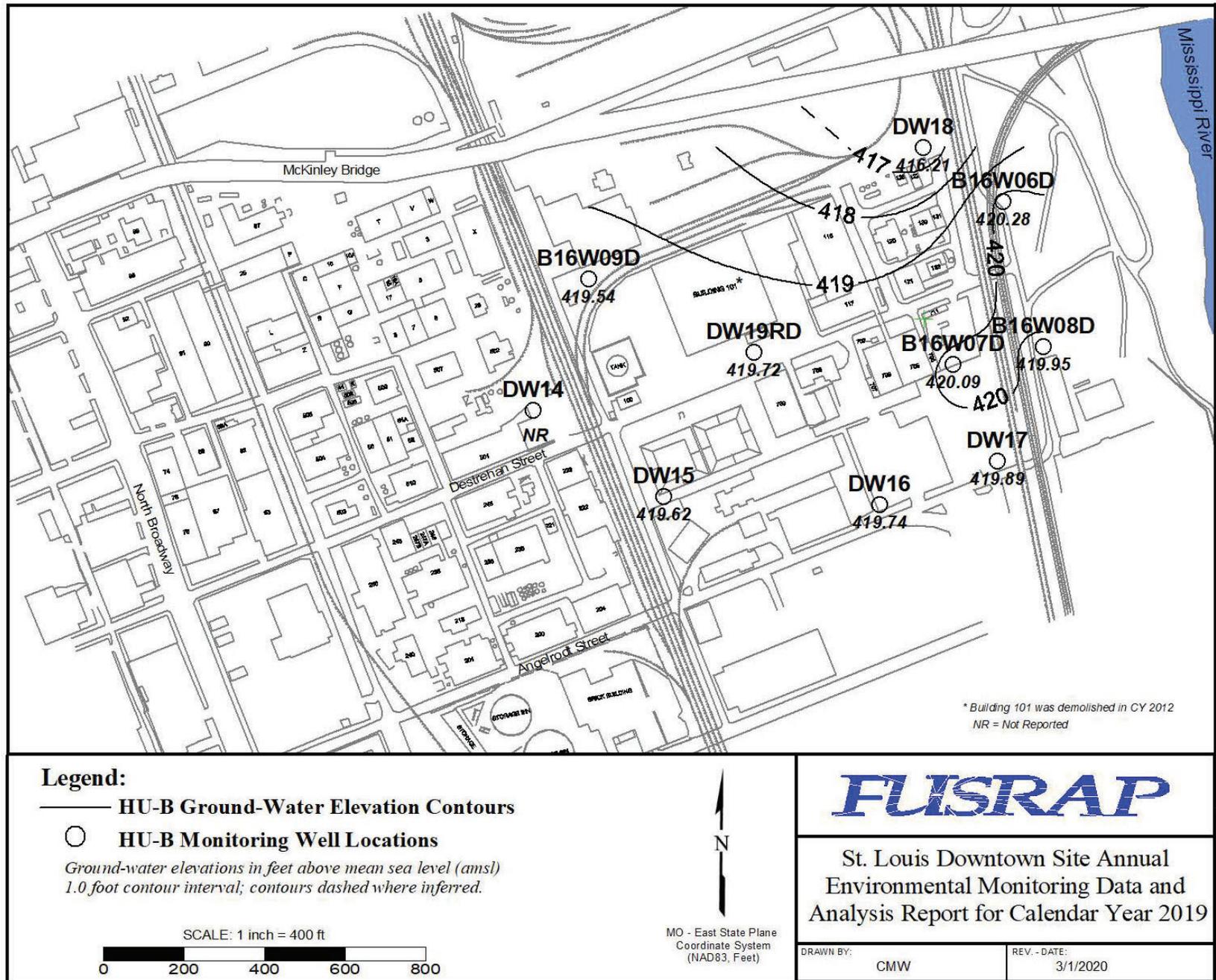


Figure 4-8. HU-B Potentiometric Surface at the SLDS (May 10, 2019)

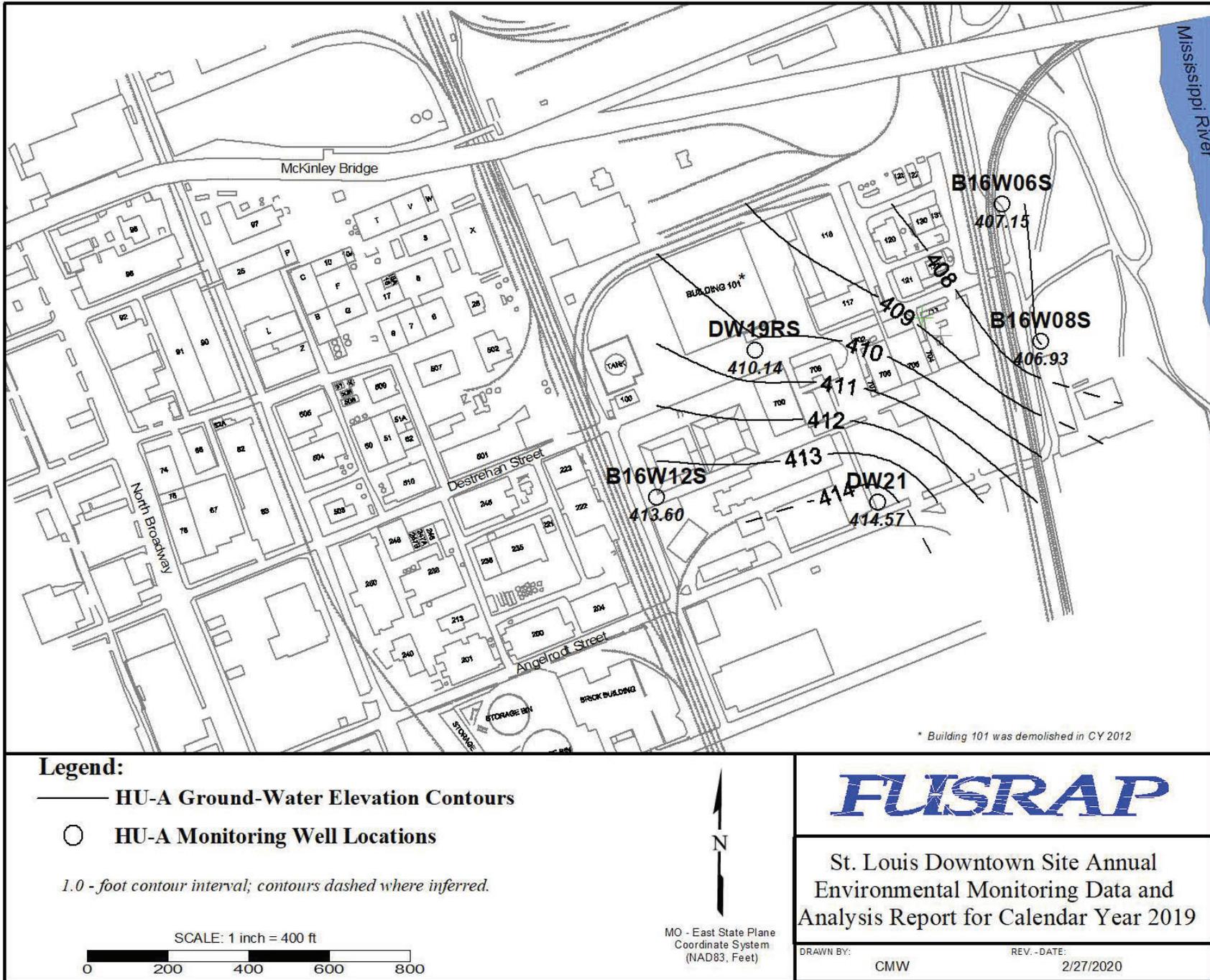
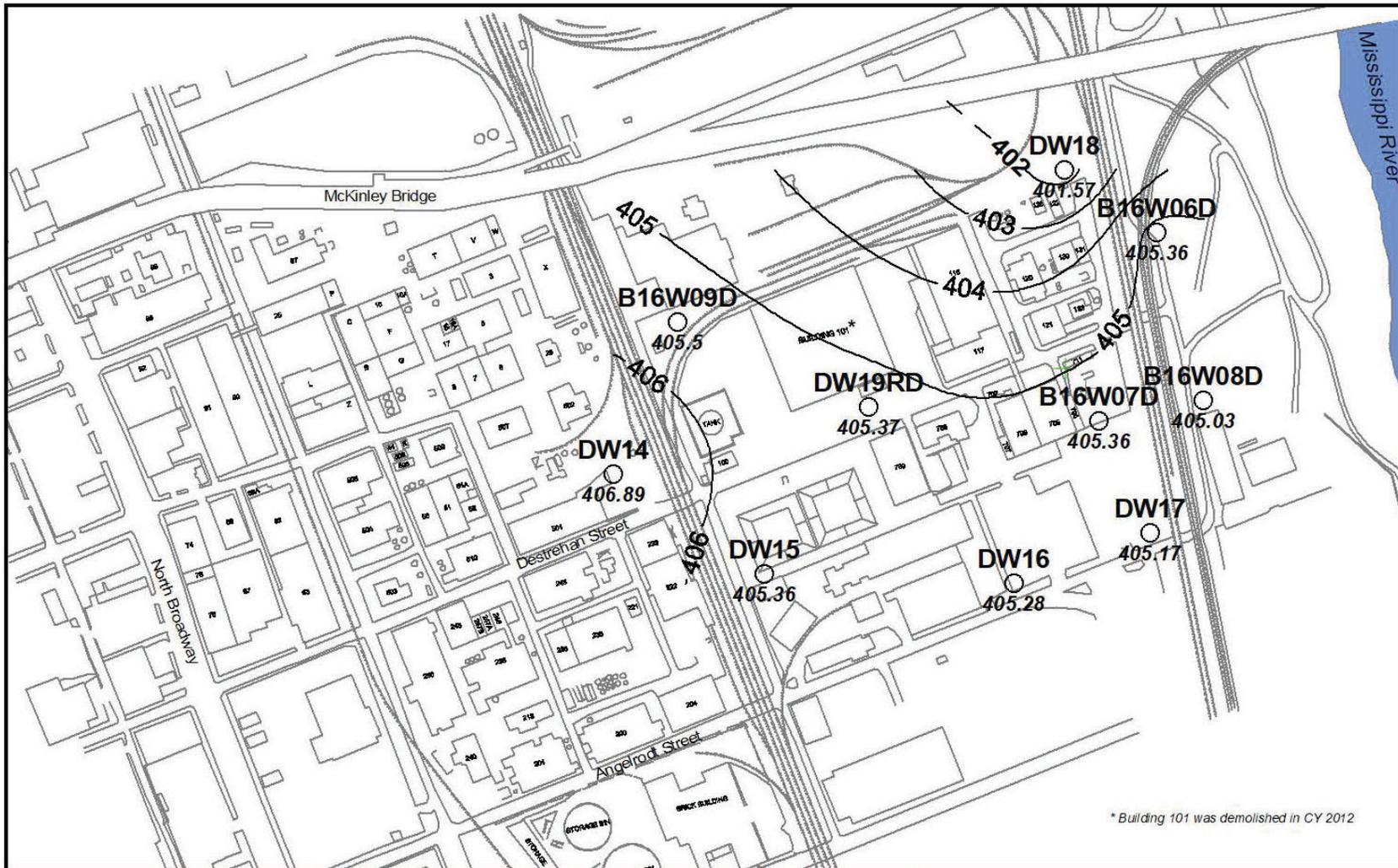


Figure 4-9. HU-A Potentiometric Surface at the SLDS (November 11, 2019)



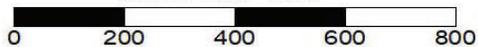
Legend:

— HU-B Ground-Water Elevation Contours

○ HU-B Monitoring Well Locations

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

SCALE: 1 inch = 400 ft



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

FUSRAP

St. Louis Downtown Site Annual
Environmental Monitoring Data and
Analysis Report for Calendar Year 2019

DRAWN BY:

CMW

REV. - DATE:

3/1/2020

Figure 4-10. HU-B Potentiometric Surface at the SLDS (November 11, 2019)

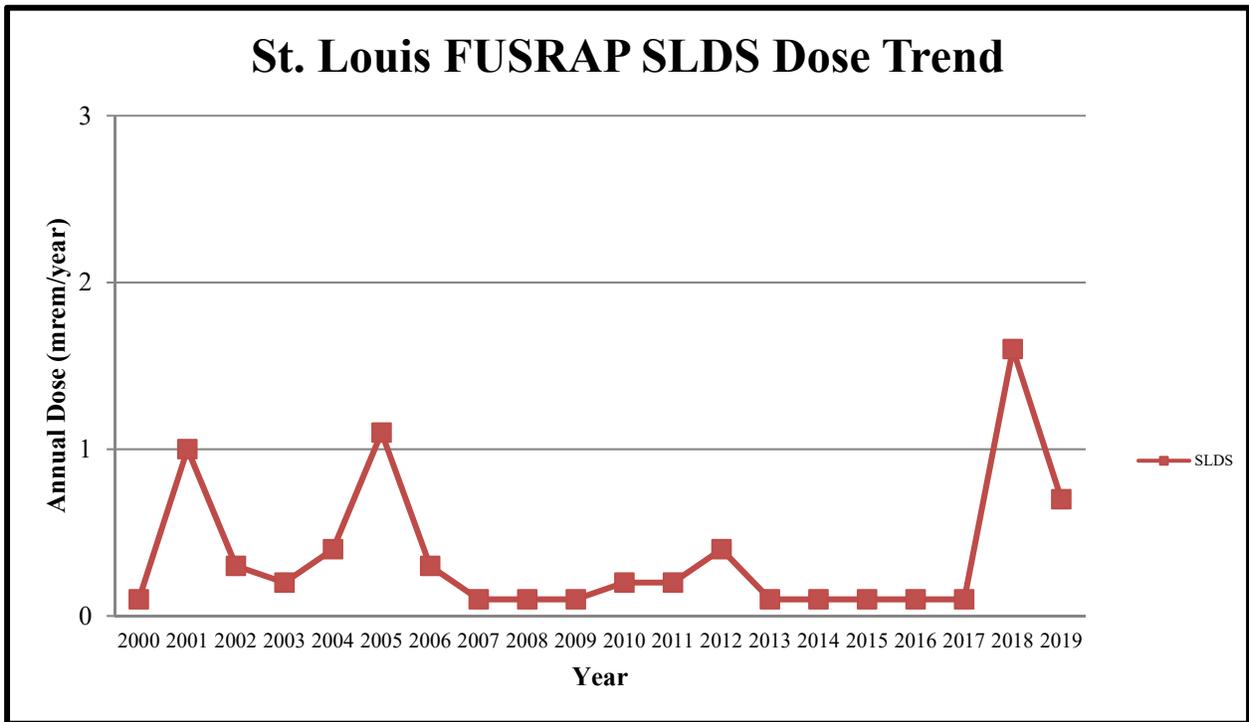


Figure 6-1. St. Louis FUSRAP SLDS Dose Trends

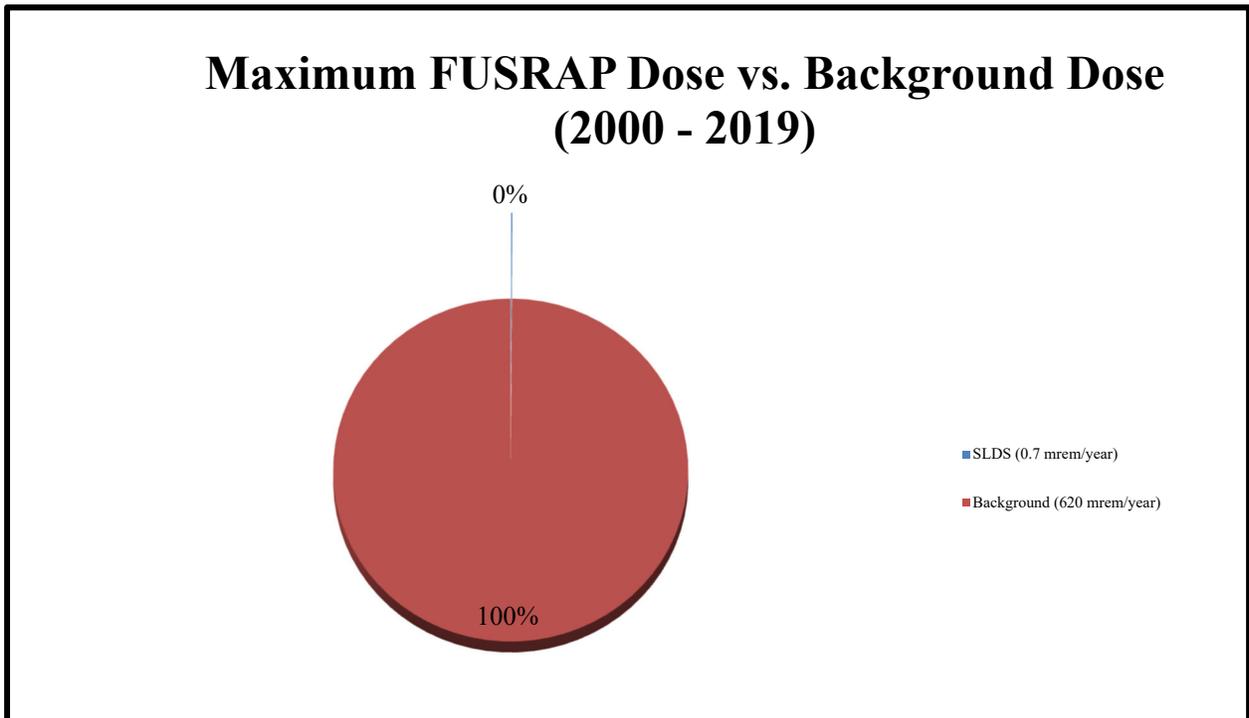


Figure 6-2. St. Louis FUSRAP SLDS Maximum Dose vs. Background Dose

APPENDIX A

**ST. LOUIS DOWNTOWN SITE 2019 RADIONUCLIDE EMISSIONS NESHAP REPORT
SUBMITTED IN ACCORDANCE WITH REQUIREMENTS OF 40 CFR 61, SUBPART I**

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Figure A-1. SLDS Critical Receptors

LIST OF ATTACHMENTS

Attachment A-1 Calculated Emission Rates from St. Louis Downtown Site Properties
Attachment A-2 CAP88-PC Output Report for St. Louis Downtown Site Properties

ACRONYMS AND ABBREVIATIONS

Ac	actinium
AEC	U.S. Atomic Energy Commission
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act
<i>CFR</i>	<i>Code of Federal Regulations</i>
CY	calendar year
DOE	U.S. Department of Energy
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	<i>Record of Decision for the St. Louis Downtown Site</i>
SLDS	St. Louis Downtown Site
SLS	St. Louis Sites
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) 2019. 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, Destrehan Street, Gunther Salt, Plant 6 Loadout, and Plant 7 West (henceforth referred to as Plant 7W).

Emissions from the SLDS were evaluated for the entire CY 2019 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: 114 James S McDonnell Boulevard
Hazelwood, MO 63042
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 Destrehan Street, Gunther Salt, Plant 6 Loadout, and Plant 7W. 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 receptors¹, 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 2020). The USEPA continues to maintain and update the CAP88-PC modeling program, and has updated it as recently as March, 2020. 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 receptors¹ is obtained using USEPA computer code CAP88-PC, Version 4.1 (USEPA 2020). 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 °C

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

Table A-1. St. Louis Wind Speed Frequency

Wind Speed Group (Knots)	Frequency (Percent)
0 – 3	10
4 – 7	29
8 – 12	36
13 – 18	21
19 – 24	3
25 – 31	1

Knot = 1.151 miles per hour

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

Table A-2. St. Louis Wind Rose Frequency

Wind Direction		Wind Frequency (Percent)	Wind Direction		Wind Frequency (Percent)
Wind Toward	Wind From		Wind Toward	Wind From	
North	South	13.1	South	North	5.6
North-Northwest	South-Southeast	7.4	South-Southeast	North-Northwest	4.3
Northwest	Southeast	6.8	Southeast	Northwest	6.1
West-Northwest	East-Southeast	6.9	East-Southeast	West-Northwest	8.7
West	East	5.5	East	West	9.0
West-Southwest	East-Northeast	2.8	East-Northeast	West-Southwest	6.8
Southwest	Northeast	3.1	Northeast	Southwest	5.4
South-Southwest	North-Northeast	3.7	North-Northeast	South-Southwest	5.0

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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. MED/AEC operations ended in 1957.

A radiological survey conducted at the SLDS in 1977 found radiological contamination that exceeded existing guidelines. In response to this survey, it was determined that further investigation of the site was necessary to characterize the nature and extent of the contamination. In 1990, the USEPA Region 7 and the U.S. Department of Energy (DOE) established schedules and deliverables for the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) process at the St. Louis Sites (SLS). In 1994, the DOE submitted the *Remedial Investigation Report for the St. Louis Site* (DOE 1994).

The *Record of Decision for the St. Louis Downtown Site* (ROD) was issued in October 1998 (USACE 1998). The USACE began remediation in October 1998, and characterization, pre-design investigation, and excavation activities have continued on Mallinckrodt and SLDS vicinity properties (VPs) through 2019.

4.2 MATERIAL HANDLING AND PROCESSING FOR CALENDAR YEAR 2019

Excavation activities were performed at the SLDS areas of Destrehan Street, Gunther Salt (DT-4), and Plant 7W. For the purposes of this evaluation, the excavations at Plant 7W are included with the Destrehan Street excavations. Additionally, loadout activities were performed at Plant 6. Excavated soils placed in the loadout area are tamped down at the end of each night or sprayed with a surfactant over longer periods of time. The excavated soils were removed from the site by rail. General area air samples were collected around excavation and loadout perimeters during CY 2019, with the results used to determine the air 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 based upon excavated area property-specific average soil radionuclide concentrations as determined from railcar data used to characterize the waste for shipment. Attachment A-1 contains Table A-1-1, a summary table of the radionuclide concentrations for each area or plant and VPs. The averaged total alpha and

total beta air particulate concentrations at each SLDS property and the activity fraction for each corresponding property were used to calculate the emission rate for each area.

4.4 LIST OF ASSUMED AIR RELEASES FOR CALENDAR YEAR 2019

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 2019

Sources	Nearest Residence		Farm		Business		School	
	Distance (m)	Direction	Distance (m)	Direction	Distance (m)	Direction	Distance (m)	Direction
Destrehan Street/Plant 7W	465	Southwest	2,980	Northeast	80	South-Southeast	800	West
Gunther Salt	240	West	3,270	Northeast	290	Northeast	790	Northwest
Plant 6 Loadout	495	Southwest	2,915	Northeast	160	South-Southeast	750	West

4.6 EMISSIONS DETERMINATION

4.6.1 Measured Airborne Radioactive Particulate Emissions

Particulate air samples were collected from several locations at prominent wind directions from 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 2019. The average gross alpha and beta concentrations (in $\mu\text{Ci}/\text{mL}$) are determined for each area or plant location for CY 2019. 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 2019

Monitoring Location	Average Concentration ($\mu\text{Ci}/\text{mL}$) ^a	
	Gross Alpha	Gross Beta
Destrehan Street/Plant 7W	3.31E-15	2.90E-14
Gunther Salt (DT-4)	4.06E-15	2.46E-14
Plant 6 Loadout	3.30E-15	2.90E-14
Background Concentrations ^b	3.91E-15	1.98E-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 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 $\mu\text{Ci}/\text{cm}^3$) for that area. The gross average concentration ($\mu\text{Ci}/\text{cm}^3$) is converted to a release (emission) rate, measured in Ci per year using Equations 1 and 2 from *A Guide for Determining Compliance with the Clean Air Act Standards for Radionuclide Emissions from NRC-Licensed and Non-DOE Federal Facilities* (USEPA 1989). Equation 1 is used to determine the effective diameter of a non-circular stack or vent.

$$D = (1.3 A)^{1/2} \quad \text{Equation 1}$$

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 2019. Calculation of the effective surface area is contained in Attachment A-1.

Table A-5. SLDS Excavation Effective Areas and Effective Diameters for CY 2019

SLDS Location	Effective Area (m^2)	Effective Diameter (m)
Destrehan Street/Plant 7W	270	19
Gunther Salt	701	30
Plant 6 Loadout	460	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.

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

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 2019

SLDS Location	Site Release Flow Rate (m^3/minute)
Destrehan Street/Plant 7W	7.4E+04
Gunther Salt	1.9E+05
Plant 6 Loadout	1.3E+05

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

The CY 2019 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 2019

Radionuclide	Emission (Ci/year) ^a		
	Destrehan Street/Plant 7W	Gunther Salt	Plant 6 Loadout
Uranium (U)-238	3.4E-05	1.5E-04	7.3E-05
U-235	1.8E-06	6.7E-06	3.5E-06
U-234	3.4E-05	1.5E-04	7.3E-05
Radium (Ra)-226	1.8E-05	3.6E-05	2.2E-05
Thorium (Th)-232	5.9E-06	6.7E-06	5.2E-06
Th-230	1.8E-05	4.0E-05	2.4E-05
Th-228	5.9E-06	6.7E-06	5.2E-06
Ra-224	5.9E-06	6.7E-06	5.2E-06
Th-234	4.7E-04	1.2E-03	8.7E-04
Protactinium (Pa)-234m	4.7E-04	1.2E-03	8.7E-04
Th-231	2.5E-05	5.3E-05	4.1E-05
Ra-228	8.0E-05	5.3E-05	6.3E-05
Actinium (Ac)-228	8.0E-05	5.3E-05	6.3E-05
Pa-231	1.8E-06	6.7E-06	3.5E-06
Ac-227	1.8E-06	6.7E-06	3.5E-06

^a Release rate based on 365-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 2019

Source	Dose (mrem/year)			
	Nearest Residence ^a	Farm ^a	Business ^b	School ^b
Destrehan Street/Plant 7W	<0.1	<0.1	< 0.1	<0.1
Gunther Salt	<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

- DOE 1994. U.S. Department of Energy. *Remedial Investigation Report for the St. Louis Site*, St. Louis, Missouri, DOE/OR/21949-280, January 1999.
- USACE 1998. U.S. Army Corps of Engineers. *Record of Decision for the St. Louis Downtown Site*, St. Louis, Missouri, Final, July 1998.
- 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 1989.
- USEPA 2020. U.S. Environmental Protection Agency. CAP88-PC Version 4.1 Computer Code, March 2020.
- 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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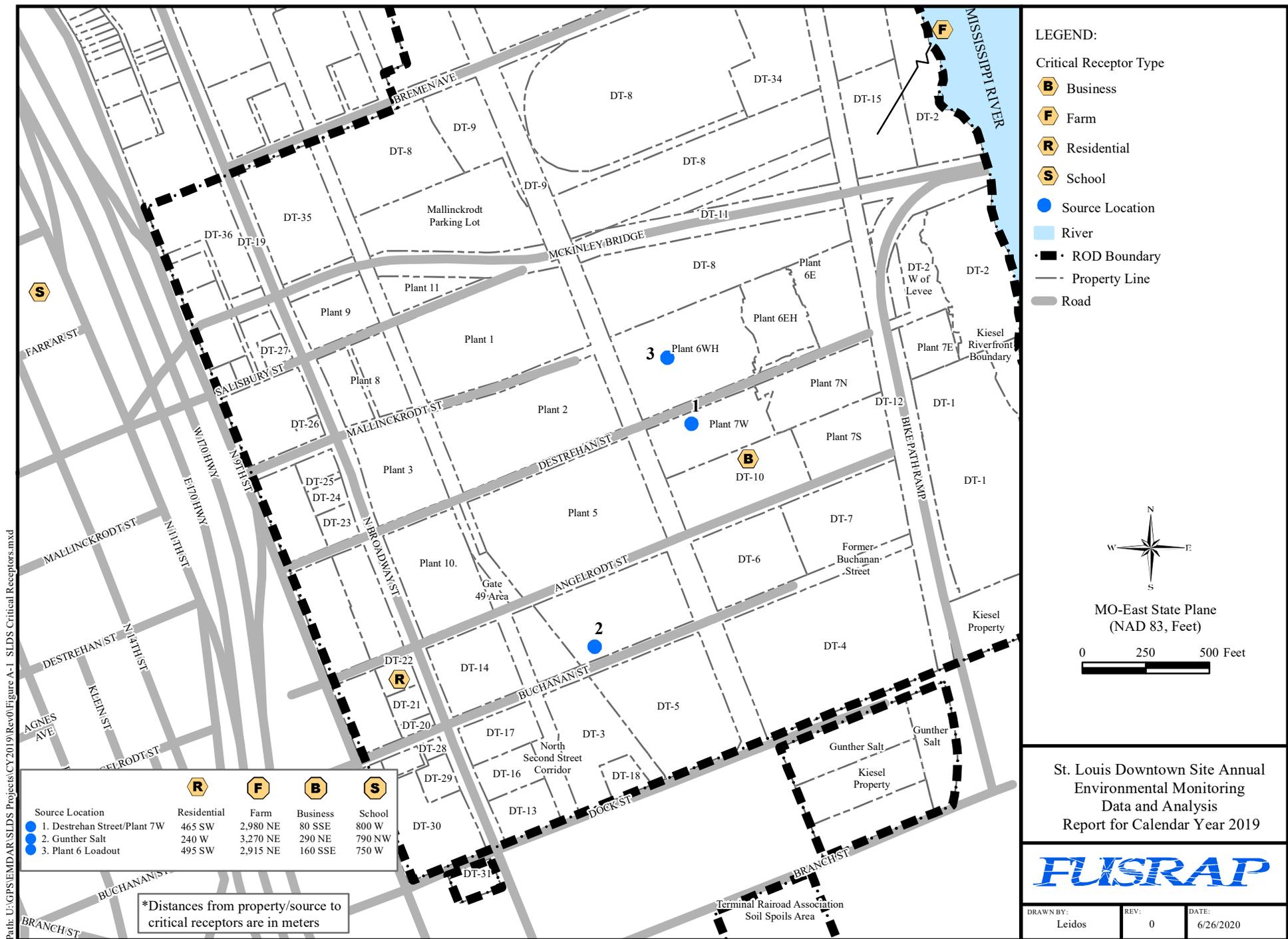


Figure A-1. SLDS Critical Receptors

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 2019^a

Property	Destrehan Street/Plant 7W	Gunther Salt	Plant 6 Loadout Average
Radionuclide	Average Concentration (pCi/g)^a		
U-238	1.7	6.5	4.1
U-235	0.1	0.3	0.2
U-234	1.7	6.5	4.1
Ra-226	0.9	1.6	1.3
Th-232	0.3	0.3	0.3
Th-230	0.9	1.8	1.3
Th-228	0.3	0.3	0.3
Ra-224	0.3	0.3	0.3
Th-234	1.7	6.5	4.1
Pa-234m	1.7	6.5	4.1
Th-231	0.1	0.3	0.2
Ra-228	0.3	0.3	0.3
Ac-228	0.3	0.3	0.3
Pa-231	0.1	0.3	0.2
Ac-227	0.1	0.3	0.2

^a Average concentration from the SLDS CY 2019 excavated property and loadout area. When data were not available, the radionuclide was assumed to be in secular equilibrium with parent radionuclide.

Table A-1-2. SLDS Average Gross Alpha and Beta Airborne Particulate Concentrations for CY 2019

Monitoring Location	Average Concentration (µCi/mL) for Location ^a	
	Gross Alpha	Gross Beta
Destrehan Street/Plant 7W	3.31E-15	2.90E-14
Gunther Salt	4.06E-15	2.46E-14
Plant 6 Loadout	3.30E-15	2.90E-14
Background Concentration ^b	3.91E-15	1.98E-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 2019

Excavation Location Name	Surface Area (m ²)	Start Date ^a	Backfill Date ^a
Destrehan Street/Plant 7W, Survey Unit (SU)-6B	233	01/01/19	01/09/19
Destrehan Street/Plant 7W, SU-6C	101	01/01/19	12/11/19
Destrehan Street/Plant 7W, SU-6D	44	01/01/19	12/11/19
Destrehan Street/Plant 7W, SU-7B	405	01/01/19	01/09/19
Destrehan Street/Plant 7W, SU-7C	122	01/01/19	12/11/19
Destrehan Street/Plant 7W, SU-7D	2	01/01/19	12/11/19
Gunther Salt, SU-3A - 3VV	535	01/03/19	07/23/19
Gunther Salt, SU-4J - 4P	102	03/13/19	12/31/19
Gunther Salt, SU-5A - 5MM	764	07/31/19	12/31/19
Plant 6 Loadout ^b	2,000	01/01/19	12/31/19

^a Open/close dates set to start or stop at the CY boundary

^b Loadout area was only open during working hours (23 percent of the year or 2,000 hours).

Table A-1-4. SLDS Average Surface Area and Flow Rate Per Location at the SLDS for CY 2019

Location	Total Days	Surface Area × Total Days	Average Surface Area/Year (A) ^a (m ²)	Diameter of Stack D = (1.3 A) ^{1/2} (m)	Flow Rate F = V π [(D) ² / 4]*60 (m ³ /minute)
Destrehan Street/Plant 7W					
Destrehan Street/Plant 7W, SU-6B	9	2,097			
Destrehan Street/Plant 7W, SU-6C	345	34,845			
Destrehan Street/Plant 7W, SU-6D	345	15,180			
Destrehan Street/Plant 7W, SU-7B	9	3,645			
Destrehan Street/Plant 7W, SU-7C	345	42,090			
Destrehan Street/Plant 7W, SU-7D	345	690			
Total		98,547	270	19	7.4E+04
Gunther Salt					
Gunther Salt, SU-3A - 3VV	202	108,070			
Gunther Salt, SU-4J - 4P	294	29,988			
Gunther Salt, SU-5A - 5MM	154	117,656			
Total		255,714	701	30	1.9E+05
Plant 6 Loadout					
Plant 6 Loadout	365	167,900			
Total		167,900	460	24	1.3E+05^b

^a Average surface area/year = [Σ(surface area x total days)]/365.

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

Table A-1-5. SLDS Airborne Radioactive Particulate Emissions Based on Excavation Perimeter Air Samples for CY 2019

Property	Destrehan Street/Plant 7W			Gunther Salt			Plant 6 Loadout		
	Activity Fraction ^a	Emission Conc. (μCi/cm ³) ^b	Release Rate (Ci/year) ^c	Activity Fraction ^a	Emission Conc. (μCi/cm ³) ^b	Release Rate (Ci/year) ^c	Activity Fraction ^a	Emission Conc. (μCi/cm ³) ^b	Release Rate (Ci/year) ^c
U-238	0.27	8.9E-16	3.4E-05	0.36	1.5E-15	1.5E-04	0.33	1.1E-15	7.3E-05
U-235	0.01	4.7E-17	1.8E-06	0.02	6.7E-17	6.7E-06	0.02	5.2E-17	3.5E-06
U-234 ^d	0.27	8.9E-16	3.4E-05	0.36	1.5E-15	1.5E-04	0.33	1.1E-15	7.3E-05
Ra-226	0.14	4.7E-16	1.8E-05	0.09	3.6E-16	3.6E-05	0.10	3.4E-16	2.2E-05
Th-232	0.05	1.5E-16	5.9E-06	0.02	6.7E-17	6.7E-06	0.02	7.9E-17	5.2E-06
Th-230	0.14	4.7E-16	1.8E-05	0.10	4.0E-16	4.0E-05	0.11	3.6E-16	2.4E-05
Th-228	0.05	1.5E-16	5.9E-06	0.02	6.7E-17	6.7E-06	0.02	7.9E-17	5.2E-06
Ra-224 ^d	0.05	1.5E-16	5.9E-06	0.02	6.7E-17	6.7E-06	0.02	7.9E-17	5.2E-06
Th-234	0.42	1.2E-14	4.7E-04	0.47	1.2E-14	1.2E-03	0.46	1.3E-14	8.7E-04
Pa-234m ^d	0.42	1.2E-14	4.7E-04	0.47	1.2E-14	1.2E-03	0.46	1.3E-14	8.7E-04
Th-231 ^d	0.02	6.4E-16	2.5E-05	0.02	5.3E-16	5.3E-05	0.02	6.3E-16	4.1E-05
Ra-228	0.07	2.1E-15	8.0E-05	0.02	5.3E-16	5.3E-05	0.03	9.5E-16	6.3E-05
Ac-228 ^d	0.07	2.1E-15	8.0E-05	0.02	5.3E-16	5.3E-05	0.03	9.5E-16	6.3E-05
Pa-231 ^d	0.01	4.7E-17	1.8E-06	0.02	6.7E-17	6.7E-06	0.02	5.2E-17	3.5E-06
Ac-227 ^d	0.01	4.7E-17	1.8E-06	0.02	6.7E-17	6.7E-06	0.02	5.2E-17	3.5E-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 365-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 cm³).

^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

Destrehan Street/Plant 7W

CAP88-PC

Version 4.1

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

Wed Mar 18 09:11:03 2020

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

Source Category: Area
Source Type: Area
Emission Year: 2019
DOSE Age Group: Adult

Comments: Air

Dataset Name: Destrehan St.
Dataset Date: Mar 18, 2020 09:10 AM
Wind File: C:\Users\finkenbinec\Documents\CAP88\Wind Files\13994.WND

Wed Mar 18 09:11:03 2020

SUMMARY
Page 1

ORGAN DOSE EQUIVALENT SUMMARY

Organ	Selected Individual (mrem)
Adrenals	9.49E-02
UB_Wall	1.04E-01
Bone_Sur	4.97E+00
Brain	9.97E-02
Breasts	1.08E-01
St_Wall	1.01E-01
SI_Wall	1.00E-01
ULI_Wall	1.05E-01
LLI_Wall	1.15E-01
Kidneys	1.82E-01
Liver	3.28E-01
Muscle	1.11E-01
Ovaries	1.30E-01
Pancreas	9.57E-02
R_Marrow	3.61E-01
Skin	1.06E+00
Spleen	1.01E-01
Testes	1.45E-01
Thymus	1.00E-01
Thyroid	1.04E-01
GB_Wall	9.61E-02
Ht_Wall	9.96E-02
Uterus	9.89E-02
ET_Reg	4.29E-01
Lung	1.23E+00
Effectiv	3.48E-01

PATHWAY EFFECTIVE DOSE EQUIVALENT SUMMARY

Pathway	Selected Individual (mrem)
INGESTION	2.25E-02
INHALATION	2.27E-01
AIR IMMERSION	4.23E-06
GROUND SURFACE	9.82E-02
INTERNAL	2.50E-01
EXTERNAL	9.82E-02
TOTAL	3.48E-01

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SUMMARY
Page 2

NUCLIDE EFFECTIVE DOSE EQUIVALENT SUMMARY

Nuclide	Selected Individual (mrem)
U-238	1.36E-02
Th-234	1.07E-03
Pa-234m	5.12E-03
Pa-234	1.01E-04
U-234	1.64E-02
Th-230	4.22E-02
Ra-226	1.14E-02
Rn-222	8.76E-06
Po-218	1.57E-10
Pb-214	5.72E-03
At-218	5.89E-10
Bi-214	3.34E-02
Rn-218	3.41E-12
Po-214	1.85E-06
Tl-210	1.31E-05
Pb-210	2.82E-05
Bi-210	4.55E-04
Hg-206	3.67E-11
Po-210	1.18E-07
Tl-206	1.06E-09
U-235	1.12E-03
Th-231	3.69E-05
Pa-231	2.88E-02
Ac-227	2.18E-02
Th-227	2.67E-04
Fr-223	2.51E-06
Ra-223	2.98E-04
Rn-219	1.29E-04
At-219	0.00E+00
Bi-215	5.81E-10
Po-215	3.95E-07
Pb-211	2.54E-04
Bi-211	1.05E-04
Tl-207	1.31E-04
Po-211	5.03E-08
Th-232	2.55E-02
Ra-228	5.22E-02
Ac-228	2.00E-02
Th-228	3.44E-02
Ra-224	2.42E-03
Rn-220	1.37E-05
Po-216	3.31E-07
Pb-212	3.02E-03
Bi-212	3.52E-03
Po-212	0.00E+00
Tl-208	2.43E-02
TOTAL	3.48E-01

Wed Mar 18 09:11:03 2020

SUMMARY
Page 3

CANCER RISK SUMMARY

Cancer	Selected Individual Total Lifetime Fatal Cancer Risk
Esophagu	1.05E-09
Stomach	3.98E-09
Colon	1.11E-08
Liver	4.84E-09
LUNG	1.40E-07
Bone	4.73E-09
Skin	1.05E-09
Breast	4.74E-09
Ovary	1.75E-09
Bladder	2.51E-09
Kidneys	9.84E-10
Thyroid	3.20E-10
Leukemia	6.08E-09
Residual	1.49E-08
Total	1.98E-07
 TOTAL	 1.98E-07

PATHWAY RISK SUMMARY

Pathway	Selected Individual Total Lifetime Fatal Cancer Risk
INGESTION	8.40E-09
INHALATION	1.40E-07
AIR IMMERSION	2.18E-12
GROUND SURFACE	4.98E-08
INTERNAL	1.48E-07
EXTERNAL	4.98E-08
 TOTAL	 1.98E-07

Wed Mar 18 09:11:03 2020

SUMMARY
Page 4

NUCLIDE RISK SUMMARY

Nuclide	Selected Individual Total Lifetime Fatal Cancer Risk
-----	-----
U-238	1.42E-08
Th-234	9.93E-10
Pa-234m	8.97E-10
Pa-234	5.49E-11
U-234	1.73E-08
Th-230	2.27E-08
Ra-226	1.02E-08
Rn-222	4.78E-12
Po-218	6.99E-17
Pb-214	3.06E-09
At-218	7.25E-17
Bi-214	1.77E-08
Rn-218	1.87E-18
Po-214	1.02E-12
Tl-210	6.97E-12
Pb-210	1.26E-11
Bi-210	5.05E-11
Hg-206	1.63E-17
Po-210	6.47E-14
Tl-206	1.19E-16
U-235	1.00E-09
Th-231	1.78E-11
Pa-231	2.83E-09
Ac-227	6.03E-09
Th-227	1.45E-10
Fr-223	9.37E-13
Ra-223	1.61E-10
Rn-219	7.07E-11
At-219	0.00E+00
Bi-215	2.59E-16
Po-215	2.16E-13
Pb-211	9.07E-11
Bi-211	5.71E-11
Tl-207	1.69E-11
Po-211	2.76E-14
Th-232	1.13E-08
Ra-228	2.43E-08
Ac-228	1.07E-08
Th-228	3.49E-08
Ra-224	2.75E-09
Rn-220	7.52E-12
Po-216	1.82E-13
Pb-212	1.64E-09
Bi-212	1.36E-09
Po-212	0.00E+00
Tl-208	1.32E-08
TOTAL	1.98E-07

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SUMMARY
Page 5

INDIVIDUAL EFFECTIVE DOSE EQUIVALENT (mrem)
(All Radionuclides and Pathways)

Direction	Distance (m)				
	80	465	800	2980	
N	3.5E-01	3.0E-02	2.1E-02	1.6E-02	
NNW	1.9E-01	2.3E-02	1.8E-02	1.6E-02	
NW	2.2E-01	2.4E-02	1.9E-02	1.6E-02	
WNW	2.6E-01	2.6E-02	1.9E-02	1.6E-02	
W	2.0E-01	2.3E-02	1.9E-02	1.6E-02	School
WSW	1.0E-01	1.9E-02	1.7E-02	1.6E-02	
SW	1.4E-01	2.1E-02	1.8E-02	1.6E-02	Residence
SSW	1.7E-01	2.2E-02	1.8E-02	1.6E-02	
S	1.5E-01	2.1E-02	1.8E-02	1.6E-02	
SSE	1.1E-01	2.0E-02	1.7E-02	1.6E-02	Business
SE	1.5E-01	2.2E-02	1.8E-02	1.6E-02	
ESE	2.5E-01	2.6E-02	1.9E-02	1.6E-02	
E	3.3E-01	2.9E-02	2.0E-02	1.6E-02	
ENE	2.7E-01	2.6E-02	2.0E-02	1.6E-02	
NE	1.7E-01	2.2E-02	1.8E-02	1.6E-02	Farm
NNE	1.5E-01	2.1E-02	1.8E-02	1.6E-02	

Note: Highlighted EDE values (mrem) are applicable to the critical receptors as defined in the 2019 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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SUMMARY
Page 6

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

Direction	Distance (m)			
	80	465	800	2980
N	2.0E-07	1.4E-08	8.8E-09	6.2E-09
NNW	1.0E-07	1.0E-08	7.4E-09	6.1E-09
NW	1.2E-07	1.1E-08	7.6E-09	6.1E-09
WNW	1.5E-07	1.2E-08	8.0E-09	6.1E-09
W	1.1E-07	1.0E-08	7.5E-09	6.1E-09
WSW	5.7E-08	8.0E-09	6.7E-09	6.0E-09
SW	7.8E-08	8.9E-09	7.0E-09	6.0E-09
SSW	9.5E-08	9.6E-09	7.2E-09	6.0E-09
S	8.5E-08	9.2E-09	7.1E-09	6.0E-09
SSE	6.1E-08	8.2E-09	6.7E-09	6.0E-09
SE	8.6E-08	9.2E-09	7.1E-09	6.0E-09
ESE	1.4E-07	1.2E-08	8.0E-09	6.1E-09
E	1.9E-07	1.3E-08	8.6E-09	6.2E-09
ENE	1.5E-07	1.2E-08	8.1E-09	6.1E-09
NE	9.7E-08	9.7E-09	7.3E-09	6.0E-09
NNE	8.2E-08	9.1E-09	7.0E-09	6.0E-09

CAP88 OUTPUT RESULTS

Gunther Salt

CAP88-PC

Version 4.1

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

Wed Mar 18 09:24:56 2020

Facility: Gunther Salt
Address:
City: St. Louis
State: MO Zip: 63147

Source Category: Area
Source Type: Area
Emission Year: 2019
DOSE Age Group: Adult

Comments: Air

Dataset Name: Gunther Salt.
Dataset Date: Mar 18, 2020 09:24 AM
Wind File: C:\Users\finkenbinec\Documents\CAP88\Wind Files\13994.WND

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SUMMARY
Page 1

ORGAN DOSE EQUIVALENT SUMMARY

Organ	Selected Individual (mrem)
Adrenals	2.20E-02
UB_Wall	2.39E-02
Bone_Sur	1.70E+00
Brain	2.30E-02
Breasts	2.49E-02
St_Wall	2.32E-02
SI_Wall	2.31E-02
ULI_Wall	2.47E-02
LLI_Wall	2.82E-02
Kidneys	5.38E-02
Liver	1.18E-01
Muscle	2.55E-02
Ovaries	3.50E-02
Pancreas	2.21E-02
R_Marrow	9.86E-02
Skin	4.07E-01
Spleen	2.34E-02
Testes	3.81E-02
Thymus	2.30E-02
Thyroid	2.39E-02
GB_Wall	2.22E-02
Ht_Wall	2.30E-02
Uterus	2.28E-02
ET_Reg	1.15E-01
Lung	3.57E-01
Effectiv	1.01E-01

PATHWAY EFFECTIVE DOSE EQUIVALENT SUMMARY

Pathway	Selected Individual (mrem)
INGESTION	5.36E-03
INHALATION	7.38E-02
AIR IMMERSION	6.34E-07
GROUND SURFACE	2.20E-02
INTERNAL	7.91E-02
EXTERNAL	2.20E-02
TOTAL	1.01E-01

NUCLIDE EFFECTIVE DOSE EQUIVALENT SUMMARY

Nuclide	Selected Individual (mrem)
U-238	8.60E-03
Th-234	5.17E-04
Pa-234m	3.26E-03
Pa-234	6.42E-05
U-234	1.04E-02
Th-230	1.34E-02
Ra-226	3.69E-03
Rn-222	2.56E-06
Po-218	4.58E-11
Pb-214	1.67E-03
At-218	1.72E-10
Bi-214	9.77E-03
Rn-218	9.97E-13
Po-214	5.42E-07
Tl-210	3.82E-06
Pb-210	8.23E-06
Bi-210	1.33E-04
Hg-206	1.07E-11
Po-210	3.45E-08
Tl-206	3.11E-10
U-235	6.03E-04
Th-231	1.98E-05
Pa-231	1.52E-02
Ac-227	1.15E-02
Th-227	1.45E-04
Fr-223	1.37E-06
Ra-223	1.62E-04
Rn-219	7.02E-05
At-219	0.00E+00
Bi-215	3.15E-10
Po-215	2.14E-07
Pb-211	1.38E-04
Bi-211	5.68E-05
Tl-207	7.14E-05
Po-211	2.73E-08
Th-232	4.11E-03
Ra-228	5.80E-03
Ac-228	2.31E-03
Th-228	5.52E-03
Ra-224	3.78E-04
Rn-220	1.60E-06
Po-216	3.85E-08
Pb-212	3.51E-04
Bi-212	4.09E-04
Po-212	0.00E+00
Tl-208	2.83E-03
TOTAL	1.01E-01

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SUMMARY
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CANCER RISK SUMMARY

Cancer	Selected Individual Total Lifetime Fatal Cancer Risk
Esophagu	2.28E-10
Stomach	8.37E-10
Colon	2.48E-09
Liver	1.53E-09
LUNG	4.27E-08
Bone	1.27E-09
Skin	4.04E-10
Breast	9.90E-10
Ovary	4.20E-10
Bladder	5.48E-10
Kidneys	2.69E-10
Thyroid	6.77E-11
Leukemia	1.28E-09
Residual	3.17E-09
Total	5.62E-08
 TOTAL	 5.62E-08

PATHWAY RISK SUMMARY

Pathway	Selected Individual Total Lifetime Fatal Cancer Risk
INGESTION	1.88E-09
INHALATION	4.39E-08
AIR IMMERSION	3.01E-13
GROUND SURFACE	1.04E-08
INTERNAL	4.58E-08
EXTERNAL	1.04E-08
 TOTAL	 5.62E-08

NUCLIDE RISK SUMMARY

Nuclide	Selected Individual Total Lifetime Fatal Cancer Risk
-----	-----
U-238	8.89E-09
Th-234	4.51E-10
Pa-234m	5.70E-10
Pa-234	3.49E-11
U-234	1.09E-08
Th-230	7.14E-09
Ra-226	3.05E-09
Rn-222	1.40E-12
Po-218	2.04E-17
Pb-214	8.95E-10
At-218	2.12E-17
Bi-214	5.16E-09
Rn-218	5.45E-19
Po-214	2.97E-13
Tl-210	2.04E-12
Pb-210	3.69E-12
Bi-210	1.47E-11
Hg-206	4.76E-18
Po-210	1.89E-14
Tl-206	3.49E-17
U-235	5.32E-10
Th-231	9.30E-12
Pa-231	1.49E-09
Ac-227	3.17E-09
Th-227	7.85E-11
Fr-223	5.09E-13
Ra-223	8.75E-11
Rn-219	3.84E-11
At-219	0.00E+00
Bi-215	1.41E-16
Po-215	1.18E-13
Pb-211	4.92E-11
Bi-211	3.10E-11
Tl-207	9.17E-12
Po-211	1.50E-14
Th-232	1.82E-09
Ra-228	2.63E-09
Ac-228	1.23E-09
Th-228	5.61E-09
Ra-224	4.36E-10
Rn-220	8.75E-13
Po-216	2.12E-14
Pb-212	1.91E-10
Bi-212	1.58E-10
Po-212	0.00E+00
Tl-208	1.54E-09
TOTAL	5.62E-08

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SUMMARY
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INDIVIDUAL EFFECTIVE DOSE EQUIVALENT (mrem)
(All Radionuclides and Pathways)

Direction	Distance (m)				
	240	290	790	3270	
N	1.0E-01	7.2E-02	1.5E-02	5.2E-03	
NNW	5.4E-02	3.9E-02	9.7E-03	4.7E-03	
NW	6.3E-02	4.5E-02	1.1E-02	4.8E-03	School
WNW	7.6E-02	5.5E-02	1.2E-02	4.9E-03	
W	5.8E-02	4.2E-02	1.0E-02	4.8E-03	Residence
WSW	3.0E-02	2.2E-02	7.0E-03	4.5E-03	
SW	4.1E-02	3.0E-02	8.1E-03	4.6E-03	
SSW	5.0E-02	3.6E-02	9.1E-03	4.7E-03	
S	4.4E-02	3.2E-02	8.6E-03	4.6E-03	
SSE	3.2E-02	2.4E-02	7.3E-03	4.5E-03	
SE	4.5E-02	3.3E-02	8.7E-03	4.7E-03	
ESE	7.4E-02	5.3E-02	1.2E-02	4.9E-03	
E	9.6E-02	6.9E-02	1.4E-02	5.1E-03	
ENE	8.0E-02	5.7E-02	1.2E-02	5.0E-03	
NE	5.0E-02	3.6E-02	9.2E-03	4.7E-03	Business(290); Farm(3270)
NNE	4.3E-02	3.1E-02	8.4E-03	4.6E-03	

Note: Highlighted EDE values (mrem) are applicable to the critical receptors as defined in the 2019 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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SUMMARY
Page 6

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

Direction	Distance (m)			
	240	290	790	3270
N	5.6E-08	4.0E-08	7.4E-09	2.0E-09
NNW	2.9E-08	2.1E-08	4.5E-09	1.8E-09
NW	3.5E-08	2.5E-08	5.0E-09	1.8E-09
WNW	4.2E-08	3.0E-08	5.8E-09	1.9E-09
W	3.2E-08	2.3E-08	4.7E-09	1.8E-09
WSW	1.6E-08	1.2E-08	3.1E-09	1.6E-09
SW	2.2E-08	1.6E-08	3.7E-09	1.7E-09
SSW	2.7E-08	2.0E-08	4.2E-09	1.7E-09
S	2.4E-08	1.7E-08	3.9E-09	1.7E-09
SSE	1.7E-08	1.2E-08	3.2E-09	1.7E-09
SE	2.4E-08	1.7E-08	4.0E-09	1.7E-09
ESE	4.1E-08	2.9E-08	5.7E-09	1.9E-09
E	5.3E-08	3.8E-08	6.9E-09	2.0E-09
ENE	4.4E-08	3.1E-08	6.0E-09	1.9E-09
NE	2.7E-08	2.0E-08	4.3E-09	1.7E-09
NNE	2.3E-08	1.7E-08	3.8E-09	1.7E-09

CAP88 OUTPUT RESULTS

Plant 6 Loadout

CAP88-PC

Version 4.1

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
Mon Mar 16 09:58:28 2020

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

Source Category: Area
Source Type: Stack
Emission Year: 2019
DOSE Age Group: Adult

Comments: Air

Dataset Name: Plant 6 Loadout.
Dataset Date: Mar 16, 2020 09:58 AM
Wind File: C:\Users\finkenbinec\Documents\CAP88\Wind Files\13994.WND

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SUMMARY
Page 1

ORGAN DOSE EQUIVALENT SUMMARY

Organ	Selected Individual (mrem)
Adrenals	3.14E-02
UB_Wall	3.43E-02
Bone_Sur	2.10E+00
Brain	3.29E-02
Breasts	3.57E-02
St_Wall	3.32E-02
SI_Wall	3.31E-02
ULI_Wall	3.50E-02
LLI_Wall	3.91E-02
Kidneys	6.89E-02
Liver	1.44E-01
Muscle	3.66E-02
Ovaries	4.72E-02
Pancreas	3.16E-02
R_Marrow	1.32E-01
Skin	4.77E-01
Spleen	3.35E-02
Testes	5.17E-02
Thymus	3.30E-02
Thyroid	3.42E-02
GB_Wall	3.18E-02
Ht_Wall	3.29E-02
Uterus	3.26E-02
ET_Reg	1.53E-01
Lung	4.60E-01
Effectiv	1.31E-01

PATHWAY EFFECTIVE DOSE EQUIVALENT SUMMARY

Pathway	Selected Individual (mrem)
INGESTION	6.96E-03
INHALATION	9.24E-02
AIR IMMERSION	1.27E-06
GROUND SURFACE	3.20E-02
INTERNAL	9.94E-02
EXTERNAL	3.20E-02
TOTAL	1.31E-01

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SUMMARY
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NUCLIDE EFFECTIVE DOSE EQUIVALENT SUMMARY

Nuclide	Selected Individual (mrem)
U-238	8.72E-03
Th-234	6.36E-04
Pa-234m	3.32E-03
Pa-234	6.54E-05
U-234	1.05E-02
Th-230	1.68E-02
Ra-226	4.28E-03
Rn-222	3.25E-06
Po-218	5.80E-11
Pb-214	2.12E-03
At-218	2.18E-10
Bi-214	1.24E-02
Rn-218	1.26E-12
Po-214	6.87E-07
Tl-210	4.84E-06
Pb-210	1.04E-05
Bi-210	1.69E-04
Hg-206	1.36E-11
Po-210	4.37E-08
Tl-206	3.94E-10
U-235	6.55E-04
Th-231	2.16E-05
Pa-231	1.67E-02
Ac-227	1.27E-02
Th-227	1.57E-04
Fr-223	1.48E-06
Ra-223	1.76E-04
Rn-219	7.61E-05
At-219	0.00E+00
Bi-215	3.42E-10
Po-215	2.32E-07
Pb-211	1.49E-04
Bi-211	6.15E-05
Tl-207	7.74E-05
Po-211	2.96E-08
Th-232	6.69E-03
Ra-228	1.27E-02
Ac-228	4.93E-03
Th-228	9.03E-03
Ra-224	6.31E-04
Rn-220	3.39E-06
Po-216	8.17E-08
Pb-212	7.44E-04
Bi-212	8.68E-04
Po-212	0.00E+00
Tl-208	5.99E-03
TOTAL	1.31E-01

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SUMMARY
Page 3

CANCER RISK SUMMARY

Cancer	Selected Individual Total Lifetime Fatal Cancer Risk
Esophagu	3.35E-10
Stomach	1.25E-09
Colon	3.59E-09
Liver	1.95E-09
LUNG	5.41E-08
Bone	1.70E-09
Skin	4.74E-10
Breast	1.48E-09
Ovary	5.93E-10
Bladder	8.03E-10
Kidneys	3.54E-10
Thyroid	1.01E-10
Leukemia	1.91E-09
Residual	4.68E-09
Total	7.33E-08
 TOTAL	 7.33E-08

PATHWAY RISK SUMMARY

Pathway	Selected Individual Total Lifetime Fatal Cancer Risk
INGESTION	2.56E-09
INHALATION	5.51E-08
AIR IMMERSION	6.25E-13
GROUND SURFACE	1.56E-08
INTERNAL	5.77E-08
EXTERNAL	1.56E-08
 TOTAL	 7.33E-08

NUCLIDE RISK SUMMARY

Nuclide	Selected Individual Total Lifetime Fatal Cancer Risk
-----	-----
U-238	9.09E-09
Th-234	5.78E-10
Pa-234m	5.81E-10
Pa-234	3.55E-11
U-234	1.11E-08
Th-230	9.02E-09
Ra-226	3.77E-09
Rn-222	1.77E-12
Po-218	2.59E-17
Pb-214	1.13E-09
At-218	2.69E-17
Bi-214	6.54E-09
Rn-218	6.91E-19
Po-214	3.77E-13
Tl-210	2.58E-12
Pb-210	4.67E-12
Bi-210	1.87E-11
Hg-206	6.04E-18
Po-210	2.40E-14
Tl-206	4.43E-17
U-235	5.82E-10
Th-231	1.03E-11
Pa-231	1.64E-09
Ac-227	3.49E-09
Th-227	8.51E-11
Fr-223	5.52E-13
Ra-223	9.49E-11
Rn-219	4.16E-11
At-219	0.00E+00
Bi-215	1.53E-16
Po-215	1.27E-13
Pb-211	5.34E-11
Bi-211	3.36E-11
Tl-207	9.94E-12
Po-211	1.62E-14
Th-232	2.97E-09
Ra-228	5.87E-09
Ac-228	2.63E-09
Th-228	9.17E-09
Ra-224	7.19E-10
Rn-220	1.85E-12
Po-216	4.49E-14
Pb-212	4.05E-10
Bi-212	3.35E-10
Po-212	0.00E+00
Tl-208	3.26E-09
TOTAL	7.33E-08

INDIVIDUAL EFFECTIVE DOSE EQUIVALENT (mrem)
(All Radionuclides and Pathways)

Direction	Distance (m)				
	160	495	750	2915	
N	1.3E-01	2.1E-02	1.2E-02	5.7E-03	
NNW	7.0E-02	1.3E-02	8.7E-03	5.4E-03	
NW	8.1E-02	1.4E-02	9.3E-03	5.4E-03	
WNW	9.9E-02	1.6E-02	1.0E-02	5.5E-03	
W	7.6E-02	1.4E-02	9.0E-03	5.4E-03	School
WSW	3.9E-02	9.2E-03	6.9E-03	5.2E-03	
SW	5.3E-02	1.1E-02	7.7E-03	5.3E-03	Residence
SSW	6.5E-02	1.2E-02	8.3E-03	5.3E-03	
S	5.7E-02	1.1E-02	8.0E-03	5.3E-03	
SSE	4.1E-02	9.5E-03	7.1E-03	5.2E-03	Business
SE	5.7E-02	1.2E-02	8.0E-03	5.3E-03	
ESE	9.6E-02	1.6E-02	1.0E-02	5.5E-03	
E	1.2E-01	2.0E-02	1.2E-02	5.6E-03	
ENE	1.0E-01	1.7E-02	1.0E-02	5.5E-03	
NE	6.5E-02	1.2E-02	8.4E-03	5.3E-03	Farm
NNE	5.5E-02	1.1E-02	7.9E-03	5.3E-03	

Note: Highlighted EDE values (mrem) are applicable to the critical receptors as defined in the 2019 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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SUMMARY
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INDIVIDUAL LIFETIME RISK (deaths)
(All Radionuclides and Pathways)

Direction	Distance (m)			
	160	495	750	2915
N	7.3E-08	1.1E-08	5.9E-09	2.2E-09
NNW	3.8E-08	6.4E-09	3.9E-09	2.1E-09
NW	4.5E-08	7.2E-09	4.3E-09	2.1E-09
WNW	5.5E-08	8.3E-09	4.8E-09	2.1E-09
W	4.2E-08	6.7E-09	4.1E-09	2.1E-09
WSW	2.1E-08	4.2E-09	2.9E-09	2.0E-09
SW	2.9E-08	5.1E-09	3.3E-09	2.0E-09
SSW	3.6E-08	5.9E-09	3.7E-09	2.0E-09
S	3.1E-08	5.5E-09	3.5E-09	2.0E-09
SSE	2.2E-08	4.4E-09	3.0E-09	2.0E-09
SE	3.1E-08	5.5E-09	3.5E-09	2.0E-09
ESE	5.3E-08	8.1E-09	4.7E-09	2.1E-09
E	7.0E-08	1.0E-08	5.6E-09	2.2E-09
ENE	5.8E-08	8.6E-09	4.9E-09	2.1E-09
NE	3.6E-08	6.0E-09	3.7E-09	2.0E-09
NNE	3.0E-08	5.3E-09	3.4E-09	2.0E-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 2019

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
BKG209169	BAP-001	01/07/19	Gross Alpha/Beta	Gross Alpha	8.811E-15	1.631E-15	4.75E-16	µCi/mL			Background Air (Particulate Air)-Environmental Monitoring
BKG209169	BAP-001	01/07/19	Gross Alpha/Beta	Gross Beta	3.056E-14	3.151E-15	9.84E-16	µCi/mL			Background Air (Particulate Air)-Environmental Monitoring
BKG209169	BAP-001	01/07/19	Gross Alpha/Beta	Gross Alpha	8.109E-15	1.558E-15	4.75E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209169	BAP-001	01/07/19	Gross Alpha/Beta	Gross Beta	3.004E-14	3.113E-15	9.84E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209170	BAP-001	01/14/19	Gross Alpha/Beta	Gross Alpha	4.48E-15	1.158E-15	4.97E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209170	BAP-001	01/14/19	Gross Alpha/Beta	Gross Beta	2.279E-14	2.623E-15	1.03E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209171	BAP-001	01/22/19	Gross Alpha/Beta	Gross Alpha	3.845E-15	1.002E-15	4.33E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209171	BAP-001	01/22/19	Gross Alpha/Beta	Gross Beta	1.631E-14	2.019E-15	8.98E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209172	BAP-001	01/28/19	Gross Alpha/Beta	Gross Alpha	6.687E-15	1.544E-15	5.85E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209172	BAP-001	01/28/19	Gross Alpha/Beta	Gross Beta	2.37E-14	2.854E-15	1.212E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209173	BAP-001	02/04/19	Gross Alpha/Beta	Gross Alpha	4.574E-15	1.158E-15	4.86E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209173	BAP-001	02/04/19	Gross Alpha/Beta	Gross Beta	2.301E-14	2.618E-15	1.007E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209174	BAP-001	02/10/19	Gross Alpha/Beta	Gross Alpha	2.179E-15	8.6E-16	5.58E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209174	BAP-001	02/10/19	Gross Alpha/Beta	Gross Beta	1.454E-14	2.104E-15	1.156E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209175	BAP-001	02/19/19	Gross Alpha/Beta	Gross Alpha	4.593E-15	1.118E-15	4.5E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209175	BAP-001	02/19/19	Gross Alpha/Beta	Gross Beta	2.748E-14	2.877E-15	9.31E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209176	BAP-001	02/25/19	Gross Alpha/Beta	Gross Alpha	5.176E-15	1.293E-15	5.35E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209176	BAP-001	02/25/19	Gross Alpha/Beta	Gross Beta	3.467E-14	3.566E-15	1.108E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209177	BAP-001	03/04/19	Gross Alpha/Beta	Gross Alpha	2.792E-15	8.89E-16	4.72E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209177	BAP-001	03/04/19	Gross Alpha/Beta	Gross Beta	2.329E-14	2.612E-15	9.77E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209178	BAP-001	03/11/19	Gross Alpha/Beta	Gross Alpha	2.756E-15	8.87E-16	4.76E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209178	BAP-001	03/11/19	Gross Alpha/Beta	Gross Beta	1.909E-14	2.308E-15	9.87E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209179	BAP-001	03/18/19	Gross Alpha/Beta	Gross Alpha	1.54E-15	6.72E-16	4.76E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209179	BAP-001	03/18/19	Gross Alpha/Beta	Gross Beta	1.664E-14	2.122E-15	9.87E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209180	BAP-001	03/25/19	Gross Alpha/Beta	Gross Alpha	1.157E-15	5.9E-16	4.76E-16	µCi/mL	J	T04, T20	Background Air (Particulate Air)-Environmental Monitoring
BKG209180	BAP-001	03/25/19	Gross Alpha/Beta	Gross Beta	1.933E-14	2.326E-15	9.87E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209181	BAP-001	04/01/19	Gross Alpha/Beta	Gross Alpha	3.981E-15	1.1E-15	5.48E-16	µCi/mL			Background Air (Particulate Air)-Environmental Monitoring
BKG209181	BAP-001	04/01/19	Gross Alpha/Beta	Gross Beta	1.117E-14	1.743E-15	1.343E-15	µCi/mL			Background Air (Particulate Air)-Environmental Monitoring
BKG209181	BAP-001	04/01/19	Gross Alpha/Beta	Gross Alpha	4.047E-15	1.109E-15	5.48E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209181	BAP-001	04/01/19	Gross Alpha/Beta	Gross Beta	1.342E-14	1.921E-15	1.343E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209182	BAP-001	04/08/19	Gross Alpha/Beta	Gross Alpha	6.042E-15	1.362E-15	5.49E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209182	BAP-001	04/08/19	Gross Alpha/Beta	Gross Beta	1.644E-14	2.157E-15	1.346E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209183	BAP-001	04/15/19	Gross Alpha/Beta	Gross Alpha	3.379E-15	1.013E-15	5.46E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209183	BAP-001	04/15/19	Gross Alpha/Beta	Gross Beta	1.038E-14	1.677E-15	1.339E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209185	BAP-001	04/29/19	Gross Alpha/Beta	Gross Alpha	3.842E-15	1.13E-15	5.98E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209185	BAP-001	04/29/19	Gross Alpha/Beta	Gross Beta	1.461E-14	2.093E-15	1.466E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209186	BAP-001	05/06/19	Gross Alpha/Beta	Gross Alpha	2.661E-15	9.18E-16	5.61E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209186	BAP-001	05/06/19	Gross Alpha/Beta	Gross Beta	1.25E-14	1.87E-15	1.377E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209187	BAP-001	05/13/19	Gross Alpha/Beta	Gross Alpha	3.019E-15	9.44E-16	5.29E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209187	BAP-001	05/13/19	Gross Alpha/Beta	Gross Beta	1.174E-14	1.76E-15	1.298E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209188	BAP-001	05/20/19	Gross Alpha/Beta	Gross Alpha	4.883E-15	1.249E-15	5.76E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209188	BAP-001	05/20/19	Gross Alpha/Beta	Gross Beta	1.725E-14	2.263E-15	1.412E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209189	BAP-001	05/28/19	Gross Alpha/Beta	Gross Alpha	2.428E-15	7.86E-16	4.54E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209189	BAP-001	05/28/19	Gross Alpha/Beta	Gross Beta	1.174E-14	1.641E-15	1.114E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209190	BAP-001	06/03/19	Gross Alpha/Beta	Gross Alpha	1.851E-15	8.51E-16	6.58E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring

Table B-1. Background Air Particulate Data Results for CY 2019

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
BKG209190	BAP-001	06/03/19	Gross Alpha/Beta	Gross Beta	1.23E-14	2.004E-15	1.614E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209191	BAP-001	06/11/19	Gross Alpha/Beta	Gross Alpha	1.949E-15	7.35E-16	4.85E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209191	BAP-001	06/11/19	Gross Alpha/Beta	Gross Beta	1.559E-14	1.987E-15	1.19E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209192	BAP-001	06/17/19	Gross Alpha/Beta	Gross Alpha	1.12E-15	6.88E-16	6.48E-16	µCi/mL	J	T04, T20	Background Air (Particulate Air)-Environmental Monitoring
BKG209192	BAP-001	06/17/19	Gross Alpha/Beta	Gross Beta	1.836E-14	2.466E-15	1.59E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209193	BAP-001	06/24/19	Gross Alpha/Beta	Gross Alpha	7.52E-16	5.36E-16	5.5E-16	µCi/mL	J	T04, T20	Background Air (Particulate Air)-Environmental Monitoring
BKG209193	BAP-001	06/24/19	Gross Alpha/Beta	Gross Beta	1.353E-14	1.934E-15	1.349E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209194	BAP-001	07/01/19	Gross Alpha/Beta	Gross Alpha	5.15E-15	1.318E-15	7.21E-16	µCi/mL			Background Air (Particulate Air)-Environmental Monitoring
BKG209194	BAP-001	07/01/19	Gross Alpha/Beta	Gross Beta	1.639E-14	2.216E-15	1.427E-15	µCi/mL			Background Air (Particulate Air)-Environmental Monitoring
BKG209194	BAP-001	07/01/19	Gross Alpha/Beta	Gross Alpha	5.429E-15	1.352E-15	7.21E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209194	BAP-001	07/01/19	Gross Alpha/Beta	Gross Beta	1.553E-14	2.151E-15	1.427E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209195	BAP-001	07/08/19	Gross Alpha/Beta	Gross Alpha	5.14E-15	1.264E-15	6.66E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209195	BAP-001	07/08/19	Gross Alpha/Beta	Gross Beta	1.864E-14	2.312E-15	1.318E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209196	BAP-001	07/15/19	Gross Alpha/Beta	Gross Alpha	5.77E-15	1.36E-15	6.87E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209196	BAP-001	07/15/19	Gross Alpha/Beta	Gross Beta	1.45E-14	2.027E-15	1.36E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209197	BAP-001	07/22/19	Gross Alpha/Beta	Gross Alpha	2.46E-15	9.2E-16	6.89E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209197	BAP-001	07/22/19	Gross Alpha/Beta	Gross Beta	7.603E-15	1.48E-15	1.363E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209198	BAP-001	07/29/19	Gross Alpha/Beta	Gross Alpha	5.155E-15	1.302E-15	7.03E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209198	BAP-001	07/29/19	Gross Alpha/Beta	Gross Beta	1.794E-14	2.309E-15	1.391E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209199	BAP-001	08/05/19	Gross Alpha/Beta	Gross Alpha	5.45E-15	1.316E-15	6.81E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209199	BAP-001	08/05/19	Gross Alpha/Beta	Gross Beta	1.956E-14	2.401E-15	1.347E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209200	BAP-001	08/12/19	Gross Alpha/Beta	Gross Alpha	5.675E-15	1.346E-15	6.84E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209200	BAP-001	08/12/19	Gross Alpha/Beta	Gross Beta	2.34E-14	2.691E-15	1.353E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209201	BAP-001	08/19/19	Gross Alpha/Beta	Gross Alpha	3.164E-15	1.033E-15	6.98E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209201	BAP-001	08/19/19	Gross Alpha/Beta	Gross Beta	1.62E-14	2.17E-15	1.381E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209202	BAP-001	08/26/19	Gross Alpha/Beta	Gross Alpha	3.3E-15	1.041E-15	6.84E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209202	BAP-001	08/26/19	Gross Alpha/Beta	Gross Beta	1.83E-14	2.311E-15	1.353E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209203	BAP-001	09/03/19	Gross Alpha/Beta	Gross Alpha	3.088E-15	9.53E-16	6.15E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209203	BAP-001	09/03/19	Gross Alpha/Beta	Gross Beta	2.343E-14	2.597E-15	1.218E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209204	BAP-001	09/09/19	Gross Alpha/Beta	Gross Alpha	3.322E-15	1.125E-15	7.82E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209204	BAP-001	09/09/19	Gross Alpha/Beta	Gross Beta	2.604E-14	3.025E-15	1.548E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209205	BAP-001	09/16/19	Gross Alpha/Beta	Gross Alpha	3.349E-15	1.056E-15	6.94E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209205	BAP-001	09/16/19	Gross Alpha/Beta	Gross Beta	3.018E-14	3.203E-15	1.374E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209206	BAP-001	09/23/19	Gross Alpha/Beta	Gross Alpha	3.234E-15	1.031E-15	6.84E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209206	BAP-001	09/23/19	Gross Alpha/Beta	Gross Beta	3.504E-14	3.54E-15	1.353E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209207	BAP-001	09/30/19	Gross Alpha/Beta	Gross Alpha	1.381E-15	7.53E-16	7.16E-16	µCi/mL	J	T04, T20	Background Air (Particulate Air)-Environmental Monitoring
BKG209207	BAP-001	09/30/19	Gross Alpha/Beta	Gross Beta	2.24E-14	2.661E-15	1.416E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209208	BAP-001	10/07/19	Gross Alpha/Beta	Gross Alpha	5.314E-15	1.245E-15	4.96E-16	µCi/mL			Background Air (Particulate Air)-Environmental Monitoring
BKG209208	BAP-001	10/07/19	Gross Alpha/Beta	Gross Beta	1.913E-14	2.356E-15	1.275E-15	µCi/mL			Background Air (Particulate Air)-Environmental Monitoring
BKG209208	BAP-001	10/07/19	Gross Alpha/Beta	Gross Alpha	5.638E-15	1.284E-15	4.96E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209208	BAP-001	10/07/19	Gross Alpha/Beta	Gross Beta	1.542E-14	2.075E-15	1.275E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209209	BAP-001	10/15/19	Gross Alpha/Beta	Gross Alpha	5.583E-15	1.239E-15	4.65E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209209	BAP-001	10/15/19	Gross Alpha/Beta	Gross Beta	2.206E-14	2.515E-15	1.194E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209210	BAP-001	10/22/19	Gross Alpha/Beta	Gross Alpha	6.805E-15	1.415E-15	4.91E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209210	BAP-001	10/22/19	Gross Alpha/Beta	Gross Beta	2.334E-14	2.66E-15	1.263E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring

Table B-1. Background Air Particulate Data Results for CY 2019

Sample Name	Station Name	Collect Date	Method	Analyte	Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event
BKG209211	BAP-001	10/28/19	Gross Alpha/Beta	Gross Alpha	5.26E-15	1.356E-15	6.01E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209211	BAP-001	10/28/19	Gross Alpha/Beta	Gross Beta	1.989E-14	2.607E-15	1.545E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209212	BAP-001	11/05/19	Gross Alpha/Beta	Gross Alpha	4.221E-15	1.018E-15	4.2E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209212	BAP-001	11/05/19	Gross Alpha/Beta	Gross Beta	1.749E-14	2.091E-15	1.079E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209213	BAP-001	11/12/19	Gross Alpha/Beta	Gross Alpha	5.157E-15	1.229E-15	5E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209213	BAP-001	11/12/19	Gross Alpha/Beta	Gross Beta	1.961E-14	2.399E-15	1.285E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209214	BAP-001	11/18/19	Gross Alpha/Beta	Gross Alpha	4.023E-15	1.208E-15	6.29E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209214	BAP-001	11/18/19	Gross Alpha/Beta	Gross Beta	2.796E-14	3.263E-15	1.617E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209215	BAP-001	11/25/19	Gross Alpha/Beta	Gross Alpha	3.344E-15	9.94E-16	5.12E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209215	BAP-001	11/25/19	Gross Alpha/Beta	Gross Beta	1.911E-14	2.384E-15	1.317E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209216	BAP-001	12/02/19	Gross Alpha/Beta	Gross Alpha	2.395E-15	8.28E-16	4.96E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209216	BAP-001	12/02/19	Gross Alpha/Beta	Gross Beta	1.475E-14	2.024E-15	1.275E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209217	BAP-001	12/09/19	Gross Alpha/Beta	Gross Alpha	2.702E-15	9.09E-16	5.31E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209217	BAP-001	12/09/19	Gross Alpha/Beta	Gross Beta	2.226E-14	2.655E-15	1.365E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209218	BAP-001	12/17/19	Gross Alpha/Beta	Gross Alpha	2.927E-15	8.54E-16	4.31E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209218	BAP-001	12/17/19	Gross Alpha/Beta	Gross Beta	2.4E-14	2.593E-15	1.108E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209219	BAP-001	12/23/19	Gross Alpha/Beta	Gross Alpha	2.125E-15	8.81E-16	6.27E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209219	BAP-001	12/23/19	Gross Alpha/Beta	Gross Beta	2.941E-14	3.367E-15	1.612E-15	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209220	BAP-001	12/30/19	Gross Alpha/Beta	Gross Alpha	1.79E-15	7.28E-16	5.09E-16	µCi/mL	=		Background Air (Particulate Air)-Environmental Monitoring
BKG209220	BAP-001	12/30/19	Gross Alpha/Beta	Gross Beta	2.693E-14	2.957E-15	1.307E-15	µCi/mL	=		Background 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 Codes:

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

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

Table B-2. SLDS TLD (External Gamma Radiation) Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
HIS211288	BA-1	04/09/19	Radiological	External gamma radiation	18.5	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-1Q2019
HIS211289	BA-1	07/01/19	Radiological	External gamma radiation	18	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-2Q2019
HIS211290	BA-1	10/03/19	Radiological	External gamma radiation	21.9	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-3Q2019
HIS215172	BA-1	01/06/20	Radiological	External gamma radiation	22.5	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-4Q2019
HIS215173	DA-2	04/09/19	Radiological	External gamma radiation	17.5	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-1Q2019
HIS215174	DA-2	07/01/19	Radiological	External gamma radiation	16.8	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-2Q2019
HIS217424	DA-2	10/03/19	Radiological	External gamma radiation	20	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-3Q2019
HIS217425	DA-2	01/06/20	Radiological	External gamma radiation	21.4	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-4Q2019
HIS217426	DA-3	04/09/19	Radiological	External gamma radiation	16.3	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-1Q2019
HIS219912	DA-3	07/01/19	Radiological	External gamma radiation	18.9	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-2Q2019
HIS219913	DA-3	10/03/19	Radiological	External gamma radiation	19.9	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-3Q2019
HIS219914	DA-3	01/06/20	Radiological	External gamma radiation	21.2	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-4Q2019
SLA211284	DA-7	04/09/19	Radiological	External gamma radiation	19.2	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-1Q2019
SLA211285	DA-7	07/01/19	Radiological	External gamma radiation	19.3	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-2Q2019
SLA211285-1	DA-7	10/03/19	Radiological	External gamma radiation	21.5	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-3Q2019
SLA211286	DA-7	01/06/20	Radiological	External gamma radiation	23.9	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-4Q2019
SLA211287	DA-8	04/09/19	Radiological	External gamma radiation	17.7	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-1Q2019
SLA215175	DA-8	07/01/19	Radiological	External gamma radiation	19.8	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-2Q2019
SLA215176	DA-8	10/03/19	Radiological	External gamma radiation	23.8	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-3Q2019
SLA215176-1	DA-8	01/06/20	Radiological	External gamma radiation	23.8	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-4Q2019
SLA215177	DA-8 DUP	04/09/19	Radiological	External gamma radiation	19.2	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-1Q2019
SLA215178	DA-8 DUP	07/01/19	Radiological	External gamma radiation	19	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-2Q2019
SLA217427	DA-8 DUP	10/03/19	Radiological	External gamma radiation	22.4	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-3Q2019
SLA217428	DA-8 DUP	01/06/20	Radiological	External gamma radiation	22.3	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-4Q2019
SLA217428-1	DA-9	04/09/19	Radiological	External gamma radiation	15.7	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-1Q2019
SLA217429	DA-9	07/01/19	Radiological	External gamma radiation	20.3	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-2Q2019
SLA217430	DA-9	10/03/19	Radiological	External gamma radiation	23.4	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-3Q2019
SLA219915	DA-9	01/06/20	Radiological	External gamma radiation	23.5	0	0.1	mrem	J	Y01	Environmental Monitoring (TLDs)-4Q2019

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 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD208980	DESTREHAN ST.	01/28/19	Gross Alpha/Beta	Gross Alpha	6.486E-15	8.737E-15	1.245E-14	µCi/mL			Destrehan St. (General Area)-Perimeter Air
SLD208980	DESTREHAN ST.	01/28/19	Gross Alpha/Beta	Gross Beta	2.69E-14	2.019E-14	2.793E-14	µCi/mL			Destrehan St. (General Area)-Perimeter Air
SLD208980	DESTREHAN ST.	01/28/19	Gross Alpha/Beta	Gross Beta	3.938E-14	2.135E-14	2.793E-14	µCi/mL	J	T04, T20	Destrehan St. (General Area)-Perimeter Air
SLD208980	DESTREHAN ST.	01/28/19	Gross Alpha/Beta	Gross Alpha	5.096E-15	8.278E-15	1.245E-14	µCi/mL	UJ	T06	Destrehan St. (General Area)-Perimeter Air
SLD208981	DESTREHAN ST.	02/05/19	Gross Alpha/Beta	Gross Beta	3.492E-14	2.295E-14	3.11E-14	µCi/mL	J	T04, T20	Destrehan St. (General Area)-Perimeter Air
SLD208981	DESTREHAN ST.	02/05/19	Gross Alpha/Beta	Gross Alpha	7.223E-15	9.73E-15	1.387E-14	µCi/mL	UJ	T06	Destrehan St. (General Area)-Perimeter Air
SLD208982	DESTREHAN ST.	02/11/19	Gross Alpha/Beta	Gross Alpha	-4.11E-16	5.431E-15	1.104E-14	µCi/mL	UJ	T06	Destrehan St. (General Area)-Perimeter Air
SLD208982	DESTREHAN ST.	02/11/19	Gross Alpha/Beta	Gross Beta	2.148E-14	1.768E-14	2.477E-14	µCi/mL	UJ	T04, T05	Destrehan St. (General Area)-Perimeter Air
SLD208983	DESTREHAN ST.	02/12/19	Gross Alpha/Beta	Gross Alpha	7.53E-15	8.771E-15	1.19E-14	µCi/mL	UJ	T06	Destrehan St. (General Area)-Perimeter Air
SLD208983	DESTREHAN ST.	02/12/19	Gross Alpha/Beta	Gross Beta	1.634E-14	1.84E-14	2.67E-14	µCi/mL	UJ	T06	Destrehan St. (General Area)-Perimeter Air
SLD208984	DESTREHAN ST.	02/13/19	Gross Alpha/Beta	Gross Beta	5.043E-14	2.102E-14	2.582E-14	µCi/mL	=		Destrehan St. (General Area)-Perimeter Air
SLD208984	DESTREHAN ST.	02/13/19	Gross Alpha/Beta	Gross Alpha	3.427E-15	7.205E-15	1.151E-14	µCi/mL	UJ	T06	Destrehan St. (General Area)-Perimeter Air
SLD208985	DESTREHAN ST.	02/14/19	Gross Alpha/Beta	Gross Alpha	-1.6E-15	4.712E-15	1.075E-14	µCi/mL	UJ	T06	Destrehan St. (General Area)-Perimeter Air
SLD208985	DESTREHAN ST.	02/14/19	Gross Alpha/Beta	Gross Beta	2.246E-14	1.736E-14	2.412E-14	µCi/mL	UJ	T04, T05	Destrehan St. (General Area)-Perimeter Air
SLD208986	DESTREHAN ST.	02/19/19	Gross Alpha/Beta	Gross Beta	2.976E-14	1.784E-14	2.38E-14	µCi/mL	J	T04, T20	Destrehan St. (General Area)-Perimeter Air
SLD208986	DESTREHAN ST.	02/19/19	Gross Alpha/Beta	Gross Alpha	-3.95E-16	5.218E-15	1.061E-14	µCi/mL	UJ	T06	Destrehan St. (General Area)-Perimeter Air
SLD208987	DESTREHAN ST.	02/20/19	Gross Alpha/Beta	Gross Alpha	-4.24E-16	5.608E-15	1.14E-14	µCi/mL	UJ	T06	Destrehan St. (General Area)-Perimeter Air
SLD208987	DESTREHAN ST.	02/20/19	Gross Alpha/Beta	Gross Beta	-8.031E-15	1.525E-14	2.558E-14	µCi/mL	UJ	T06	Destrehan St. (General Area)-Perimeter Air
SLD208988	DESTREHAN ST.	02/21/19	Gross Alpha/Beta	Gross Beta	6.671E-14	2.11E-14	2.37E-14	µCi/mL	=		Destrehan St. (General Area)-Perimeter Air
SLD208988	DESTREHAN ST.	02/21/19	Gross Alpha/Beta	Gross Alpha	5.504E-15	7.413E-15	1.056E-14	µCi/mL	UJ	T06	Destrehan St. (General Area)-Perimeter Air
SLD208989	DESTREHAN ST.	02/25/19	Gross Alpha/Beta	Gross Beta	3.939E-14	1.893E-14	2.412E-14	µCi/mL	=		Destrehan St. (General Area)-Perimeter Air
SLD208989	DESTREHAN ST.	02/25/19	Gross Alpha/Beta	Gross Alpha	3.2E-15	6.729E-15	1.075E-14	µCi/mL	UJ	T06	Destrehan St. (General Area)-Perimeter Air
SLD209051	DESTREHAN ST.	02/26/19	Gross Alpha/Beta	Gross Beta	3.182E-14	1.424E-14	1.832E-14	µCi/mL			Destrehan St. (General Area)-Perimeter Air
SLD209051	DESTREHAN ST.	02/26/19	Gross Alpha/Beta	Gross Alpha	6.84E-16	4.413E-15	9.408E-15	µCi/mL			Destrehan St. (General Area)-Perimeter Air
SLD209051	DESTREHAN ST.	02/26/19	Gross Alpha/Beta	Gross Alpha	1.006E-14	7.993E-15	9.408E-15	µCi/mL	J	T04, T20	Destrehan St. (General Area)-Perimeter Air
SLD209051	DESTREHAN ST.	02/26/19	Gross Alpha/Beta	Gross Beta	3.403E-14	1.449E-14	1.832E-14	µCi/mL	=		Destrehan St. (General Area)-Perimeter Air
SLD209052	DESTREHAN ST.	02/27/19	Gross Alpha/Beta	Gross Beta	2.581E-14	1.349E-14	1.824E-14	µCi/mL	J	T04, T20	Destrehan St. (General Area)-Perimeter Air
SLD209052	DESTREHAN ST.	02/27/19	Gross Alpha/Beta	Gross Alpha	5.346E-15	6.419E-15	9.366E-15	µCi/mL	UJ	T06	Destrehan St. (General Area)-Perimeter Air
SLD209053	DESTREHAN ST.	03/05/19	Gross Alpha/Beta	Gross Alpha	-4.246E-15	7.46E-15	2.407E-14	µCi/mL	UJ	T06	Destrehan St. (General Area)-Perimeter Air
SLD209053	DESTREHAN ST.	03/05/19	Gross Alpha/Beta	Gross Beta	2.106E-14	2.9E-14	4.687E-14	µCi/mL	UJ	T06	Destrehan St. (General Area)-Perimeter Air
SLD209054	DESTREHAN ST.	03/06/19	Gross Alpha/Beta	Gross Beta	2.268E-14	1.271E-14	1.752E-14	µCi/mL	J	T04, T20	Destrehan St. (General Area)-Perimeter Air
SLD209054	DESTREHAN ST.	03/06/19	Gross Alpha/Beta	Gross Alpha	-1.588E-15	2.789E-15	8.999E-15	µCi/mL	UJ	T06	Destrehan St. (General Area)-Perimeter Air
SLD209055	DESTREHAN ST.	03/11/19	Gross Alpha/Beta	Gross Alpha	2.179E-15	1.407E-14	3E-14	µCi/mL	UJ	T06	Destrehan St. (General Area)-Perimeter Air
SLD209055	DESTREHAN ST.	03/11/19	Gross Alpha/Beta	Gross Beta	4.505E-14	3.859E-14	5.841E-14	µCi/mL	UJ	T04, T05	Destrehan St. (General Area)-Perimeter Air
SLD209056	DESTREHAN ST.	03/12/19	Gross Alpha/Beta	Gross Beta	4.211E-14	2.067E-14	2.742E-14	µCi/mL	=		Destrehan St. (General Area)-Perimeter Air
SLD209056	DESTREHAN ST.	03/12/19	Gross Alpha/Beta	Gross Alpha	1.023E-15	6.605E-15	1.408E-14	µCi/mL	UJ	T06	Destrehan St. (General Area)-Perimeter Air
SLD210518	DESTREHAN ST.	03/19/19	Gross Alpha/Beta	Gross Alpha	6.677E-15	6.775E-15	9.106E-15	µCi/mL			Destrehan St. (General Area)-Perimeter Air
SLD210518	DESTREHAN ST.	03/19/19	Gross Alpha/Beta	Gross Beta	1.516E-14	1.162E-14	1.724E-14	µCi/mL			Destrehan St. (General Area)-Perimeter Air
SLD210518	DESTREHAN ST.	03/19/19	Gross Alpha/Beta	Gross Beta	2.319E-14	1.265E-14	1.724E-14	µCi/mL	J	T04, T20	Destrehan St. (General Area)-Perimeter Air
SLD210518	DESTREHAN ST.	03/19/19	Gross Alpha/Beta	Gross Alpha	6.677E-15	6.775E-15	9.106E-15	µCi/mL	UJ	T06	Destrehan St. (General Area)-Perimeter Air
SLD210519	DESTREHAN ST.	03/20/19	Gross Alpha/Beta	Gross Alpha	7.092E-15	7.197E-15	9.673E-15	µCi/mL	UJ	T06	Destrehan St. (General Area)-Perimeter Air
SLD210519	DESTREHAN ST.	03/20/19	Gross Alpha/Beta	Gross Beta	1.377E-14	1.203E-14	1.832E-14	µCi/mL	UJ	T04, T05	Destrehan St. (General Area)-Perimeter Air
SLD210520	DESTREHAN ST.	03/21/19	Gross Alpha/Beta	Gross Beta	4.128E-14	1.832E-14	2.334E-14	µCi/mL	=		Destrehan St. (General Area)-Perimeter Air
SLD210520	DESTREHAN ST.	03/21/19	Gross Alpha/Beta	Gross Alpha	7.466E-15	8.609E-15	1.233E-14	µCi/mL	UJ	T06	Destrehan St. (General Area)-Perimeter Air
SLD210521	DESTREHAN ST.	03/25/19	Gross Alpha/Beta	Gross Beta	2.546E-14	1.637E-14	2.334E-14	µCi/mL	J	T04, T20	Destrehan St. (General Area)-Perimeter Air
SLD210521	DESTREHAN ST.	03/25/19	Gross Alpha/Beta	Gross Alpha	4.322E-15	7.36E-15	1.233E-14	µCi/mL	UJ	T06	Destrehan St. (General Area)-Perimeter Air
SLD210522	DESTREHAN ST.	03/26/19	Gross Alpha/Beta	Gross Alpha	8.95E-16	4.448E-15	9.359E-15	µCi/mL	UJ	T06	Destrehan St. (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD210522	DESTREHAN ST.	03/26/19	Gross Alpha/Beta	Gross Beta	8.071E-15	1.092E-14	1.772E-14	µCi/mL	UJ	T06	Destrehan St. (General Area)-Perimeter Air
SLD210523	DESTREHAN ST.	03/27/19	Gross Alpha/Beta	Gross Alpha	4.475E-15	6.08E-15	9.359E-15	µCi/mL	UJ	T06	Destrehan St. (General Area)-Perimeter Air
SLD210523	DESTREHAN ST.	03/27/19	Gross Alpha/Beta	Gross Beta	1.633E-14	1.204E-14	1.772E-14	µCi/mL	UJ	T04, T05	Destrehan St. (General Area)-Perimeter Air
SLD210524	DESTREHAN ST.	03/28/19	Gross Alpha/Beta	Gross Beta	2.649E-14	1.292E-14	1.701E-14	µCi/mL	=		Destrehan St. (General Area)-Perimeter Air
SLD210524	DESTREHAN ST.	03/28/19	Gross Alpha/Beta	Gross Alpha	3.151E-15	5.364E-15	8.985E-15	µCi/mL	UJ	T06	Destrehan St. (General Area)-Perimeter Air
SLD210546	DESTREHAN ST.	04/09/19	Gross Alpha/Beta	Gross Alpha	1.276E-15	5.336E-15	1.102E-14	µCi/mL	UJ	T06	Destrehan St. (General Area)-Perimeter Air
SLD210546	DESTREHAN ST.	04/09/19	Gross Alpha/Beta	Gross Beta	1.572E-14	1.341E-14	1.943E-14	µCi/mL	UJ	T04, T05	Destrehan St. (General Area)-Perimeter Air
SLD210547	DESTREHAN ST.	04/10/19	Gross Alpha/Beta	Gross Alpha	2.343E-15	5.433E-15	1.012E-14	µCi/mL	UJ	T06	Destrehan St. (General Area)-Perimeter Air
SLD210547	DESTREHAN ST.	04/10/19	Gross Alpha/Beta	Gross Beta	1.591E-14	1.249E-14	1.784E-14	µCi/mL	UJ	T04, T05	Destrehan St. (General Area)-Perimeter Air
SLD210548	DESTREHAN ST.	04/16/19	Gross Alpha/Beta	Gross Alpha	0	1.183E-14	2.783E-14	µCi/mL	UJ	T06	Destrehan St. (General Area)-Perimeter Air
SLD210548	DESTREHAN ST.	04/16/19	Gross Alpha/Beta	Gross Beta	-2.872E-15	2.816E-14	4.907E-14	µCi/mL	UJ	T06	Destrehan St. (General Area)-Perimeter Air
SLD210569	PLANT 2	04/09/19	Gross Alpha/Beta	Gross Alpha	-3.61E-16	6.618E-15	1.678E-14	µCi/mL			Plant 2 (General Area)- Perimeter Air
SLD210569	PLANT 2	04/09/19	Gross Alpha/Beta	Gross Beta	2.396E-14	2.161E-14	3.261E-14	µCi/mL			Plant 2 (General Area)- Perimeter Air
SLD210569	PLANT 2	04/09/19	Gross Alpha/Beta	Gross Alpha	-2.527E-15	5.006E-15	1.678E-14	µCi/mL	UJ	T06	Plant 2 (General Area)- Perimeter Air
SLD210569	PLANT 2	04/09/19	Gross Alpha/Beta	Gross Beta	1.442E-14	2.033E-14	3.261E-14	µCi/mL	UJ	T06	Plant 2 (General Area)- Perimeter Air
SLD210570	PLANT 2	04/10/19	Gross Alpha/Beta	Gross Alpha	3.029E-15	6.883E-15	1.28E-14	µCi/mL	UJ	T06	Plant 2 (General Area)- Perimeter Air
SLD210570	PLANT 2	04/10/19	Gross Alpha/Beta	Gross Beta	1.204E-14	1.565E-14	2.488E-14	µCi/mL	UJ	T06	Plant 2 (General Area)- Perimeter Air
SLD210571	PLANT 2	04/11/19	Gross Alpha/Beta	Gross Beta	3.021E-14	1.538E-14	2.032E-14	µCi/mL	J	T04, T20	Plant 2 (General Area)- Perimeter Air
SLD210571	PLANT 2	04/11/19	Gross Alpha/Beta	Gross Alpha	2.474E-15	5.621E-15	1.046E-14	µCi/mL	UJ	T06	Plant 2 (General Area)- Perimeter Air
SLD210572	PLANT 2	04/15/19	Gross Alpha/Beta	Gross Alpha	-1.489E-15	2.949E-15	9.885E-15	µCi/mL	UJ	T06	Plant 2 (General Area)- Perimeter Air
SLD210572	PLANT 2	04/15/19	Gross Alpha/Beta	Gross Beta	1.251E-14	1.252E-14	1.921E-14	µCi/mL	UJ	T06	Plant 2 (General Area)- Perimeter Air
SLD210573	PLANT 2	04/16/19	Gross Alpha/Beta	Gross Alpha	2.261E-15	5.137E-15	9.554E-15	µCi/mL	UJ	T06	Plant 2 (General Area)- Perimeter Air
SLD210573	PLANT 2	04/16/19	Gross Alpha/Beta	Gross Beta	1.83E-14	1.291E-14	1.857E-14	µCi/mL	UJ	T04, T05	Plant 2 (General Area)- Perimeter Air
SLD210574	PLANT 2	04/17/19	Gross Alpha/Beta	Gross Beta	2.751E-14	1.464E-14	1.96E-14	µCi/mL	J	T04, T20	Plant 2 (General Area)- Perimeter Air
SLD210574	PLANT 2	04/17/19	Gross Alpha/Beta	Gross Alpha	4.991E-15	6.562E-15	1.009E-14	µCi/mL	UJ	T06	Plant 2 (General Area)- Perimeter Air
SLD210575	PLANT 2	04/18/19	Gross Alpha/Beta	Gross Alpha	1.386E-15	6.073E-15	1.288E-14	µCi/mL	UJ	T06	Plant 2 (General Area)- Perimeter Air
SLD210575	PLANT 2	04/18/19	Gross Alpha/Beta	Gross Beta	1.107E-14	1.56E-14	2.504E-14	µCi/mL	UJ	T06	Plant 2 (General Area)- Perimeter Air
SLD210576	PLANT 2	04/22/19	Gross Alpha/Beta	Gross Beta	2.416E-14	1.647E-14	2.352E-14	µCi/mL	J	T04, T20	Plant 2 (General Area)- Perimeter Air
SLD210576	PLANT 2	04/22/19	Gross Alpha/Beta	Gross Alpha	-2.6E-16	4.773E-15	1.21E-14	µCi/mL	UJ	T06	Plant 2 (General Area)- Perimeter Air
SLD210577	PLANT 2	04/23/19	Gross Alpha/Beta	Gross Beta	2.024E-14	1.295E-14	1.822E-14	µCi/mL	J	T04, T20	Plant 2 (General Area)- Perimeter Air
SLD210577	PLANT 2	04/23/19	Gross Alpha/Beta	Gross Alpha	1.009E-15	4.42E-15	9.375E-15	µCi/mL	UJ	T06	Plant 2 (General Area)- Perimeter Air
SLD210578	PLANT 2	04/24/19	Gross Alpha/Beta	Gross Alpha	1.483E-14	1.665E-14	2.377E-14	µCi/mL	UJ	T06	Plant 2 (General Area)- Perimeter Air
SLD210578	PLANT 2	04/24/19	Gross Alpha/Beta	Gross Beta	3.781E-14	3.112E-14	4.62E-14	µCi/mL	UJ	T04, T05	Plant 2 (General Area)- Perimeter Air
SLD210545	PLANT 7	04/17/19	Gross Alpha/Beta	Gross Alpha	-2.467E-15	2.893E-15	1.065E-14	µCi/mL			Plant 7 (General Area)-Perimeter Air
SLD210545	PLANT 7	04/17/19	Gross Alpha/Beta	Gross Beta	1.83E-14	1.334E-14	1.878E-14	µCi/mL			Plant 7 (General Area)-Perimeter Air
SLD210545	PLANT 7	04/17/19	Gross Alpha/Beta	Gross Beta	2.994E-14	1.473E-14	1.878E-14	µCi/mL	=		Plant 7 (General Area)-Perimeter Air
SLD210545	PLANT 7	04/17/19	Gross Alpha/Beta	Gross Alpha	0	4.529E-15	1.065E-14	µCi/mL	UJ	T06	Plant 7 (General Area)-Perimeter Air
SLD210649	PLANT 7	05/20/19	Gross Alpha/Beta	Gross Alpha	5.769E-15	7.675E-15	1.127E-14	µCi/mL			Plant 7 (General Area)-Perimeter Air
SLD210649	PLANT 7	05/20/19	Gross Alpha/Beta	Gross Beta	1.54E-16	1.399E-14	2.228E-14	µCi/mL			Plant 7 (General Area)-Perimeter Air
SLD210649	PLANT 7	05/20/19	Gross Alpha/Beta	Gross Alpha	1.35E-15	5.72E-15	1.127E-14	µCi/mL	UJ	T06	Plant 7 (General Area)-Perimeter Air
SLD210649	PLANT 7	05/20/19	Gross Alpha/Beta	Gross Beta	5.715E-15	1.471E-14	2.228E-14	µCi/mL	UJ	T06	Plant 7 (General Area)-Perimeter Air
SLD210650	PLANT 7	05/21/19	Gross Alpha/Beta	Gross Alpha	2.823E-15	6.436E-15	1.127E-14	µCi/mL	UJ	T06	Plant 7 (General Area)-Perimeter Air
SLD210650	PLANT 7	05/21/19	Gross Alpha/Beta	Gross Beta	1.22E-14	1.553E-14	2.228E-14	µCi/mL	UJ	T06	Plant 7 (General Area)-Perimeter Air
SLD216055	PLANT 7	09/04/19	Gross Alpha/Beta	Gross Beta	3.828E-14	1.676E-14	2.038E-14	µCi/mL			Plant 7 (General Area)-Perimeter Air
SLD216055	PLANT 7	09/04/19	Gross Alpha/Beta	Gross Alpha	3.977E-15	6.398E-15	9.606E-15	µCi/mL			Plant 7 (General Area)-Perimeter Air
SLD216055	PLANT 7	09/04/19	Gross Alpha/Beta	Gross Beta	6.184E-14	1.928E-14	2.038E-14	µCi/mL	=		Plant 7 (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD216055	PLANT 7	09/04/19	Gross Alpha/Beta	Gross Alpha	2.687E-15	5.851E-15	9.606E-15	µCi/mL	UJ	T06	Plant 7 (General Area)-Perimeter Air
SLD216056	PLANT 7	09/05/19	Gross Alpha/Beta	Gross Alpha	1.409E-14	1.085E-14	1.155E-14	µCi/mL	J	T04, T20	Plant 7 (General Area)-Perimeter Air
SLD216056	PLANT 7	09/05/19	Gross Alpha/Beta	Gross Beta	1.872E-14	1.694E-14	2.451E-14	µCi/mL	UJ	T04, T05	Plant 7 (General Area)-Perimeter Air
SLD216057	PLANT 7	09/09/19	Gross Alpha/Beta	Gross Alpha	1.375E-14	1.059E-14	1.127E-14	µCi/mL	J	T04, T20	Plant 7 (General Area)-Perimeter Air
SLD216057	PLANT 7	09/09/19	Gross Alpha/Beta	Gross Beta	6.566E-14	2.191E-14	2.392E-14	µCi/mL	=		Plant 7 (General Area)-Perimeter Air
SLD216058	PLANT 7	09/10/19	Gross Alpha/Beta	Gross Alpha	7.746E-15	1.687E-14	2.769E-14	µCi/mL	UJ	T06	Plant 7 (General Area)-Perimeter Air
SLD216058	PLANT 7	09/10/19	Gross Alpha/Beta	Gross Beta	1.819E-14	3.717E-14	5.875E-14	µCi/mL	UJ	T06	Plant 7 (General Area)-Perimeter Air
SLD216059	PLANT 7	09/11/19	Gross Alpha/Beta	Gross Beta	5.195E-14	1.993E-14	2.309E-14	µCi/mL	=		Plant 7 (General Area)-Perimeter Air
SLD216059	PLANT 7	09/11/19	Gross Alpha/Beta	Gross Alpha	1.035E-14	9.334E-15	1.088E-14	µCi/mL	UJ	T04, T05	Plant 7 (General Area)-Perimeter Air
SLD216060	PLANT 7	09/17/19	Gross Alpha/Beta	Gross Beta	6.289E-14	2.267E-14	2.561E-14	µCi/mL	=		Plant 7 (General Area)-Perimeter Air
SLD216060	PLANT 7	09/17/19	Gross Alpha/Beta	Gross Alpha	3.376E-15	7.351E-15	1.207E-14	µCi/mL	UJ	T06	Plant 7 (General Area)-Perimeter Air
SLD216061	PLANT 7	09/18/19	Gross Alpha/Beta	Gross Alpha	1.341E-14	9.144E-15	9.008E-15	µCi/mL	J	T04, T20	Plant 7 (General Area)-Perimeter Air
SLD216061	PLANT 7	09/18/19	Gross Alpha/Beta	Gross Beta	6.588E-14	1.888E-14	1.912E-14	µCi/mL	=		Plant 7 (General Area)-Perimeter Air
SLD216062	PLANT 7	09/19/19	Gross Alpha/Beta	Gross Alpha	1.73E-14	1.18E-14	1.162E-14	µCi/mL	J	T04, T20	Plant 7 (General Area)-Perimeter Air
SLD216062	PLANT 7	09/19/19	Gross Alpha/Beta	Gross Beta	8.499E-14	2.436E-14	2.466E-14	µCi/mL	=		Plant 7 (General Area)-Perimeter Air
SLD216063	PLANT 7	09/26/19	Gross Alpha/Beta	Gross Alpha	-3.727E-15	4.159E-15	1.448E-14	µCi/mL	UJ	T06	Plant 7 (General Area)-Perimeter Air
SLD216063	PLANT 7	09/26/19	Gross Alpha/Beta	Gross Beta	1.459E-14	2.011E-14	3.073E-14	µCi/mL	UJ	T06	Plant 7 (General Area)-Perimeter Air
SLD216084	PLANT 7W	10/02/19	Gross Alpha/Beta	Gross Beta	3.433E-14	1.703E-14	2.296E-14	µCi/mL			Plant 7W (General Area)-Perimeter Air
SLD216084	PLANT 7W	10/02/19	Gross Alpha/Beta	Gross Alpha	8.566E-15	8.068E-15	1.139E-14	µCi/mL			Plant 7W (General Area)-Perimeter Air
SLD216084	PLANT 7W	10/02/19	Gross Alpha/Beta	Gross Beta	4.168E-14	1.773E-14	2.296E-14	µCi/mL	=		Plant 7W (General Area)-Perimeter Air
SLD216084	PLANT 7W	10/02/19	Gross Alpha/Beta	Gross Alpha	3.998E-15	6.629E-15	1.139E-14	µCi/mL	UJ	T06	Plant 7W (General Area)-Perimeter Air
SLD216085	PLANT 7W	10/03/19	Gross Alpha/Beta	Gross Alpha	6.24E-16	5.809E-15	1.245E-14	µCi/mL	UJ	T06	Plant 7W (General Area)-Perimeter Air
SLD216085	PLANT 7W	10/03/19	Gross Alpha/Beta	Gross Beta	5.362E-15	1.538E-14	2.511E-14	µCi/mL	UJ	T06	Plant 7W (General Area)-Perimeter Air
SLD216086	PLANT 7W	10/08/19	Gross Alpha/Beta	Gross Alpha	-3.782E-15	9.312E-15	2.514E-14	µCi/mL	UJ	T06	Plant 7W (General Area)-Perimeter Air
SLD216086	PLANT 7W	10/08/19	Gross Alpha/Beta	Gross Beta	3.031E-14	3.309E-14	5.069E-14	µCi/mL	UJ	T06	Plant 7W (General Area)-Perimeter Air
SLD216087	PLANT 7W	10/09/19	Gross Alpha/Beta	Gross Beta	5.186E-14	3.068E-14	4.299E-14	µCi/mL	J	T04, T20	Plant 7W (General Area)-Perimeter Air
SLD216087	PLANT 7W	10/09/19	Gross Alpha/Beta	Gross Alpha	-3.207E-15	7.897E-15	2.132E-14	µCi/mL	UJ	T06	Plant 7W (General Area)-Perimeter Air
SLD216088	PLANT 7W	10/10/19	Gross Alpha/Beta	Gross Beta	5.644E-14	2.278E-14	2.905E-14	µCi/mL	=		Plant 7W (General Area)-Perimeter Air
SLD216088	PLANT 7W	10/10/19	Gross Alpha/Beta	Gross Alpha	-7.22E-16	6.066E-15	1.44E-14	µCi/mL	UJ	T06	Plant 7W (General Area)-Perimeter Air
SLD216089	PLANT 7W	10/14/19	Gross Alpha/Beta	Gross Alpha	3.796E-15	8.27E-15	1.514E-14	µCi/mL	UJ	T06	Plant 7W (General Area)-Perimeter Air
SLD216089	PLANT 7W	10/14/19	Gross Alpha/Beta	Gross Beta	1.923E-14	2.003E-14	3.053E-14	µCi/mL	UJ	T06	Plant 7W (General Area)-Perimeter Air
SLD216115	PLANT 7W	10/21/19	Gross Alpha/Beta	Gross Beta	1.979E-14	1.385E-14	1.819E-14	µCi/mL	J	T04, T20	Plant 7W (General Area)-Perimeter Air
SLD216115	PLANT 7W	10/21/19	Gross Alpha/Beta	Gross Alpha	5.605E-15	6.766E-15	1.021E-14	µCi/mL	UJ	T06	Plant 7W (General Area)-Perimeter Air
SLD216116	PLANT 7W	10/22/19	Gross Alpha/Beta	Gross Alpha	-7.52E-16	1.685E-14	3.973E-14	µCi/mL	UJ	T06	Plant 7W (General Area)-Perimeter Air
SLD216116	PLANT 7W	10/22/19	Gross Alpha/Beta	Gross Beta	1.227E-14	4.599E-14	7.08E-14	µCi/mL	UJ	T06	Plant 7W (General Area)-Perimeter Air
SLD216117	PLANT 7W	10/23/19	Gross Alpha/Beta	Gross Beta	2.683E-14	1.819E-14	2.374E-14	µCi/mL	J	T04, T20	Plant 7W (General Area)-Perimeter Air
SLD216117	PLANT 7W	10/23/19	Gross Alpha/Beta	Gross Alpha	4.289E-15	7.714E-15	1.332E-14	µCi/mL	UJ	T06	Plant 7W (General Area)-Perimeter Air
SLD216163	PLANT 7W	11/06/19	Gross Alpha/Beta	Gross Alpha	-1.837E-15	6.346E-15	1.435E-14	µCi/mL	UJ	T06	Plant 7W (General Area)-Perimeter Air
SLD216163	PLANT 7W	11/06/19	Gross Alpha/Beta	Gross Beta	1.278E-14	1.56E-14	2.353E-14	µCi/mL	UJ	T06	Plant 7W (General Area)-Perimeter Air
SLD216164	PLANT 7W	11/13/19	Gross Alpha/Beta	Gross Beta	2.646E-14	1.449E-14	1.891E-14	µCi/mL	J	T04, T20	Plant 7W (General Area)-Perimeter Air
SLD216164	PLANT 7W	11/13/19	Gross Alpha/Beta	Gross Alpha	8.86E-16	6.097E-15	1.154E-14	µCi/mL	UJ	T06	Plant 7W (General Area)-Perimeter Air
SLD216165	PLANT 7W	11/12/19	Gross Alpha/Beta	Gross Alpha	3.229E-15	1.022E-14	1.802E-14	µCi/mL	UJ	T06	Plant 7W (General Area)-Perimeter Air
SLD216165	PLANT 7W	11/12/19	Gross Alpha/Beta	Gross Beta	1.123E-14	1.897E-14	2.954E-14	µCi/mL	UJ	T06	Plant 7W (General Area)-Perimeter Air
SLD216166	PLANT 7W	11/20/19	Gross Alpha/Beta	Gross Beta	2.717E-14	1.688E-14	2.274E-14	µCi/mL	J	T04, T20	Plant 7W (General Area)-Perimeter Air
SLD216166	PLANT 7W	11/20/19	Gross Alpha/Beta	Gross Alpha	1.065E-15	7.33E-15	1.387E-14	µCi/mL	UJ	T06	Plant 7W (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD208907	GUNTHER SALT	01/03/19	Gross Alpha/Beta	Gross Beta	3.217E-14	1.5E-14	1.766E-14	µCi/mL	=		Gunther Salt North (General Area)-Perimeter Air
SLD208907	GUNTHER SALT	01/03/19	Gross Alpha/Beta	Gross Alpha	7.292E-15	7.938E-15	1.113E-14	µCi/mL	UJ	T06	Gunther Salt North (General Area)-Perimeter Air
SLD208908	GUNTHER SALT	01/07/19	Gross Alpha/Beta	Gross Beta	3.8E-14	1.537E-14	1.727E-14	µCi/mL	=		Gunther Salt North (General Area)-Perimeter Air
SLD208908	GUNTHER SALT	01/07/19	Gross Alpha/Beta	Gross Alpha	2.505E-15	6.215E-15	1.088E-14	µCi/mL	UJ	T06	Gunther Salt North (General Area)-Perimeter Air
SLD208909	GUNTHER SALT	01/08/19	Gross Alpha/Beta	Gross Beta	1.959E-14	1.406E-14	1.843E-14	µCi/mL	J	T04, T20	Gunther Salt North (General Area)-Perimeter Air
SLD208909	GUNTHER SALT	01/08/19	Gross Alpha/Beta	Gross Alpha	1.439E-15	6.154E-15	1.161E-14	µCi/mL	UJ	T06	Gunther Salt North (General Area)-Perimeter Air
SLD208949	GUNTHER SALT	01/09/19	Gross Alpha/Beta	Gross Beta	3.228E-14	1.724E-14	2.336E-14	µCi/mL			Kiesel/Gunther Salt (General Area)-Perimeter Air
SLD208949	GUNTHER SALT	01/09/19	Gross Alpha/Beta	Gross Alpha	-2.823E-15	6.076E-15	1.397E-14	µCi/mL			Kiesel/Gunther Salt (General Area)-Perimeter Air
SLD208949	GUNTHER SALT	01/09/19	Gross Alpha/Beta	Gross Alpha	6.015E-15	9.441E-15	1.397E-14	µCi/mL	UJ	T06	Kiesel/Gunther Salt (General Area)-Perimeter Air
SLD208949	GUNTHER SALT	01/09/19	Gross Alpha/Beta	Gross Beta	2.209E-14	1.602E-14	2.336E-14	µCi/mL	UJ	T04, T05	Kiesel/Gunther Salt (General Area)-Perimeter Air
SLD208950	GUNTHER SALT	01/10/19	Gross Alpha/Beta	Gross Beta	5.446E-14	1.804E-14	2.054E-14	µCi/mL	=		Kiesel/Gunther Salt (General Area)-Perimeter Air
SLD208950	GUNTHER SALT	01/10/19	Gross Alpha/Beta	Gross Alpha	1.177E-14	1.015E-14	1.228E-14	µCi/mL	UJ	T04, T05	Kiesel/Gunther Salt (General Area)-Perimeter Air
SLD208951	GUNTHER SALT	01/15/19	Gross Alpha/Beta	Gross Alpha	1.293E-15	6.427E-15	1.132E-14	µCi/mL	UJ	T06	Kiesel/Gunther Salt (General Area)-Perimeter Air
SLD208951	GUNTHER SALT	01/15/19	Gross Alpha/Beta	Gross Beta	1.189E-14	1.223E-14	1.892E-14	µCi/mL	UJ	T06	Kiesel/Gunther Salt (General Area)-Perimeter Air
SLD208952	GUNTHER SALT	01/16/19	Gross Alpha/Beta	Gross Beta	3.56E-14	1.682E-14	2.198E-14	µCi/mL	=		Kiesel/Gunther Salt (General Area)-Perimeter Air
SLD208952	GUNTHER SALT	01/16/19	Gross Alpha/Beta	Gross Alpha	5.659E-15	8.883E-15	1.314E-14	µCi/mL	UJ	T06	Kiesel/Gunther Salt (General Area)-Perimeter Air
SLD208953	GUNTHER SALT	01/17/19	Gross Alpha/Beta	Gross Alpha	4.828E-15	7.579E-15	1.121E-14	µCi/mL	UJ	T06	Kiesel/Gunther Salt (General Area)-Perimeter Air
SLD208953	GUNTHER SALT	01/17/19	Gross Alpha/Beta	Gross Beta	1.475E-14	1.249E-14	1.875E-14	µCi/mL	UJ	T04, T05	Kiesel/Gunther Salt (General Area)-Perimeter Air
SLD208954	GUNTHER SALT	01/22/19	Gross Alpha/Beta	Gross Beta	2.062E-14	1.357E-14	1.937E-14	µCi/mL	J	T04, T20	Kiesel/Gunther Salt (General Area)-Perimeter Air
SLD208954	GUNTHER SALT	01/22/19	Gross Alpha/Beta	Gross Alpha	4.989E-15	7.83E-15	1.159E-14	µCi/mL	UJ	T06	Kiesel/Gunther Salt (General Area)-Perimeter Air
SLD208955	GUNTHER SALT	01/23/19	Gross Alpha/Beta	Gross Alpha	4.919E-15	7.72E-15	1.142E-14	µCi/mL	UJ	T06	Kiesel/Gunther Salt (General Area)-Perimeter Air
SLD208955	GUNTHER SALT	01/23/19	Gross Alpha/Beta	Gross Beta	5.178E-15	1.145E-14	1.91E-14	µCi/mL	UJ	T06	Kiesel/Gunther Salt (General Area)-Perimeter Air
SLD208956	GUNTHER SALT	01/24/19	Gross Alpha/Beta	Gross Beta	3.473E-14	1.583E-14	2.044E-14	µCi/mL	=		Kiesel/Gunther Salt (General Area)-Perimeter Air
SLD208956	GUNTHER SALT	01/24/19	Gross Alpha/Beta	Gross Alpha	1.396E-15	6.942E-15	1.222E-14	µCi/mL	UJ	T06	Kiesel/Gunther Salt (General Area)-Perimeter Air
SLD208957	GUNTHER SALT	02/04/19	Gross Alpha/Beta	Gross Alpha	1.43E-16	8.593E-15	1.63E-14	µCi/mL	UJ	T06	Kiesel/Gunther Salt (General Area)-Perimeter Air
SLD208957	GUNTHER SALT	02/04/19	Gross Alpha/Beta	Gross Beta	1.712E-14	1.761E-14	2.725E-14	µCi/mL	UJ	T06	Kiesel/Gunther Salt (General Area)-Perimeter Air
SLD208958	GUNTHER SALT	02/05/19	Gross Alpha/Beta	Gross Beta	2.516E-14	1.314E-14	1.769E-14	µCi/mL	J	T04, T20	Kiesel/Gunther Salt (General Area)-Perimeter Air
SLD208958	GUNTHER SALT	02/05/19	Gross Alpha/Beta	Gross Alpha	3.441E-15	6.792E-15	1.058E-14	µCi/mL	UJ	T06	Kiesel/Gunther Salt (General Area)-Perimeter Air
SLD208959	GUNTHER SALT	02/06/19	Gross Alpha/Beta	Gross Alpha	3.52E-16	2.113E-14	4.007E-14	µCi/mL	UJ	T06	Kiesel/Gunther Salt (General Area)-Perimeter Air
SLD208959	GUNTHER SALT	02/06/19	Gross Alpha/Beta	Gross Beta	3.944E-14	4.296E-14	6.701E-14	µCi/mL	UJ	T06	Kiesel/Gunther Salt (General Area)-Perimeter Air
SLD208990	GUNTHER SALT	02/07/19	Gross Alpha/Beta	Gross Alpha	-4.6E-16	4.375E-15	1.094E-14	µCi/mL			Gunther Salt (General Area)-Perimeter Air
SLD208990	GUNTHER SALT	02/07/19	Gross Alpha/Beta	Gross Beta	-4.264E-15	1.182E-14	2.087E-14	µCi/mL			Gunther Salt (General Area)-Perimeter Air
SLD208990	GUNTHER SALT	02/07/19	Gross Alpha/Beta	Gross Alpha	-4.6E-16	4.375E-15	1.094E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD208990	GUNTHER SALT	02/07/19	Gross Alpha/Beta	Gross Beta	1.221E-14	1.405E-14	2.087E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD208991	GUNTHER SALT	02/11/19	Gross Alpha/Beta	Gross Beta	2.876E-14	1.387E-14	1.727E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD208991	GUNTHER SALT	02/11/19	Gross Alpha/Beta	Gross Alpha	7.6E-16	4.279E-15	9.053E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD208992	GUNTHER SALT	02/12/19	Gross Alpha/Beta	Gross Beta	1.855E-14	1.258E-14	1.712E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD208992	GUNTHER SALT	02/12/19	Gross Alpha/Beta	Gross Alpha	1.884E-15	4.808E-15	8.973E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD208993	GUNTHER SALT	02/13/19	Gross Alpha/Beta	Gross Beta	4.879E-14	1.671E-14	1.833E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD208993	GUNTHER SALT	02/13/19	Gross Alpha/Beta	Gross Alpha	2.017E-15	5.147E-15	9.605E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD208994	GUNTHER SALT	02/14/19	Gross Alpha/Beta	Gross Alpha	1.927E-15	4.916E-15	9.174E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD208994	GUNTHER SALT	02/14/19	Gross Alpha/Beta	Gross Beta	1.17E-14	1.197E-14	1.75E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD208995	GUNTHER SALT	02/19/19	Gross Alpha/Beta	Gross Beta	2.168E-14	1.309E-14	1.735E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD208995	GUNTHER SALT	02/19/19	Gross Alpha/Beta	Gross Alpha	5.346E-15	6.294E-15	9.093E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD208996	GUNTHER SALT	02/20/19	Gross Alpha/Beta	Gross Alpha	-3.8E-16	3.62E-15	9.053E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD208996	GUNTHER SALT	02/20/19	Gross Alpha/Beta	Gross Beta	7.236E-15	1.126E-14	1.727E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD208997	GUNTHER SALT	02/21/19	Gross Alpha/Beta	Gross Beta	4.475E-14	1.567E-14	1.735E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD208997	GUNTHER SALT	02/21/19	Gross Alpha/Beta	Gross Alpha	3.055E-15	5.387E-15	9.093E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD208998	GUNTHER SALT	02/25/19	Gross Alpha/Beta	Gross Alpha	1.499E-14	8.976E-15	8.706E-15	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD208998	GUNTHER SALT	02/25/19	Gross Alpha/Beta	Gross Beta	5.25E-14	1.6E-14	1.661E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD209036	GUNTHER SALT	02/26/19	Gross Alpha/Beta	Gross Beta	4.261E-14	1.501E-14	1.76E-14	µCi/mL			Gunther Salt (General Area)-Perimeter Air
SLD209036	GUNTHER SALT	02/26/19	Gross Alpha/Beta	Gross Alpha	8.536E-15	7.335E-15	9.038E-15	µCi/mL			Gunther Salt (General Area)-Perimeter Air
SLD209036	GUNTHER SALT	02/26/19	Gross Alpha/Beta	Gross Beta	4.898E-14	1.569E-14	1.76E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD209036	GUNTHER SALT	02/26/19	Gross Alpha/Beta	Gross Alpha	5.159E-15	6.195E-15	9.038E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD209037	GUNTHER SALT	02/27/19	Gross Alpha/Beta	Gross Beta	2.434E-14	1.245E-14	1.672E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD209037	GUNTHER SALT	02/27/19	Gross Alpha/Beta	Gross Alpha	4.902E-15	5.886E-15	8.588E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD209038	GUNTHER SALT	03/04/19	Gross Alpha/Beta	Gross Alpha	2.846E-15	5.192E-15	8.845E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD209038	GUNTHER SALT	03/04/19	Gross Alpha/Beta	Gross Beta	1.328E-14	1.138E-14	1.723E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD209039	GUNTHER SALT	03/05/19	Gross Alpha/Beta	Gross Alpha	1.872E-15	5.044E-15	9.494E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD209039	GUNTHER SALT	03/05/19	Gross Alpha/Beta	Gross Beta	1.723E-14	1.259E-14	1.849E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD209040	GUNTHER SALT	03/06/19	Gross Alpha/Beta	Gross Beta	2.463E-14	1.316E-14	1.791E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD209040	GUNTHER SALT	03/06/19	Gross Alpha/Beta	Gross Alpha	2.96E-15	5.4E-15	9.199E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD209041	GUNTHER SALT	03/07/19	Gross Alpha/Beta	Gross Beta	3.171E-14	1.372E-14	1.745E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD209041	GUNTHER SALT	03/07/19	Gross Alpha/Beta	Gross Alpha	8.462E-15	7.271E-15	8.96E-15	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD209042	GUNTHER SALT	03/11/19	Gross Alpha/Beta	Gross Alpha	1.196E-14	9.505E-15	1.119E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD209042	GUNTHER SALT	03/11/19	Gross Alpha/Beta	Gross Beta	3.433E-14	1.652E-14	2.179E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD209043	GUNTHER SALT	03/12/19	Gross Alpha/Beta	Gross Alpha	1.058E-14	1.111E-14	1.522E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD209043	GUNTHER SALT	03/12/19	Gross Alpha/Beta	Gross Beta	1.451E-14	1.85E-14	2.964E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD209044	GUNTHER SALT	03/12/19	Gross Alpha/Beta	Gross Beta	2.992E-14	1.338E-14	1.723E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD209044	GUNTHER SALT	03/12/19	Gross Alpha/Beta	Gross Alpha	3.947E-15	5.644E-15	8.845E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD209045	GUNTHER SALT	03/13/19	Gross Alpha/Beta	Gross Beta	3.482E-14	1.416E-14	1.76E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD209045	GUNTHER SALT	03/13/19	Gross Alpha/Beta	Gross Alpha	5.159E-15	6.195E-15	9.038E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD209046	GUNTHER SALT	03/13/19	Gross Alpha/Beta	Gross Beta	3.633E-14	1.499E-14	1.875E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD209046	GUNTHER SALT	03/13/19	Gross Alpha/Beta	Gross Alpha	4.296E-15	6.142E-15	9.627E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD209047	GUNTHER SALT	03/14/19	Gross Alpha/Beta	Gross Alpha	6.757E-15	7.091E-15	9.717E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD209047	GUNTHER SALT	03/14/19	Gross Alpha/Beta	Gross Beta	3.934E-15	1.109E-14	1.892E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD209048	GUNTHER SALT	03/14/19	Gross Alpha/Beta	Gross Alpha	3.083E-15	5.625E-15	9.582E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD209048	GUNTHER SALT	03/14/19	Gross Alpha/Beta	Gross Beta	1.439E-14	1.233E-14	1.866E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD209049	GUNTHER SALT	03/18/19	Gross Alpha/Beta	Gross Alpha	-1.691E-15	2.97E-15	9.582E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD209049	GUNTHER SALT	03/18/19	Gross Alpha/Beta	Gross Beta	1.439E-14	1.233E-14	1.866E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD209050	GUNTHER SALT	03/18/19	Gross Alpha/Beta	Gross Beta	2.245E-14	1.484E-14	2.133E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD209050	GUNTHER SALT	03/18/19	Gross Alpha/Beta	Gross Alpha	8.979E-15	8.451E-15	1.095E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD210500	GUNTHER SALT	03/19/19	Gross Alpha/Beta	Gross Beta	2.471E-14	1.652E-14	2.337E-14	µCi/mL			Gunther Salt (General Area)-Perimeter Air
SLD210500	GUNTHER SALT	03/19/19	Gross Alpha/Beta	Gross Alpha	-8.83E-16	5.001E-15	1.099E-14	µCi/mL			Gunther Salt (General Area)-Perimeter Air
SLD210500	GUNTHER SALT	03/19/19	Gross Alpha/Beta	Gross Alpha	6.181E-15	7.645E-15	1.099E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210500	GUNTHER SALT	03/19/19	Gross Alpha/Beta	Gross Beta	1.637E-14	1.569E-14	2.337E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD210501	GUNTHER SALT	03/20/19	Gross Alpha/Beta	Gross Alpha	7.795E-15	9.642E-15	1.386E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210501	GUNTHER SALT	03/20/19	Gross Alpha/Beta	Gross Beta	2.638E-14	2.036E-14	2.947E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD210502	GUNTHER SALT	03/21/19	Gross Alpha/Beta	Gross Beta	2.546E-14	1.66E-14	2.337E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD210502	GUNTHER SALT	03/21/19	Gross Alpha/Beta	Gross Alpha	2.94E-16	5.527E-15	1.099E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210503	GUNTHER SALT	03/21/19	Gross Alpha/Beta	Gross Alpha	3.61E-16	6.782E-15	1.349E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210503	GUNTHER SALT	03/21/19	Gross Alpha/Beta	Gross Beta	2.38E-14	1.962E-14	2.868E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD210504	GUNTHER SALT	03/25/19	Gross Alpha/Beta	Gross Beta	2.738E-14	1.66E-14	2.307E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD210504	GUNTHER SALT	03/25/19	Gross Alpha/Beta	Gross Alpha	2.91E-16	5.455E-15	1.085E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD210505	GUNTHER SALT	03/25/19	Gross Alpha/Beta	Gross Alpha	-3.551E-15	4.098E-15	1.206E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210505	GUNTHER SALT	03/25/19	Gross Alpha/Beta	Gross Beta	2.294E-14	1.771E-14	2.563E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD210506	GUNTHER SALT	03/26/19	Gross Alpha/Beta	Gross Alpha	5.004E-15	7.27E-15	1.099E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210506	GUNTHER SALT	03/26/19	Gross Alpha/Beta	Gross Beta	8.024E-15	1.483E-14	2.337E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210507	GUNTHER SALT	03/26/19	Gross Alpha/Beta	Gross Alpha	-9.92E-16	5.62E-15	1.235E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210507	GUNTHER SALT	03/26/19	Gross Alpha/Beta	Gross Beta	1.243E-14	1.702E-14	2.626E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210508	GUNTHER SALT	03/27/19	Gross Alpha/Beta	Gross Alpha	1.519E-15	6.2E-15	1.134E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210508	GUNTHER SALT	03/27/19	Gross Alpha/Beta	Gross Beta	1.376E-14	1.587E-14	2.411E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210509	GUNTHER SALT	03/27/19	Gross Alpha/Beta	Gross Alpha	1.44E-15	5.879E-15	1.076E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210509	GUNTHER SALT	03/27/19	Gross Alpha/Beta	Gross Beta	2.195E-14	1.595E-14	2.287E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD210510	GUNTHER SALT	03/28/19	Gross Alpha/Beta	Gross Beta	2.952E-14	1.712E-14	2.358E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD210510	GUNTHER SALT	03/28/19	Gross Alpha/Beta	Gross Alpha	-8.91E-16	5.045E-15	1.109E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210511	GUNTHER SALT	03/28/19	Gross Alpha/Beta	Gross Alpha	4.596E-15	8.256E-15	1.32E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210511	GUNTHER SALT	03/28/19	Gross Alpha/Beta	Gross Beta	8.727E-15	1.771E-14	2.807E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210512	GUNTHER SALT	04/01/19	Gross Alpha/Beta	Gross Alpha	-5.846E-15	1.252E-14	3.119E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210512	GUNTHER SALT	04/01/19	Gross Alpha/Beta	Gross Beta	1.847E-14	4.161E-14	6.631E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210513	GUNTHER SALT	04/01/19	Gross Alpha/Beta	Gross Alpha	4.124E-15	1.684E-14	3.081E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210513	GUNTHER SALT	04/01/19	Gross Alpha/Beta	Gross Beta	2.036E-14	4.132E-14	6.549E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210514	GUNTHER SALT	04/02/19	Gross Alpha/Beta	Gross Alpha	-2.238E-15	4.794E-15	1.194E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210514	GUNTHER SALT	04/02/19	Gross Alpha/Beta	Gross Beta	1.448E-14	1.67E-14	2.538E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210515	GUNTHER SALT	04/02/19	Gross Alpha/Beta	Gross Beta	3.907E-14	1.878E-14	2.479E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD210515	GUNTHER SALT	04/02/19	Gross Alpha/Beta	Gross Alpha	1.03E-14	9.208E-15	1.166E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD210516	GUNTHER SALT	04/03/19	Gross Alpha/Beta	Gross Alpha	4.935E-15	8.866E-15	1.418E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210516	GUNTHER SALT	04/03/19	Gross Alpha/Beta	Gross Beta	2.111E-14	2.023E-14	3.014E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD210517	GUNTHER SALT	04/03/19	Gross Alpha/Beta	Gross Alpha	-3.196E-15	3.688E-15	1.085E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210517	GUNTHER SALT	04/03/19	Gross Alpha/Beta	Gross Beta	1.615E-14	1.548E-14	2.307E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD210579	GUNTHER SALT	04/04/19	Gross Alpha/Beta	Gross Alpha	-2.32E-16	4.257E-15	1.079E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210579	GUNTHER SALT	04/04/19	Gross Alpha/Beta	Gross Beta	1.278E-14	1.355E-14	2.098E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210580	GUNTHER SALT	04/08/19	Gross Alpha/Beta	Gross Alpha	-1.319E-15	2.613E-15	8.758E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210580	GUNTHER SALT	04/08/19	Gross Alpha/Beta	Gross Beta	1.108E-14	1.109E-14	1.702E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210581	GUNTHER SALT	04/09/19	Gross Alpha/Beta	Gross Alpha	3.135E-15	5.115E-15	8.57E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210581	GUNTHER SALT	04/09/19	Gross Alpha/Beta	Gross Beta	5.278E-15	1.009E-14	1.666E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210582	GUNTHER SALT	04/10/19	Gross Alpha/Beta	Gross Alpha	1.826E-14	2.979E-14	4.992E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210582	GUNTHER SALT	04/10/19	Gross Alpha/Beta	Gross Beta	1.047E-14	5.587E-14	9.702E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210583	GUNTHER SALT	04/11/19	Gross Alpha/Beta	Gross Beta	2.33E-14	1.447E-14	2.021E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD210583	GUNTHER SALT	04/11/19	Gross Alpha/Beta	Gross Alpha	2.461E-15	5.592E-15	1.04E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210584	GUNTHER SALT	04/15/19	Gross Alpha/Beta	Gross Alpha	-1.6E-15	3.168E-15	1.062E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210584	GUNTHER SALT	04/15/19	Gross Alpha/Beta	Gross Beta	1.172E-14	1.322E-14	2.064E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210625	GUNTHER SALT	05/06/19	Gross Alpha/Beta	Gross Alpha	-1.079E-15	3.647E-15	1.007E-14	µCi/mL			Gunther Salt (General Area)-Perimeter Air
SLD210625	GUNTHER SALT	05/06/19	Gross Alpha/Beta	Gross Beta	1.58E-14	1.495E-14	2.441E-14	µCi/mL			Gunther Salt (General Area)-Perimeter Air
SLD210625	GUNTHER SALT	05/06/19	Gross Alpha/Beta	Gross Alpha	1.275E-15	4.939E-15	1.007E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210625	GUNTHER SALT	05/06/19	Gross Alpha/Beta	Gross Beta	1.883E-14	1.527E-14	2.441E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD210626	GUNTHER SALT	05/07/19	Gross Alpha/Beta	Gross Beta	2.543E-14	1.584E-14	2.42E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD210626	GUNTHER SALT	05/07/19	Gross Alpha/Beta	Gross Alpha	-1.07E-15	3.615E-15	9.984E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210627	GUNTHER SALT	05/13/19	Gross Alpha/Beta	Gross Alpha	1.039E-14	1.387E-14	2.177E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210627	GUNTHER SALT	05/13/19	Gross Alpha/Beta	Gross Beta	1.284E-14	3E-14	5.278E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD210628	GUNTHER SALT	05/29/19	Gross Alpha/Beta	Gross Alpha	1.2E-16	5.326E-15	1.236E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD210628	GUNTHER SALT	05/29/19	Gross Alpha/Beta	Gross Beta	7.288E-15	1.703E-14	2.995E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212225	GUNTHER SALT	06/03/19	Gross Alpha/Beta	Gross Alpha	7.261E-15	8.815E-15	1.045E-14	µCi/mL			Gunther Salt (General Area)-Perimeter Air
SLD212225	GUNTHER SALT	06/03/19	Gross Alpha/Beta	Gross Beta	5.964E-15	1.202E-14	1.838E-14	µCi/mL			Gunther Salt (General Area)-Perimeter Air
SLD212225	GUNTHER SALT	06/03/19	Gross Alpha/Beta	Gross Beta	2.728E-14	1.459E-14	1.838E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD212225	GUNTHER SALT	06/03/19	Gross Alpha/Beta	Gross Alpha	-1.21E-15	6.038E-15	1.045E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212226	GUNTHER SALT	06/04/19	Gross Alpha/Beta	Gross Beta	3.437E-14	1.496E-14	1.771E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD212226	GUNTHER SALT	06/04/19	Gross Alpha/Beta	Gross Alpha	6.998E-15	8.496E-15	1.007E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212227	GUNTHER SALT	06/05/19	Gross Alpha/Beta	Gross Alpha	2.281E-15	1.308E-14	1.97E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212227	GUNTHER SALT	06/05/19	Gross Alpha/Beta	Gross Beta	-3.109E-15	2.074E-14	3.464E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212228	GUNTHER SALT	06/10/19	Gross Alpha/Beta	Gross Beta	1.844E-14	1.245E-14	1.659E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD212228	GUNTHER SALT	06/10/19	Gross Alpha/Beta	Gross Alpha	2.185E-15	6.636E-15	9.434E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212229	GUNTHER SALT	06/11/19	Gross Alpha/Beta	Gross Alpha	-1.166E-15	5.82E-15	1.007E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212229	GUNTHER SALT	06/11/19	Gross Alpha/Beta	Gross Beta	1.309E-14	1.251E-14	1.771E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD212230	GUNTHER SALT	06/12/19	Gross Alpha/Beta	Gross Beta	2.841E-14	1.713E-14	2.224E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD212230	GUNTHER SALT	06/12/19	Gross Alpha/Beta	Gross Alpha	0	7.872E-15	1.265E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212231	GUNTHER SALT	06/17/19	Gross Alpha/Beta	Gross Alpha	0	6.298E-15	1.012E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212231	GUNTHER SALT	06/17/19	Gross Alpha/Beta	Gross Beta	7.249E-15	1.183E-14	1.779E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212252	GUNTHER SALT	06/18/19	Gross Alpha/Beta	Gross Alpha	1.188E-15	4.678E-15	9.383E-15	µCi/mL			Gunther Salt (General Area)-Perimeter Air
SLD212252	GUNTHER SALT	06/18/19	Gross Alpha/Beta	Gross Beta	1.363E-14	1.261E-14	1.705E-14	µCi/mL			Gunther Salt (General Area)-Perimeter Air
SLD212252	GUNTHER SALT	06/18/19	Gross Alpha/Beta	Gross Beta	2.536E-14	1.392E-14	1.705E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD212252	GUNTHER SALT	06/18/19	Gross Alpha/Beta	Gross Alpha	2.285E-15	5.169E-15	9.383E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212253	GUNTHER SALT	06/19/19	Gross Alpha/Beta	Gross Alpha	4.596E-15	6.193E-15	9.629E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212253	GUNTHER SALT	06/19/19	Gross Alpha/Beta	Gross Beta	1.682E-14	1.327E-14	1.749E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD212254	GUNTHER SALT	06/24/19	Gross Alpha/Beta	Gross Alpha	3.697E-15	6.141E-15	1.026E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212254	GUNTHER SALT	06/24/19	Gross Alpha/Beta	Gross Beta	8.863E-15	1.308E-14	1.863E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212255	GUNTHER SALT	06/25/19	Gross Alpha/Beta	Gross Alpha	2.545E-15	5.757E-15	1.045E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212255	GUNTHER SALT	06/25/19	Gross Alpha/Beta	Gross Beta	1.672E-14	1.422E-14	1.898E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD212256	GUNTHER SALT	06/26/19	Gross Alpha/Beta	Gross Beta	2.423E-14	1.329E-14	1.628E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD212256	GUNTHER SALT	06/26/19	Gross Alpha/Beta	Gross Alpha	8.7E-17	3.947E-15	8.964E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212316	GUNTHER SALT	07/16/19	Gross Alpha/Beta	Gross Alpha	2.826E-15	9.206E-15	1.833E-14	µCi/mL			Gunther Salt (General Area)-Perimeter Air
SLD212316	GUNTHER SALT	07/16/19	Gross Alpha/Beta	Gross Beta	1.83E-14	2.426E-14	3.914E-14	µCi/mL			Gunther Salt (General Area)-Perimeter Air
SLD212316	GUNTHER SALT	07/16/19	Gross Alpha/Beta	Gross Alpha	4.82E-15	1.004E-14	1.833E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212316	GUNTHER SALT	07/16/19	Gross Alpha/Beta	Gross Beta	1.317E-14	2.369E-14	3.914E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212317	GUNTHER SALT	07/17/19	Gross Alpha/Beta	Gross Beta	3.21E-14	1.87E-14	2.372E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD212317	GUNTHER SALT	07/17/19	Gross Alpha/Beta	Gross Alpha	5.102E-15	7.116E-15	1.091E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212318	GUNTHER SALT	07/18/19	Gross Alpha/Beta	Gross Alpha	7.557E-15	7.971E-15	1.105E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212318	GUNTHER SALT	07/18/19	Gross Alpha/Beta	Gross Beta	1.178E-14	1.705E-14	2.404E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212319	GUNTHER SALT	07/23/19	Gross Alpha/Beta	Gross Alpha	4.16E-16	5.647E-15	1.157E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212319	GUNTHER SALT	07/23/19	Gross Alpha/Beta	Gross Beta	1.314E-14	1.793E-14	2.516E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212320	GUNTHER SALT	07/24/19	Gross Alpha/Beta	Gross Alpha	7.053E-15	7.44E-15	1.032E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212320	GUNTHER SALT	07/24/19	Gross Alpha/Beta	Gross Beta	1.458E-14	1.625E-14	2.244E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212321	GUNTHER SALT	07/25/19	Gross Alpha/Beta	Gross Beta	4.179E-14	2.591E-14	3.324E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD212321	GUNTHER SALT	07/25/19	Gross Alpha/Beta	Gross Alpha	8.799E-15	1.051E-14	1.528E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212322	GUNTHER SALT	07/31/19	Gross Alpha/Beta	Gross Alpha	7.557E-15	7.971E-15	1.105E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212322	GUNTHER SALT	07/31/19	Gross Alpha/Beta	Gross Beta	1.716E-14	1.755E-14	2.404E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212323	GUNTHER SALT	08/01/19	Gross Alpha/Beta	Gross Alpha	2.784E-15	6.366E-15	1.105E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212323	GUNTHER SALT	08/01/19	Gross Alpha/Beta	Gross Beta	1.332E-14	1.72E-14	2.404E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD212324	GUNTHER SALT	08/05/19	Gross Alpha/Beta	Gross Beta	4.462E-14	1.995E-14	2.393E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD212324	GUNTHER SALT	08/05/19	Gross Alpha/Beta	Gross Alpha	8.711E-15	8.289E-15	1.1E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD212325	GUNTHER SALT	08/06/19	Gross Alpha/Beta	Gross Beta	4.734E-14	2.033E-14	2.415E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD212325	GUNTHER SALT	08/06/19	Gross Alpha/Beta	Gross Alpha	3.995E-15	6.832E-15	1.11E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212326	GUNTHER SALT	08/07/19	Gross Alpha/Beta	Gross Beta	3.665E-14	1.91E-14	2.372E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD212326	GUNTHER SALT	08/07/19	Gross Alpha/Beta	Gross Alpha	6.279E-15	7.5E-15	1.091E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212327	GUNTHER SALT	08/08/19	Gross Alpha/Beta	Gross Beta	2.601E-14	1.911E-14	2.516E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD212327	GUNTHER SALT	08/08/19	Gross Alpha/Beta	Gross Alpha	1.665E-15	6.176E-15	1.157E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212328	GUNTHER SALT	08/12/19	Gross Alpha/Beta	Gross Alpha	-1.273E-15	7.742E-15	1.768E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212328	GUNTHER SALT	08/12/19	Gross Alpha/Beta	Gross Beta	3.237E-14	2.854E-14	3.847E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD212389	GUNTHER SALT	08/13/19	Gross Alpha/Beta	Gross Alpha	2.673E-15	5.745E-15	9.96E-15	µCi/mL			Gunther Salt (General Area)-Perimeter Air
SLD212389	GUNTHER SALT	08/13/19	Gross Alpha/Beta	Gross Beta	1.562E-14	1.622E-14	2.376E-14	µCi/mL			Gunther Salt (General Area)-Perimeter Air
SLD212389	GUNTHER SALT	08/13/19	Gross Alpha/Beta	Gross Beta	3.092E-14	1.77E-14	2.376E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD212389	GUNTHER SALT	08/13/19	Gross Alpha/Beta	Gross Alpha	2.673E-15	5.745E-15	9.96E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212390	GUNTHER SALT	08/14/19	Gross Alpha/Beta	Gross Alpha	2.603E-15	5.596E-15	9.701E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212390	GUNTHER SALT	08/14/19	Gross Alpha/Beta	Gross Beta	2.117E-14	1.639E-14	2.315E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD212391	GUNTHER SALT	08/15/19	Gross Alpha/Beta	Gross Beta	2.341E-14	1.66E-14	2.315E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD212391	GUNTHER SALT	08/15/19	Gross Alpha/Beta	Gross Alpha	6.074E-15	6.894E-15	9.701E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212392	GUNTHER SALT	08/19/19	Gross Alpha/Beta	Gross Alpha	1.472E-15	5.183E-15	9.872E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212392	GUNTHER SALT	08/19/19	Gross Alpha/Beta	Gross Beta	2.079E-14	1.66E-14	2.355E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD212393	GUNTHER SALT	08/20/19	Gross Alpha/Beta	Gross Beta	2.937E-14	1.717E-14	2.315E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD212393	GUNTHER SALT	08/20/19	Gross Alpha/Beta	Gross Alpha	2.603E-15	5.596E-15	9.701E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212394	GUNTHER SALT	08/21/19	Gross Alpha/Beta	Gross Alpha	1.468E-14	9.594E-15	1.005E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD212394	GUNTHER SALT	08/21/19	Gross Alpha/Beta	Gross Beta	1.962E-14	1.675E-14	2.398E-14	µCi/mL	U	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD212395	GUNTHER SALT	08/22/19	Gross Alpha/Beta	Gross Alpha	1.519E-15	5.348E-15	1.019E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212395	GUNTHER SALT	08/22/19	Gross Alpha/Beta	Gross Beta	1.676E-14	1.667E-14	2.43E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD212396	GUNTHER SALT	08/26/19	Gross Alpha/Beta	Gross Alpha	3.007E-15	6.463E-15	1.121E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212396	GUNTHER SALT	08/26/19	Gross Alpha/Beta	Gross Beta	9.825E-15	1.747E-14	2.673E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212397	GUNTHER SALT	08/27/19	Gross Alpha/Beta	Gross Alpha	3.826E-15	6.165E-15	9.872E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212397	GUNTHER SALT	08/27/19	Gross Alpha/Beta	Gross Beta	1.624E-14	1.615E-14	2.355E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD212398	GUNTHER SALT	08/28/19	Gross Alpha/Beta	Gross Alpha	1.485E-15	5.229E-15	9.96E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212398	GUNTHER SALT	08/28/19	Gross Alpha/Beta	Gross Beta	2.021E-14	1.667E-14	2.376E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD212399	GUNTHER SALT	08/29/19	Gross Alpha/Beta	Gross Beta	3.489E-14	1.782E-14	2.335E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD212399	GUNTHER SALT	08/29/19	Gross Alpha/Beta	Gross Alpha	1.459E-15	5.138E-15	9.786E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212400	GUNTHER SALT	09/03/19	Gross Alpha/Beta	Gross Beta	5.797E-14	2.089E-14	2.487E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD212400	GUNTHER SALT	09/03/19	Gross Alpha/Beta	Gross Alpha	5.283E-15	6.972E-15	1.042E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212401	GUNTHER SALT	09/04/19	Gross Alpha/Beta	Gross Alpha	-2.643E-15	2.199E-15	3.186E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212401	GUNTHER SALT	09/04/19	Gross Alpha/Beta	Gross Beta	-4.121E-14	7.911E-15	9.309E-15	µCi/mL	UJ	T06, T07	Gunther Salt (General Area)-Perimeter Air
SLD212402	GUNTHER SALT	09/05/19	Gross Alpha/Beta	Gross Beta	2.503E-14	1.776E-14	2.475E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD212402	GUNTHER SALT	09/05/19	Gross Alpha/Beta	Gross Alpha	8.971E-15	8.172E-15	1.038E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD212403	GUNTHER SALT	09/09/19	Gross Alpha/Beta	Gross Beta	3.338E-14	1.768E-14	2.335E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD212403	GUNTHER SALT	09/09/19	Gross Alpha/Beta	Gross Alpha	2.626E-15	5.645E-15	9.786E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212404	GUNTHER SALT	09/10/19	Gross Alpha/Beta	Gross Beta	3.968E-14	1.866E-14	2.398E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD212404	GUNTHER SALT	09/10/19	Gross Alpha/Beta	Gross Alpha	6.292E-15	7.141E-15	1.005E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD212405	GUNTHER SALT	09/11/19	Gross Alpha/Beta	Gross Beta	6.102E-14	2.054E-14	2.387E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD212405	GUNTHER SALT	09/11/19	Gross Alpha/Beta	Gross Alpha	8.65E-15	7.88E-15	1E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD216275	GUNTHER SALT	09/12/19	Gross Alpha/Beta	Gross Alpha	1.314E-14	9.491E-15	9.705E-15	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD216275	GUNTHER SALT	09/12/19	Gross Alpha/Beta	Gross Beta	4.717E-14	1.786E-14	2.059E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD216276	GUNTHER SALT	09/16/19	Gross Alpha/Beta	Gross Alpha	9.594E-15	7.95E-15	8.839E-15	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD216276	GUNTHER SALT	09/16/19	Gross Alpha/Beta	Gross Beta	4.064E-14	1.602E-14	1.876E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD216277	GUNTHER SALT	09/17/19	Gross Alpha/Beta	Gross Beta	4.287E-14	1.564E-14	1.776E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD216277	GUNTHER SALT	09/17/19	Gross Alpha/Beta	Gross Alpha	5.712E-15	6.423E-15	8.367E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216278	GUNTHER SALT	09/18/19	Gross Alpha/Beta	Gross Beta	3.398E-14	1.723E-14	2.195E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD216278	GUNTHER SALT	09/18/19	Gross Alpha/Beta	Gross Alpha	8.45E-15	8.419E-15	1.034E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD216279	GUNTHER SALT	09/19/19	Gross Alpha/Beta	Gross Alpha	9.289E-15	7.697E-15	8.558E-15	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD216279	GUNTHER SALT	09/19/19	Gross Alpha/Beta	Gross Beta	5.809E-14	1.748E-14	1.816E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD216280	GUNTHER SALT	09/23/19	Gross Alpha/Beta	Gross Beta	1.877E-14	1.296E-14	1.784E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD216280	GUNTHER SALT	09/23/19	Gross Alpha/Beta	Gross Alpha	5.737E-15	6.452E-15	8.405E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216281	GUNTHER SALT	09/24/19	Gross Alpha/Beta	Gross Beta	3.451E-14	1.463E-14	1.76E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD216281	GUNTHER SALT	09/24/19	Gross Alpha/Beta	Gross Alpha	6.775E-15	6.75E-15	8.294E-15	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD216282	GUNTHER SALT	09/25/19	Gross Alpha/Beta	Gross Beta	2.286E-14	1.364E-14	1.816E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD216282	GUNTHER SALT	09/25/19	Gross Alpha/Beta	Gross Alpha	5.842E-15	6.569E-15	8.558E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216283	GUNTHER SALT	09/30/19	Gross Alpha/Beta	Gross Beta	2.393E-14	1.357E-14	1.784E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD216283	GUNTHER SALT	09/30/19	Gross Alpha/Beta	Gross Alpha	3.48E-15	5.598E-15	8.405E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216284	GUNTHER SALT	10/01/19	Gross Alpha/Beta	Gross Alpha	6.805E-15	7.997E-15	1.234E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216284	GUNTHER SALT	10/01/19	Gross Alpha/Beta	Gross Beta	1.248E-14	1.599E-14	2.488E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216285	GUNTHER SALT	10/02/19	Gross Alpha/Beta	Gross Beta	4.105E-14	1.823E-14	2.388E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD216285	GUNTHER SALT	10/02/19	Gross Alpha/Beta	Gross Alpha	2.97E-15	6.469E-15	1.184E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216286	GUNTHER SALT	10/08/19	Gross Alpha/Beta	Gross Alpha	1.019E-14	8.805E-15	1.195E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD216286	GUNTHER SALT	10/08/19	Gross Alpha/Beta	Gross Beta	2.367E-14	1.667E-14	2.41E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD216287	GUNTHER SALT	10/07/19	Gross Alpha/Beta	Gross Alpha	6.13E-16	5.702E-15	1.222E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216287	GUNTHER SALT	10/07/19	Gross Alpha/Beta	Gross Beta	2.026E-14	1.665E-14	2.465E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD216288	GUNTHER SALT	10/09/19	Gross Alpha/Beta	Gross Beta	4.378E-14	1.944E-14	2.547E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD216288	GUNTHER SALT	10/09/19	Gross Alpha/Beta	Gross Alpha	5.7E-15	7.78E-15	1.263E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216289	GUNTHER SALT	10/10/19	Gross Alpha/Beta	Gross Beta	2.598E-14	1.69E-14	2.41E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD216289	GUNTHER SALT	10/10/19	Gross Alpha/Beta	Gross Alpha	-1.798E-15	4.426E-15	1.195E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216290	GUNTHER SALT	10/14/19	Gross Alpha/Beta	Gross Alpha	-6.07E-16	5.101E-15	1.211E-14	µCi/mL	UJ	T06	Gunther Salt North (General Area)-Perimeter Air
SLD216290	GUNTHER SALT	10/14/19	Gross Alpha/Beta	Gross Beta	1.852E-14	1.634E-14	2.442E-14	µCi/mL	UJ	T04, T05	Gunther Salt North (General Area)-Perimeter Air
SLD216291	GUNTHER SALT	10/15/19	Gross Alpha/Beta	Gross Beta	3.572E-14	1.516E-14	1.747E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD216291	GUNTHER SALT	10/15/19	Gross Alpha/Beta	Gross Alpha	4.269E-15	6.1E-15	9.8E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216292	GUNTHER SALT	10/16/19	Gross Alpha/Beta	Gross Beta	1.904E-14	1.376E-14	1.819E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD216292	GUNTHER SALT	10/16/19	Gross Alpha/Beta	Gross Alpha	-1.93E-16	4.328E-15	1.021E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216293	GUNTHER SALT	10/17/19	Gross Alpha/Beta	Gross Alpha	1.251E-15	3.566E-15	6.364E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216293	GUNTHER SALT	10/17/19	Gross Alpha/Beta	Gross Beta	-5.808E-15	8.386E-15	1.218E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216294	GUNTHER SALT	10/21/19	Gross Alpha/Beta	Gross Alpha	1.735E-14	1.836E-14	2.617E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216294	GUNTHER SALT	10/21/19	Gross Alpha/Beta	Gross Beta	2.166E-14	3.202E-14	4.665E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216295	GUNTHER SALT	10/22/19	Gross Alpha/Beta	Gross Beta	2.211E-14	1.376E-14	1.762E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD216295	GUNTHER SALT	10/22/19	Gross Alpha/Beta	Gross Alpha	-1.87E-16	4.193E-15	9.888E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216296	GUNTHER SALT	10/23/19	Gross Alpha/Beta	Gross Beta	2.358E-14	1.467E-14	1.879E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD216296	GUNTHER SALT	10/23/19	Gross Alpha/Beta	Gross Alpha	9.98E-16	5.073E-15	1.054E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216297	GUNTHER SALT	10/24/19	Gross Alpha/Beta	Gross Beta	2.38E-14	1.481E-14	1.897E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD216297	GUNTHER SALT	10/24/19	Gross Alpha/Beta	Gross Alpha	1.008E-15	5.122E-15	1.065E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216298	GUNTHER SALT	10/29/19	Gross Alpha/Beta	Gross Alpha	1.339E-14	9.458E-15	9.797E-15	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD216298	GUNTHER SALT	10/29/19	Gross Alpha/Beta	Gross Beta	1.851E-14	1.463E-14	1.74E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD216299	GUNTHER SALT	10/30/19	Gross Alpha/Beta	Gross Alpha	1.083E-15	6.046E-15	1.03E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216299	GUNTHER SALT	10/30/19	Gross Alpha/Beta	Gross Beta	1.93E-16	1.324E-14	1.83E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216300	GUNTHER SALT	10/31/19	Gross Alpha/Beta	Gross Beta	2.237E-14	1.515E-14	1.756E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD216300	GUNTHER SALT	10/31/19	Gross Alpha/Beta	Gross Alpha	7.842E-15	8.049E-15	9.885E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216301	GUNTHER SALT	11/04/19	Gross Alpha/Beta	Gross Alpha	1.238E-14	9.262E-15	9.885E-15	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD216301	GUNTHER SALT	11/04/19	Gross Alpha/Beta	Gross Beta	3.568E-14	1.651E-14	1.756E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD216302	GUNTHER SALT	11/06/19	Gross Alpha/Beta	Gross Alpha	1.395E-14	9.852E-15	1.021E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD216302	GUNTHER SALT	11/06/19	Gross Alpha/Beta	Gross Beta	3.913E-14	1.727E-14	1.813E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD216303	GUNTHER SALT	11/05/19	Gross Alpha/Beta	Gross Beta	2.183E-14	1.521E-14	1.772E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD216303	GUNTHER SALT	11/05/19	Gross Alpha/Beta	Gross Alpha	6.769E-15	7.788E-15	9.974E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216304	GUNTHER SALT	11/07/19	Gross Alpha/Beta	Gross Beta	2.296E-14	1.353E-14	1.799E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD216304	GUNTHER SALT	11/07/19	Gross Alpha/Beta	Gross Alpha	1.966E-15	6.22E-15	1.097E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216305	GUNTHER SALT	11/12/19	Gross Alpha/Beta	Gross Beta	3.49E-14	1.626E-14	2.024E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD216305	GUNTHER SALT	11/12/19	Gross Alpha/Beta	Gross Alpha	-1.58E-15	5.457E-15	1.234E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216306	GUNTHER SALT	11/13/19	Gross Alpha/Beta	Gross Alpha	3.249E-15	6.956E-15	1.154E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216306	GUNTHER SALT	11/13/19	Gross Alpha/Beta	Gross Beta	1.413E-14	1.302E-14	1.891E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD216307	GUNTHER SALT	11/14/19	Gross Alpha/Beta	Gross Beta	4.522E-14	1.625E-14	1.84E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD216307	GUNTHER SALT	11/14/19	Gross Alpha/Beta	Gross Alpha	8.62E-16	5.93E-15	1.122E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216308	GUNTHER SALT	11/18/19	Gross Alpha/Beta	Gross Beta	2.095E-14	1.339E-14	1.815E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD216308	GUNTHER SALT	11/18/19	Gross Alpha/Beta	Gross Alpha	-2.83E-16	5.393E-15	1.107E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216309	GUNTHER SALT	11/19/19	Gross Alpha/Beta	Gross Beta	2.15E-14	1.336E-14	1.799E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD216309	GUNTHER SALT	11/19/19	Gross Alpha/Beta	Gross Alpha	8.43E-16	5.799E-15	1.097E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216310	GUNTHER SALT	11/20/19	Gross Alpha/Beta	Gross Beta	2.219E-14	1.379E-14	1.857E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD216310	GUNTHER SALT	11/20/19	Gross Alpha/Beta	Gross Alpha	-1.45E-15	5.007E-15	1.133E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216311	GUNTHER SALT	11/25/19	Gross Alpha/Beta	Gross Beta	6.375E-14	2.166E-14	2.395E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD216311	GUNTHER SALT	11/25/19	Gross Alpha/Beta	Gross Alpha	4.114E-15	8.808E-15	1.461E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216312	GUNTHER SALT	11/26/19	Gross Alpha/Beta	Gross Beta	3.372E-14	1.352E-14	1.718E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD216312	GUNTHER SALT	11/26/19	Gross Alpha/Beta	Gross Alpha	6.532E-15	6.771E-15	8.444E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216313	GUNTHER SALT	11/27/19	Gross Alpha/Beta	Gross Alpha	4.738E-15	6.572E-15	9.252E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216313	GUNTHER SALT	11/27/19	Gross Alpha/Beta	Gross Beta	1.565E-14	1.212E-14	1.883E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD216314	GUNTHER SALT	12/02/19	Gross Alpha/Beta	Gross Beta	1.765E-14	1.139E-14	1.696E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD216314	GUNTHER SALT	12/02/19	Gross Alpha/Beta	Gross Alpha	-9.1E-17	3.996E-15	8.335E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216315	GUNTHER SALT	12/03/19	Gross Alpha/Beta	Gross Beta	2.068E-14	1.255E-14	1.839E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD216315	GUNTHER SALT	12/03/19	Gross Alpha/Beta	Gross Alpha	2.264E-15	5.473E-15	9.036E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216316	GUNTHER SALT	12/04/19	Gross Alpha/Beta	Gross Beta	2.862E-14	1.338E-14	1.805E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD216316	GUNTHER SALT	12/04/19	Gross Alpha/Beta	Gross Alpha	4.542E-15	6.301E-15	8.87E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216317	GUNTHER SALT	12/05/19	Gross Alpha/Beta	Gross Beta	4.828E-14	1.568E-14	1.805E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD216317	GUNTHER SALT	12/05/19	Gross Alpha/Beta	Gross Alpha	6.862E-15	7.112E-15	8.87E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216318	GUNTHER SALT	12/09/19	Gross Alpha/Beta	Gross Beta	5.073E-14	1.554E-14	1.733E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD216318	GUNTHER SALT	12/09/19	Gross Alpha/Beta	Gross Alpha	6.59E-15	6.83E-15	8.519E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216319	GUNTHER SALT	12/10/19	Gross Alpha/Beta	Gross Alpha	3.067E-15	7.413E-15	1.224E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216319	GUNTHER SALT	12/10/19	Gross Alpha/Beta	Gross Beta	1.966E-14	1.589E-14	2.49E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD216320	GUNTHER SALT	12/11/19	Gross Alpha/Beta	Gross Beta	2.972E-14	1.338E-14	1.78E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD216320	GUNTHER SALT	12/11/19	Gross Alpha/Beta	Gross Alpha	2.193E-15	5.3E-15	8.75E-15	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216321	GUNTHER SALT	11/25/19	Gross Alpha/Beta	Gross Alpha	1.771E-14	1.025E-14	9.078E-15	µCi/mL			Gunther Salt (General Area)-Perimeter Air
SLD216321	GUNTHER SALT	11/25/19	Gross Alpha/Beta	Gross Beta	3.781E-14	1.472E-14	1.847E-14	µCi/mL			Gunther Salt (General Area)-Perimeter Air
SLD216321	GUNTHER SALT	11/25/19	Gross Alpha/Beta	Gross Alpha	1.414E-14	9.355E-15	9.078E-15	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD216321	GUNTHER SALT	11/25/19	Gross Alpha/Beta	Gross Beta	4.632E-14	1.57E-14	1.847E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD216322	GUNTHER SALT	12/12/19	Gross Alpha/Beta	Gross Alpha	9.11E-16	5.892E-15	1.079E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216322	GUNTHER SALT	12/12/19	Gross Alpha/Beta	Gross Beta	9.91E-15	1.635E-14	2.426E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216323	GUNTHER SALT	12/18/19	Gross Alpha/Beta	Gross Beta	5.329E-14	2.006E-14	2.372E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD216323	GUNTHER SALT	12/18/19	Gross Alpha/Beta	Gross Alpha	9.206E-15	8.549E-15	1.055E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD216324	GUNTHER SALT	12/19/19	Gross Alpha/Beta	Gross Beta	4.459E-14	2.029E-14	2.53E-14	µCi/mL	=		Gunther Salt (General Area)-Perimeter Air
SLD216324	GUNTHER SALT	12/19/19	Gross Alpha/Beta	Gross Alpha	6.017E-15	7.973E-15	1.125E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216325	GUNTHER SALT	12/23/19	Gross Alpha/Beta	Gross Beta	3.709E-14	2.066E-14	2.696E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD216325	GUNTHER SALT	12/23/19	Gross Alpha/Beta	Gross Alpha	6.412E-15	8.497E-15	1.199E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216326	GUNTHER SALT	12/24/19	Gross Alpha/Beta	Gross Alpha	2.315E-15	6.943E-15	1.175E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216326	GUNTHER SALT	12/24/19	Gross Alpha/Beta	Gross Beta	2.443E-14	1.913E-14	2.643E-14	µCi/mL	UJ	T04, T05	Gunther Salt (General Area)-Perimeter Air
SLD216327	GUNTHER SALT	12/26/19	Gross Alpha/Beta	Gross Beta	2.725E-14	1.957E-14	2.669E-14	µCi/mL	J	T04, T20	Gunther Salt (General Area)-Perimeter Air
SLD216327	GUNTHER SALT	12/26/19	Gross Alpha/Beta	Gross Alpha	7.684E-15	8.831E-15	1.187E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216328	GUNTHER SALT	12/30/19	Gross Alpha/Beta	Gross Alpha	3.483E-15	7.115E-15	1.125E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD216328	GUNTHER SALT	12/30/19	Gross Alpha/Beta	Gross Beta	9.517E-15	1.697E-14	2.53E-14	µCi/mL	UJ	T06	Gunther Salt (General Area)-Perimeter Air
SLD208910	P6WH LOADOUT	01/02/19	Gross Alpha/Beta	Gross Beta	3.592E-14	1.437E-14	1.716E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208910	P6WH LOADOUT	01/02/19	Gross Alpha/Beta	Gross Alpha	8.128E-15	8.052E-15	1.109E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208910	P6WH LOADOUT	01/02/19	Gross Alpha/Beta	Gross Beta	3.811E-14	1.462E-14	1.716E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208910	P6WH LOADOUT	01/02/19	Gross Alpha/Beta	Gross Alpha	5.806E-15	7.341E-15	1.109E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208911	P6WH LOADOUT	01/02/19	Gross Alpha/Beta	Gross Beta	4.254E-14	1.445E-14	1.607E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208911	P6WH LOADOUT	01/02/19	Gross Alpha/Beta	Gross Alpha	6.526E-15	7.217E-15	1.039E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208912	P6WH LOADOUT	01/02/19	Gross Alpha/Beta	Gross Beta	4.834E-14	1.575E-14	1.716E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208912	P6WH LOADOUT	01/02/19	Gross Alpha/Beta	Gross Alpha	5.806E-15	7.341E-15	1.109E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208913	P6WH LOADOUT	01/03/19	Gross Alpha/Beta	Gross Beta	3.396E-14	1.379E-14	1.656E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208913	P6WH LOADOUT	01/03/19	Gross Alpha/Beta	Gross Alpha	7.845E-15	7.772E-15	1.071E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208914	P6WH LOADOUT	01/03/19	Gross Alpha/Beta	Gross Alpha	1.172E-14	8.55E-15	1.018E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208914	P6WH LOADOUT	01/03/19	Gross Alpha/Beta	Gross Beta	4.099E-14	1.408E-14	1.574E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208915	P6WH LOADOUT	01/03/19	Gross Alpha/Beta	Gross Beta	5.088E-14	1.565E-14	1.656E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208915	P6WH LOADOUT	01/03/19	Gross Alpha/Beta	Gross Alpha	2.242E-15	5.917E-15	1.071E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208916	P6WH LOADOUT	01/07/19	Gross Alpha/Beta	Gross Beta	4.227E-14	1.485E-14	1.678E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208916	P6WH LOADOUT	01/07/19	Gross Alpha/Beta	Gross Alpha	3.407E-15	6.413E-15	1.085E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208917	P6WH LOADOUT	01/07/19	Gross Alpha/Beta	Gross Beta	3.914E-14	1.392E-14	1.581E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208917	P6WH LOADOUT	01/07/19	Gross Alpha/Beta	Gross Alpha	3.209E-15	6.041E-15	1.022E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208918	P6WH LOADOUT	01/07/19	Gross Alpha/Beta	Gross Beta	4.441E-14	1.509E-14	1.678E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208918	P6WH LOADOUT	01/07/19	Gross Alpha/Beta	Gross Alpha	5.678E-15	7.179E-15	1.085E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208919	P6WH LOADOUT	01/08/19	Gross Alpha/Beta	Gross Beta	2.256E-14	1.271E-14	1.701E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208919	P6WH LOADOUT	01/08/19	Gross Alpha/Beta	Gross Alpha	-1.151E-15	4.582E-15	1.1E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208920	P6WH LOADOUT	01/08/19	Gross Alpha/Beta	Gross Alpha	2.13E-15	5.623E-15	1.018E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208920	P6WH LOADOUT	01/08/19	Gross Alpha/Beta	Gross Beta	1.016E-14	1.039E-14	1.574E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208921	P6WH LOADOUT	01/08/19	Gross Alpha/Beta	Gross Alpha	-1.126E-15	4.482E-15	1.076E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208921	P6WH LOADOUT	01/08/19	Gross Alpha/Beta	Gross Beta	1.428E-14	1.145E-14	1.663E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208922	P6WH LOADOUT	01/09/19	Gross Alpha/Beta	Gross Beta	2.941E-14	1.339E-14	1.678E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208922	P6WH LOADOUT	01/09/19	Gross Alpha/Beta	Gross Alpha	-1.136E-15	4.522E-15	1.085E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208923	P6WH LOADOUT	01/09/19	Gross Alpha/Beta	Gross Beta	2.29E-14	1.201E-14	1.574E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208923	P6WH LOADOUT	01/09/19	Gross Alpha/Beta	Gross Alpha	8.522E-15	7.693E-15	1.018E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208924	P6WH LOADOUT	01/09/19	Gross Alpha/Beta	Gross Alpha	0	5.174E-15	1.109E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208924	P6WH LOADOUT	01/09/19	Gross Alpha/Beta	Gross Beta	1.473E-14	1.181E-14	1.716E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD208925	P6WH LOADOUT	01/10/19	Gross Alpha/Beta	Gross Beta	3.737E-14	1.518E-14	1.823E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208925	P6WH LOADOUT	01/10/19	Gross Alpha/Beta	Gross Alpha	4.934E-15	7.393E-15	1.179E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208926	P6WH LOADOUT	01/10/19	Gross Alpha/Beta	Gross Beta	2.841E-14	1.294E-14	1.621E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208926	P6WH LOADOUT	01/10/19	Gross Alpha/Beta	Gross Alpha	6.582E-15	7.278E-15	1.048E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208927	P6WH LOADOUT	01/10/19	Gross Alpha/Beta	Gross Beta	5.155E-14	1.697E-14	1.858E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208927	P6WH LOADOUT	01/10/19	Gross Alpha/Beta	Gross Alpha	6.287E-15	7.95E-15	1.201E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208928	P6WH LOADOUT	01/15/19	Gross Alpha/Beta	Gross Beta	2.155E-14	1.314E-14	1.797E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208928	P6WH LOADOUT	01/15/19	Gross Alpha/Beta	Gross Alpha	1.216E-15	5.939E-15	1.162E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208929	P6WH LOADOUT	01/15/19	Gross Alpha/Beta	Gross Beta	2.058E-14	1.255E-14	1.716E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208929	P6WH LOADOUT	01/15/19	Gross Alpha/Beta	Gross Alpha	2.322E-15	6.13E-15	1.109E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208930	P6WH LOADOUT	01/15/19	Gross Alpha/Beta	Gross Alpha	-2.261E-15	3.895E-15	1.08E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208930	P6WH LOADOUT	01/15/19	Gross Alpha/Beta	Gross Beta	1.008E-14	1.093E-14	1.671E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208930	P6WH LOADOUT	01/15/19	Gross Alpha/Beta	Gross Beta	2.288E-14	1.257E-14	1.671E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208930	P6WH LOADOUT	01/15/19	Gross Alpha/Beta	Gross Alpha	-1.131E-15	4.502E-15	1.08E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208931	P6WH LOADOUT	01/16/19	Gross Alpha/Beta	Gross Beta	4.14E-14	1.508E-14	1.731E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208931	P6WH LOADOUT	01/16/19	Gross Alpha/Beta	Gross Alpha	0	5.221E-15	1.12E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208932	P6WH LOADOUT	01/16/19	Gross Alpha/Beta	Gross Beta	4.553E-14	1.53E-14	1.693E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208932	P6WH LOADOUT	01/16/19	Gross Alpha/Beta	Gross Alpha	0	5.105E-15	1.095E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208933	P6WH LOADOUT	01/16/19	Gross Alpha/Beta	Gross Beta	5.08E-14	1.592E-14	1.701E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208933	P6WH LOADOUT	01/16/19	Gross Alpha/Beta	Gross Alpha	1.151E-15	5.621E-15	1.1E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208934	P6WH LOADOUT	01/17/19	Gross Alpha/Beta	Gross Beta	3.139E-14	1.38E-14	1.708E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208934	P6WH LOADOUT	01/17/19	Gross Alpha/Beta	Gross Alpha	2.312E-15	6.103E-15	1.105E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208935	P6WH LOADOUT	01/17/19	Gross Alpha/Beta	Gross Beta	2.898E-14	1.296E-14	1.614E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208935	P6WH LOADOUT	01/17/19	Gross Alpha/Beta	Gross Alpha	4.369E-15	6.547E-15	1.044E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208936	P6WH LOADOUT	01/17/19	Gross Alpha/Beta	Gross Beta	3.544E-14	1.418E-14	1.693E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208936	P6WH LOADOUT	01/17/19	Gross Alpha/Beta	Gross Alpha	0	5.105E-15	1.095E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208937	P6WH LOADOUT	01/22/19	Gross Alpha/Beta	Gross Beta	2.703E-14	1.329E-14	1.708E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208937	P6WH LOADOUT	01/22/19	Gross Alpha/Beta	Gross Alpha	0	5.15E-15	1.105E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208938	P6WH LOADOUT	01/22/19	Gross Alpha/Beta	Gross Beta	2.954E-14	1.299E-14	1.607E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208938	P6WH LOADOUT	01/22/19	Gross Alpha/Beta	Gross Alpha	6.526E-15	7.217E-15	1.039E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208939	P6WH LOADOUT	01/22/19	Gross Alpha/Beta	Gross Beta	3.537E-14	1.395E-14	1.656E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208939	P6WH LOADOUT	01/22/19	Gross Alpha/Beta	Gross Alpha	2.242E-15	5.917E-15	1.071E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208940	P6WH LOADOUT	01/23/19	Gross Alpha/Beta	Gross Beta	2.632E-14	1.294E-14	1.663E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208940	P6WH LOADOUT	01/23/19	Gross Alpha/Beta	Gross Alpha	0	5.015E-15	1.076E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208941	P6WH LOADOUT	01/23/19	Gross Alpha/Beta	Gross Beta	3.336E-14	1.335E-14	1.594E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208941	P6WH LOADOUT	01/23/19	Gross Alpha/Beta	Gross Alpha	3.236E-15	6.091E-15	1.031E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208942	P6WH LOADOUT	01/23/19	Gross Alpha/Beta	Gross Beta	3.36E-14	1.429E-14	1.747E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208942	P6WH LOADOUT	01/23/19	Gross Alpha/Beta	Gross Alpha	0	5.269E-15	1.13E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208943	P6WH LOADOUT	01/24/19	Gross Alpha/Beta	Gross Beta	4.863E-14	1.67E-14	1.867E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208943	P6WH LOADOUT	01/24/19	Gross Alpha/Beta	Gross Alpha	7.582E-15	8.384E-15	1.207E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208944	P6WH LOADOUT	01/24/19	Gross Alpha/Beta	Gross Beta	3.901E-14	1.371E-14	1.548E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208944	P6WH LOADOUT	01/24/19	Gross Alpha/Beta	Gross Alpha	2.096E-15	5.532E-15	1.001E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208945	P6WH LOADOUT	01/24/19	Gross Alpha/Beta	Gross Beta	3.334E-14	1.466E-14	1.814E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208945	P6WH LOADOUT	01/24/19	Gross Alpha/Beta	Gross Alpha	3.683E-15	6.932E-15	1.173E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208946	P6WH LOADOUT	01/28/19	Gross Alpha/Beta	Gross Beta	3.375E-14	1.436E-14	1.755E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208946	P6WH LOADOUT	01/28/19	Gross Alpha/Beta	Gross Alpha	-2.376E-15	4.093E-15	1.135E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208947	P6WH LOADOUT	01/28/19	Gross Alpha/Beta	Gross Beta	2.954E-14	1.299E-14	1.607E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD208947	P6WH LOADOUT	01/28/19	Gross Alpha/Beta	Gross Alpha	-2.175E-15	3.747E-15	1.039E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208948	P6WH LOADOUT	01/28/19	Gross Alpha/Beta	Gross Beta	3.329E-14	1.416E-14	1.731E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208948	P6WH LOADOUT	01/28/19	Gross Alpha/Beta	Gross Alpha	-1.172E-15	4.666E-15	1.12E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208960	P6WH LOADOUT	01/29/19	Gross Alpha/Beta	Gross Beta	2.744E-14	1.426E-14	1.709E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208960	P6WH LOADOUT	01/29/19	Gross Alpha/Beta	Gross Alpha	4.836E-15	6.947E-15	1.128E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208960	P6WH LOADOUT	01/29/19	Gross Alpha/Beta	Gross Beta	3.446E-14	1.501E-14	1.709E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208960	P6WH LOADOUT	01/29/19	Gross Alpha/Beta	Gross Alpha	-1.86E-15	4.276E-15	1.128E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208961	P6WH LOADOUT	02/04/19	Gross Alpha/Beta	Gross Alpha	-7.99E-16	5.18E-15	1.211E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208961	P6WH LOADOUT	02/04/19	Gross Alpha/Beta	Gross Beta	1.515E-14	1.373E-14	1.836E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208962	P6WH LOADOUT	02/04/19	Gross Alpha/Beta	Gross Beta	2.622E-14	1.486E-14	1.819E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208962	P6WH LOADOUT	02/04/19	Gross Alpha/Beta	Gross Alpha	-1.98E-15	4.551E-15	1.2E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208963	P6WH LOADOUT	02/04/19	Gross Alpha/Beta	Gross Beta	2.892E-14	1.418E-14	1.673E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208963	P6WH LOADOUT	02/04/19	Gross Alpha/Beta	Gross Alpha	3.64E-16	5.2E-15	1.104E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208964	P6WH LOADOUT	02/05/19	Gross Alpha/Beta	Gross Beta	4.355E-14	1.652E-14	1.794E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208964	P6WH LOADOUT	02/05/19	Gross Alpha/Beta	Gross Alpha	5.077E-15	7.294E-15	1.184E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208965	P6WH LOADOUT	02/05/19	Gross Alpha/Beta	Gross Beta	4.353E-14	1.575E-14	1.68E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208965	P6WH LOADOUT	02/05/19	Gross Alpha/Beta	Gross Alpha	8.044E-15	7.827E-15	1.108E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208966	P6WH LOADOUT	02/05/19	Gross Alpha/Beta	Gross Beta	5.66E-14	1.794E-14	1.811E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208966	P6WH LOADOUT	02/05/19	Gross Alpha/Beta	Gross Alpha	5.124E-15	7.361E-15	1.195E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208967	P6WH LOADOUT	02/06/19	Gross Alpha/Beta	Gross Alpha	1.637E-15	6.34E-15	1.24E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208967	P6WH LOADOUT	02/06/19	Gross Alpha/Beta	Gross Beta	1.783E-14	1.432E-14	1.88E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208968	P6WH LOADOUT	02/06/19	Gross Alpha/Beta	Gross Alpha	3.85E-16	5.503E-15	1.168E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208968	P6WH LOADOUT	02/06/19	Gross Alpha/Beta	Gross Beta	1.242E-14	1.298E-14	1.77E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208969	P6WH LOADOUT	02/06/19	Gross Alpha/Beta	Gross Alpha	4E-16	5.708E-15	1.211E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208969	P6WH LOADOUT	02/06/19	Gross Alpha/Beta	Gross Beta	7.606E-15	1.284E-14	1.836E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208970	P6WH LOADOUT	02/07/19	Gross Alpha/Beta	Gross Alpha	-4.679E-15	3.311E-15	1.289E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208970	P6WH LOADOUT	02/07/19	Gross Alpha/Beta	Gross Beta	-2.342E-15	1.237E-14	1.954E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208971	P6WH LOADOUT	02/07/19	Gross Alpha/Beta	Gross Alpha	4.03E-16	5.762E-15	1.223E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208971	P6WH LOADOUT	02/07/19	Gross Alpha/Beta	Gross Beta	9.961E-15	1.323E-14	1.853E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208972	P6WH LOADOUT	02/07/19	Gross Alpha/Beta	Gross Alpha	-3.403E-15	4.174E-15	1.289E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208972	P6WH LOADOUT	02/07/19	Gross Alpha/Beta	Gross Beta	-1.539E-15	1.247E-14	1.954E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208973	P6WH LOADOUT	02/11/19	Gross Alpha/Beta	Gross Alpha	-1.927E-15	4.429E-15	1.168E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208973	P6WH LOADOUT	02/11/19	Gross Alpha/Beta	Gross Beta	1.17E-14	1.29E-14	1.77E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208974	P6WH LOADOUT	02/11/19	Gross Alpha/Beta	Gross Alpha	-7.07E-16	4.583E-15	1.072E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208974	P6WH LOADOUT	02/11/19	Gross Alpha/Beta	Gross Beta	1.274E-14	1.207E-14	1.624E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208975	P6WH LOADOUT	02/11/19	Gross Alpha/Beta	Gross Alpha	-7.5E-16	4.864E-15	1.137E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208975	P6WH LOADOUT	02/11/19	Gross Alpha/Beta	Gross Beta	1.422E-14	1.289E-14	1.724E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208976	P6WH LOADOUT	02/12/19	Gross Alpha/Beta	Gross Beta	3.336E-14	1.525E-14	1.762E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208976	P6WH LOADOUT	02/12/19	Gross Alpha/Beta	Gross Alpha	-1.918E-15	4.409E-15	1.163E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208977	P6WH LOADOUT	02/12/19	Gross Alpha/Beta	Gross Alpha	-7.28E-16	4.719E-15	1.104E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208977	P6WH LOADOUT	02/12/19	Gross Alpha/Beta	Gross Beta	8.303E-15	1.186E-14	1.673E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208978	P6WH LOADOUT	02/12/19	Gross Alpha/Beta	Gross Alpha	2.811E-15	6.673E-15	1.217E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208978	P6WH LOADOUT	02/12/19	Gross Alpha/Beta	Gross Beta	1.446E-14	1.371E-14	1.845E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208979	P6WH LOADOUT	02/13/19	Gross Alpha/Beta	Gross Beta	6.013E-14	1.84E-14	1.828E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208979	P6WH LOADOUT	02/13/19	Gross Alpha/Beta	Gross Alpha	3.978E-15	7.032E-15	1.206E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208999	P6WH LOADOUT	02/13/19	Gross Alpha/Beta	Gross Beta	6.042E-14	2.068E-14	2.391E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208999	P6WH LOADOUT	02/13/19	Gross Alpha/Beta	Gross Alpha	1.983E-15	6.229E-15	1.066E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD208999	P6WH LOADOUT	02/13/19	Gross Alpha/Beta	Gross Beta	7.492E-14	2.195E-14	2.391E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD208999	P6WH LOADOUT	02/13/19	Gross Alpha/Beta	Gross Alpha	4.362E-15	7.085E-15	1.066E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209000	P6WH LOADOUT	02/13/19	Gross Alpha/Beta	Gross Beta	4.96E-14	2.095E-14	2.582E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209000	P6WH LOADOUT	02/13/19	Gross Alpha/Beta	Gross Alpha	8.57E-16	6.217E-15	1.151E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209001	P6WH LOADOUT	02/14/19	Gross Alpha/Beta	Gross Beta	3.509E-14	1.902E-14	2.488E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209001	P6WH LOADOUT	02/14/19	Gross Alpha/Beta	Gross Alpha	5.779E-15	7.784E-15	1.109E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209002	P6WH LOADOUT	02/14/19	Gross Alpha/Beta	Gross Beta	2.627E-14	1.726E-14	2.339E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209002	P6WH LOADOUT	02/14/19	Gross Alpha/Beta	Gross Alpha	-1.552E-15	4.571E-15	1.043E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209003	P6WH LOADOUT	02/14/19	Gross Alpha/Beta	Gross Beta	3.879E-14	1.958E-14	2.523E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209003	P6WH LOADOUT	02/14/19	Gross Alpha/Beta	Gross Alpha	3.348E-15	7.039E-15	1.125E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209004	P6WH LOADOUT	02/19/19	Gross Alpha/Beta	Gross Alpha	-1.566E-15	4.61E-15	1.052E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209004	P6WH LOADOUT	02/19/19	Gross Alpha/Beta	Gross Beta	2.047E-14	1.684E-14	2.36E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209005	P6WH LOADOUT	02/19/19	Gross Alpha/Beta	Gross Beta	3.033E-14	1.709E-14	2.253E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209005	P6WH LOADOUT	02/19/19	Gross Alpha/Beta	Gross Alpha	7.47E-16	5.424E-15	1.004E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209006	P6WH LOADOUT	02/19/19	Gross Alpha/Beta	Gross Beta	3.093E-14	1.815E-14	2.412E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209006	P6WH LOADOUT	02/19/19	Gross Alpha/Beta	Gross Alpha	5.601E-15	7.544E-15	1.075E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209007	P6WH LOADOUT	02/20/19	Gross Alpha/Beta	Gross Alpha	8.11E-16	5.884E-15	1.09E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209007	P6WH LOADOUT	02/20/19	Gross Alpha/Beta	Gross Beta	1.339E-14	1.669E-14	2.444E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209008	P6WH LOADOUT	02/20/19	Gross Alpha/Beta	Gross Alpha	-1.507E-15	4.438E-15	1.013E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209008	P6WH LOADOUT	02/20/19	Gross Alpha/Beta	Gross Beta	2.26E-14	1.649E-14	2.271E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209009	P6WH LOADOUT	02/20/19	Gross Alpha/Beta	Gross Beta	2.684E-14	1.764E-14	2.391E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209009	P6WH LOADOUT	02/20/19	Gross Alpha/Beta	Gross Alpha	-3.97E-16	5.241E-15	1.066E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209010	P6WH LOADOUT	02/21/19	Gross Alpha/Beta	Gross Beta	6.634E-14	2.134E-14	2.412E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209010	P6WH LOADOUT	02/21/19	Gross Alpha/Beta	Gross Alpha	4.4E-15	7.148E-15	1.075E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209011	P6WH LOADOUT	02/21/19	Gross Alpha/Beta	Gross Beta	6.1E-14	1.979E-14	2.244E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209011	P6WH LOADOUT	02/21/19	Gross Alpha/Beta	Gross Alpha	5.21E-15	7.018E-15	1E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209012	P6WH LOADOUT	02/21/19	Gross Alpha/Beta	Gross Beta	4.501E-14	1.979E-14	2.466E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209012	P6WH LOADOUT	02/21/19	Gross Alpha/Beta	Gross Alpha	-4.09E-16	5.406E-15	1.099E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209013	P6WH LOADOUT	02/25/19	Gross Alpha/Beta	Gross Alpha	1.208E-14	9.668E-15	1.119E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209013	P6WH LOADOUT	02/25/19	Gross Alpha/Beta	Gross Beta	7.149E-14	2.243E-14	2.511E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209014	P6WH LOADOUT	02/25/19	Gross Alpha/Beta	Gross Beta	7.78E-14	2.186E-14	2.339E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209014	P6WH LOADOUT	02/25/19	Gross Alpha/Beta	Gross Alpha	6.597E-15	7.684E-15	1.043E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209015	P6WH LOADOUT	02/25/19	Gross Alpha/Beta	Gross Beta	6.414E-14	2.217E-14	2.57E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209015	P6WH LOADOUT	02/25/19	Gross Alpha/Beta	Gross Alpha	2.132E-15	6.697E-15	1.146E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209016	P6WH LOADOUT	02/26/19	Gross Alpha/Beta	Gross Beta	4.555E-14	1.606E-14	1.685E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209016	P6WH LOADOUT	02/26/19	Gross Alpha/Beta	Gross Alpha	5.274E-15	5.9E-15	7.804E-15	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209016	P6WH LOADOUT	02/26/19	Gross Alpha/Beta	Gross Alpha	8.727E-15	7.136E-15	7.804E-15	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209016	P6WH LOADOUT	02/26/19	Gross Alpha/Beta	Gross Beta	3.686E-14	1.514E-14	1.685E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209017	P6WH LOADOUT	02/26/19	Gross Alpha/Beta	Gross Beta	4.832E-14	1.568E-14	1.586E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209017	P6WH LOADOUT	02/26/19	Gross Alpha/Beta	Gross Alpha	6.047E-15	5.965E-15	7.345E-15	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209018	P6WH LOADOUT	02/26/19	Gross Alpha/Beta	Gross Alpha	1.229E-14	8.269E-15	7.875E-15	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209018	P6WH LOADOUT	02/26/19	Gross Alpha/Beta	Gross Beta	4.742E-14	1.636E-14	1.7E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209019	P6WH LOADOUT	02/27/19	Gross Alpha/Beta	Gross Alpha	8.727E-15	7.136E-15	7.804E-15	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209019	P6WH LOADOUT	02/27/19	Gross Alpha/Beta	Gross Beta	3.903E-14	1.538E-14	1.685E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209020	P6WH LOADOUT	02/27/19	Gross Alpha/Beta	Gross Alpha	9.456E-15	7.184E-15	7.471E-15	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209020	P6WH LOADOUT	02/27/19	Gross Alpha/Beta	Gross Beta	4.083E-14	1.509E-14	1.613E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209021	P6WH LOADOUT	02/27/19	Gross Alpha/Beta	Gross Beta	3.469E-14	1.491E-14	1.685E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD209021	P6WH LOADOUT	02/27/19	Gross Alpha/Beta	Gross Alpha	4.124E-15	5.428E-15	7.804E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209022	P6WH LOADOUT	03/04/19	Gross Alpha/Beta	Gross Beta	2.646E-14	1.451E-14	1.764E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209022	P6WH LOADOUT	03/04/19	Gross Alpha/Beta	Gross Alpha	7.03E-16	3.845E-15	8.169E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209023	P6WH LOADOUT	03/04/19	Gross Alpha/Beta	Gross Beta	2.526E-14	1.326E-14	1.593E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209023	P6WH LOADOUT	03/04/19	Gross Alpha/Beta	Gross Alpha	2.81E-15	4.642E-15	7.376E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209024	P6WH LOADOUT	03/04/19	Gross Alpha/Beta	Gross Beta	2.598E-14	1.425E-14	1.732E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209024	P6WH LOADOUT	03/04/19	Gross Alpha/Beta	Gross Alpha	1.872E-15	4.455E-15	8.019E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209025	P6WH LOADOUT	03/05/19	Gross Alpha/Beta	Gross Alpha	1.333E-14	8.52E-15	7.804E-15	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209025	P6WH LOADOUT	03/05/19	Gross Alpha/Beta	Gross Beta	2.311E-14	1.362E-14	1.685E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209026	P6WH LOADOUT	03/05/19	Gross Alpha/Beta	Gross Beta	2.468E-14	1.324E-14	1.599E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209026	P6WH LOADOUT	03/05/19	Gross Alpha/Beta	Gross Alpha	1.729E-15	4.116E-15	7.408E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209027	P6WH LOADOUT	03/05/19	Gross Alpha/Beta	Gross Beta	2.969E-14	1.467E-14	1.732E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209027	P6WH LOADOUT	03/05/19	Gross Alpha/Beta	Gross Alpha	4.237E-15	5.577E-15	8.019E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209028	P6WH LOADOUT	03/06/19	Gross Alpha/Beta	Gross Beta	2.697E-14	1.386E-14	1.656E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209028	P6WH LOADOUT	03/06/19	Gross Alpha/Beta	Gross Alpha	-4.71E-16	2.812E-15	7.667E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209029	P6WH LOADOUT	03/06/19	Gross Alpha/Beta	Gross Beta	4.355E-14	1.519E-14	1.586E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209029	P6WH LOADOUT	03/06/19	Gross Alpha/Beta	Gross Alpha	1.715E-15	4.081E-15	7.345E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209030	P6WH LOADOUT	03/06/19	Gross Alpha/Beta	Gross Alpha	9.922E-15	7.539E-15	7.839E-15	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209030	P6WH LOADOUT	03/06/19	Gross Alpha/Beta	Gross Beta	4.648E-14	1.621E-14	1.693E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209031	P6WH LOADOUT	03/07/19	Gross Alpha/Beta	Gross Beta	4.555E-14	1.606E-14	1.685E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209031	P6WH LOADOUT	03/07/19	Gross Alpha/Beta	Gross Alpha	2.973E-15	4.912E-15	7.804E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209032	P6WH LOADOUT	03/07/19	Gross Alpha/Beta	Gross Beta	3.695E-14	1.436E-14	1.566E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209032	P6WH LOADOUT	03/07/19	Gross Alpha/Beta	Gross Alpha	4.902E-15	5.484E-15	7.254E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209033	P6WH LOADOUT	03/07/19	Gross Alpha/Beta	Gross Beta	3.557E-14	1.505E-14	1.693E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209033	P6WH LOADOUT	03/07/19	Gross Alpha/Beta	Gross Alpha	1.83E-15	4.356E-15	7.839E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209034	P6WH LOADOUT	03/11/19	Gross Alpha/Beta	Gross Beta	3.793E-14	1.536E-14	1.7E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209034	P6WH LOADOUT	03/11/19	Gross Alpha/Beta	Gross Alpha	1.839E-15	4.375E-15	7.875E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209035	P6WH LOADOUT	03/11/19	Gross Alpha/Beta	Gross Beta	3.932E-14	1.453E-14	1.553E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209035	P6WH LOADOUT	03/11/19	Gross Alpha/Beta	Gross Alpha	6.984E-15	6.221E-15	7.194E-15	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209057	P6WH LOADOUT	03/11/19	Gross Alpha/Beta	Gross Alpha	1.416E-14	1.146E-14	1.112E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209057	P6WH LOADOUT	03/11/19	Gross Alpha/Beta	Gross Beta	4.089E-14	1.839E-14	2.426E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209057	P6WH LOADOUT	03/11/19	Gross Alpha/Beta	Gross Beta	2.504E-14	1.689E-14	2.426E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209057	P6WH LOADOUT	03/11/19	Gross Alpha/Beta	Gross Alpha	4.787E-15	9.305E-15	1.112E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209058	P6WH LOADOUT	03/13/19	Gross Alpha/Beta	Gross Beta	2.62E-14	1.681E-14	2.394E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209058	P6WH LOADOUT	03/13/19	Gross Alpha/Beta	Gross Alpha	9.6E-17	7.926E-15	1.097E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209059	P6WH LOADOUT	03/12/19	Gross Alpha/Beta	Gross Beta	5.8E-14	1.989E-14	2.415E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209059	P6WH LOADOUT	03/12/19	Gross Alpha/Beta	Gross Alpha	2.431E-15	8.651E-15	1.107E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209060	P6WH LOADOUT	03/12/19	Gross Alpha/Beta	Gross Alpha	2.453E-15	8.727E-15	1.117E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209060	P6WH LOADOUT	03/12/19	Gross Alpha/Beta	Gross Beta	1.15E-14	1.562E-14	2.436E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209061	P6WH LOADOUT	03/12/19	Gross Alpha/Beta	Gross Beta	2.97E-14	1.74E-14	2.436E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209061	P6WH LOADOUT	03/12/19	Gross Alpha/Beta	Gross Alpha	2.453E-15	8.727E-15	1.117E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209062	P6WH LOADOUT	03/13/19	Gross Alpha/Beta	Gross Alpha	4.491E-15	8.73E-15	1.043E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209062	P6WH LOADOUT	03/13/19	Gross Alpha/Beta	Gross Beta	1.783E-14	1.529E-14	2.276E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209063	P6WH LOADOUT	03/13/19	Gross Alpha/Beta	Gross Beta	2.579E-14	1.696E-14	2.426E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209063	P6WH LOADOUT	03/13/19	Gross Alpha/Beta	Gross Alpha	-1.075E-15	7.68E-15	1.112E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209064	P6WH LOADOUT	03/14/19	Gross Alpha/Beta	Gross Beta	3.023E-14	1.771E-14	2.48E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD209064	P6WH LOADOUT	03/14/19	Gross Alpha/Beta	Gross Alpha	-2.297E-15	7.479E-15	1.137E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD210468	P6WH LOADOUT	03/14/19	Gross Alpha/Beta	Gross Alpha	-1.089E-15	7.783E-15	1.126E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210468	P6WH LOADOUT	03/14/19	Gross Alpha/Beta	Gross Beta	8.542E-15	1.545E-14	2.458E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210469	P6WH LOADOUT	03/14/19	Gross Alpha/Beta	Gross Alpha	9.9E-17	8.137E-15	1.126E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210469	P6WH LOADOUT	03/14/19	Gross Alpha/Beta	Gross Beta	1.16E-14	1.576E-14	2.458E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210470	P6WH LOADOUT	03/18/19	Gross Alpha/Beta	Gross Alpha	2.442E-15	8.689E-15	1.112E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210470	P6WH LOADOUT	03/18/19	Gross Alpha/Beta	Gross Beta	1.598E-14	1.6E-14	2.426E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210471	P6WH LOADOUT	03/18/19	Gross Alpha/Beta	Gross Alpha	-1.025E-15	7.327E-15	1.06E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210471	P6WH LOADOUT	03/18/19	Gross Alpha/Beta	Gross Beta	2.028E-14	1.576E-14	2.314E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210472	P6WH LOADOUT	03/18/19	Gross Alpha/Beta	Gross Alpha	1E-16	8.247E-15	1.142E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210472	P6WH LOADOUT	03/18/19	Gross Alpha/Beta	Gross Beta	2.184E-14	1.697E-14	2.491E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210473	P6WH LOADOUT	03/19/19	Gross Alpha/Beta	Gross Alpha	1.206E-15	7.947E-15	1.056E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210473	P6WH LOADOUT	03/19/19	Gross Alpha/Beta	Gross Beta	2.092E-14	1.577E-14	2.304E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210474	P6WH LOADOUT	03/19/19	Gross Alpha/Beta	Gross Beta	2.804E-14	1.757E-14	2.491E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210474	P6WH LOADOUT	03/19/19	Gross Alpha/Beta	Gross Alpha	2.508E-15	8.924E-15	1.142E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210475	P6WH LOADOUT	03/19/19	Gross Alpha/Beta	Gross Beta	3.197E-14	1.762E-14	2.436E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210475	P6WH LOADOUT	03/19/19	Gross Alpha/Beta	Gross Alpha	-1.079E-15	7.714E-15	1.117E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210476	P6WH LOADOUT	03/20/19	Gross Alpha/Beta	Gross Alpha	-1.104E-15	7.888E-15	1.142E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210476	P6WH LOADOUT	03/20/19	Gross Alpha/Beta	Gross Beta	-8.399E-15	1.386E-14	2.491E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210477	P6WH LOADOUT	03/20/19	Gross Alpha/Beta	Gross Alpha	3.419E-15	8.516E-15	1.052E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210477	P6WH LOADOUT	03/20/19	Gross Alpha/Beta	Gross Beta	1.369E-14	1.5E-14	2.295E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210478	P6WH LOADOUT	03/20/19	Gross Alpha/Beta	Gross Beta	3.967E-14	1.867E-14	2.491E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210478	P6WH LOADOUT	03/20/19	Gross Alpha/Beta	Gross Alpha	9.731E-15	1.072E-14	1.142E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210479	P6WH LOADOUT	03/21/19	Gross Alpha/Beta	Gross Beta	3.235E-14	1.818E-14	2.525E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210479	P6WH LOADOUT	03/21/19	Gross Alpha/Beta	Gross Alpha	-2.339E-15	7.616E-15	1.157E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210480	P6WH LOADOUT	03/21/19	Gross Alpha/Beta	Gross Beta	2.217E-14	1.382E-14	1.659E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210480	P6WH LOADOUT	03/21/19	Gross Alpha/Beta	Gross Alpha	8.09E-16	4.428E-15	8.459E-15	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210480	P6WH LOADOUT	03/21/19	Gross Alpha/Beta	Gross Beta	2.692E-14	1.432E-14	1.659E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210480	P6WH LOADOUT	03/21/19	Gross Alpha/Beta	Gross Alpha	4.045E-15	5.8E-15	8.459E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210481	P6WH LOADOUT	03/21/19	Gross Alpha/Beta	Gross Beta	2.094E-14	1.457E-14	1.786E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210481	P6WH LOADOUT	03/21/19	Gross Alpha/Beta	Gross Alpha	2.032E-15	5.304E-15	9.106E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210482	P6WH LOADOUT	03/25/19	Gross Alpha/Beta	Gross Beta	2.617E-14	1.518E-14	1.794E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210482	P6WH LOADOUT	03/25/19	Gross Alpha/Beta	Gross Alpha	8.75E-16	4.789E-15	9.148E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210483	P6WH LOADOUT	03/25/19	Gross Alpha/Beta	Gross Beta	2.467E-14	1.399E-14	1.646E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210483	P6WH LOADOUT	03/25/19	Gross Alpha/Beta	Gross Alpha	4.011E-15	5.752E-15	8.388E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210484	P6WH LOADOUT	03/25/19	Gross Alpha/Beta	Gross Beta	2.021E-14	1.449E-14	1.786E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210484	P6WH LOADOUT	03/25/19	Gross Alpha/Beta	Gross Alpha	-1.451E-15	3.456E-15	9.106E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210485	P6WH LOADOUT	03/26/19	Gross Alpha/Beta	Gross Beta	2.039E-14	1.418E-14	1.739E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210485	P6WH LOADOUT	03/26/19	Gross Alpha/Beta	Gross Alpha	6.501E-15	6.878E-15	8.867E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210486	P6WH LOADOUT	03/26/19	Gross Alpha/Beta	Gross Alpha	3.898E-15	5.59E-15	8.152E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210486	P6WH LOADOUT	03/26/19	Gross Alpha/Beta	Gross Beta	4.359E-15	1.144E-14	1.599E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210487	P6WH LOADOUT	03/26/19	Gross Alpha/Beta	Gross Alpha	-2.85E-16	4.089E-15	8.945E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210487	P6WH LOADOUT	03/26/19	Gross Alpha/Beta	Gross Beta	9.089E-15	1.304E-14	1.755E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210488	P6WH LOADOUT	03/27/19	Gross Alpha/Beta	Gross Beta	2.187E-14	1.478E-14	1.803E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210488	P6WH LOADOUT	03/27/19	Gross Alpha/Beta	Gross Alpha	6.737E-15	7.128E-15	9.189E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210489	P6WH LOADOUT	03/27/19	Gross Alpha/Beta	Gross Alpha	2.929E-15	5.314E-15	8.354E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210489	P6WH LOADOUT	03/27/19	Gross Alpha/Beta	Gross Beta	6.478E-15	1.195E-14	1.639E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210490	P6WH LOADOUT	03/27/19	Gross Alpha/Beta	Gross Alpha	1.996E-15	5.21E-15	8.945E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD210490	P6WH LOADOUT	03/27/19	Gross Alpha/Beta	Gross Beta	1.555E-14	1.376E-14	1.755E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210491	P6WH LOADOUT	03/28/19	Gross Alpha/Beta	Gross Beta	2.21E-14	1.453E-14	1.763E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210491	P6WH LOADOUT	03/28/19	Gross Alpha/Beta	Gross Alpha	-2.86E-16	4.107E-15	8.985E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210492	P6WH LOADOUT	03/28/19	Gross Alpha/Beta	Gross Beta	3.207E-14	1.5E-14	1.68E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210492	P6WH LOADOUT	03/28/19	Gross Alpha/Beta	Gross Alpha	3.004E-15	5.449E-15	8.566E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210493	P6WH LOADOUT	03/28/19	Gross Alpha/Beta	Gross Alpha	9.936E-15	7.966E-15	8.906E-15	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210493	P6WH LOADOUT	03/28/19	Gross Alpha/Beta	Gross Beta	3.048E-14	1.53E-14	1.747E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210494	P6WH LOADOUT	04/01/19	Gross Alpha/Beta	Gross Beta	2.21E-14	1.453E-14	1.763E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210494	P6WH LOADOUT	04/01/19	Gross Alpha/Beta	Gross Alpha	-1.432E-15	3.41E-15	8.985E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210495	P6WH LOADOUT	04/01/19	Gross Alpha/Beta	Gross Beta	2.658E-14	1.414E-14	1.639E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210495	P6WH LOADOUT	04/01/19	Gross Alpha/Beta	Gross Alpha	1.864E-15	4.866E-15	8.354E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210496	P6WH LOADOUT	04/01/19	Gross Alpha/Beta	Gross Alpha	-2.94E-16	4.22E-15	9.231E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210496	P6WH LOADOUT	04/01/19	Gross Alpha/Beta	Gross Beta	1.753E-14	1.437E-14	1.811E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210497	P6WH LOADOUT	04/02/19	Gross Alpha/Beta	Gross Beta	2.259E-14	1.526E-14	1.862E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210497	P6WH LOADOUT	04/02/19	Gross Alpha/Beta	Gross Alpha	9.08E-16	4.968E-15	9.491E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210498	P6WH LOADOUT	04/02/19	Gross Alpha/Beta	Gross Beta	2.488E-14	1.477E-14	1.755E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210498	P6WH LOADOUT	04/02/19	Gross Alpha/Beta	Gross Alpha	-2.85E-16	4.089E-15	8.945E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210499	P6WH LOADOUT	04/02/19	Gross Alpha/Beta	Gross Alpha	8.83E-16	4.832E-15	9.231E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210499	P6WH LOADOUT	04/02/19	Gross Alpha/Beta	Gross Beta	1.234E-14	1.379E-14	1.811E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210525	P6WH LOADOUT	04/03/19	Gross Alpha/Beta	Gross Beta	2.19E-14	1.374E-14	1.716E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210525	P6WH LOADOUT	04/03/19	Gross Alpha/Beta	Gross Alpha	5.556E-15	8.179E-15	1.062E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210525	P6WH LOADOUT	04/03/19	Gross Alpha/Beta	Gross Alpha	4.444E-15	7.868E-15	1.062E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210525	P6WH LOADOUT	04/03/19	Gross Alpha/Beta	Gross Beta	1.491E-14	1.296E-14	1.716E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210526	P6WH LOADOUT	04/03/19	Gross Alpha/Beta	Gross Beta	2.425E-14	1.348E-14	1.638E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210526	P6WH LOADOUT	04/03/19	Gross Alpha/Beta	Gross Alpha	0	6.192E-15	1.014E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210527	P6WH LOADOUT	04/03/19	Gross Alpha/Beta	Gross Beta	3.21E-14	1.498E-14	1.738E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210527	P6WH LOADOUT	04/03/19	Gross Alpha/Beta	Gross Alpha	1.126E-15	6.946E-15	1.076E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210528	P6WH LOADOUT	04/04/19	Gross Alpha/Beta	Gross Beta	3.427E-14	1.547E-14	1.777E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210528	P6WH LOADOUT	04/04/19	Gross Alpha/Beta	Gross Alpha	1.151E-15	7.101E-15	1.1E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210529	P6WH LOADOUT	04/04/19	Gross Alpha/Beta	Gross Beta	3.96E-14	1.508E-14	1.638E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210529	P6WH LOADOUT	04/04/19	Gross Alpha/Beta	Gross Alpha	4.243E-15	7.512E-15	1.014E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210530	P6WH LOADOUT	04/04/19	Gross Alpha/Beta	Gross Beta	4.131E-14	1.593E-14	1.738E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210530	P6WH LOADOUT	04/04/19	Gross Alpha/Beta	Gross Alpha	6.754E-15	8.591E-15	1.076E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210531	P6WH LOADOUT	04/08/19	Gross Alpha/Beta	Gross Beta	2.773E-14	1.447E-14	1.731E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210531	P6WH LOADOUT	04/08/19	Gross Alpha/Beta	Gross Alpha	-1.121E-15	6.147E-15	1.071E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210532	P6WH LOADOUT	04/08/19	Gross Alpha/Beta	Gross Beta	2.329E-14	1.325E-14	1.618E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210532	P6WH LOADOUT	04/08/19	Gross Alpha/Beta	Gross Alpha	2.096E-15	6.799E-15	1.001E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210533	P6WH LOADOUT	04/08/19	Gross Alpha/Beta	Gross Beta	1.919E-14	1.349E-14	1.723E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210533	P6WH LOADOUT	04/08/19	Gross Alpha/Beta	Gross Alpha	2.232E-15	7.24E-15	1.066E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210534	P6WH LOADOUT	04/09/19	Gross Alpha/Beta	Gross Alpha	2.503E-15	8.119E-15	1.196E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210534	P6WH LOADOUT	04/09/19	Gross Alpha/Beta	Gross Beta	4.986E-15	1.322E-14	1.932E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210535	P6WH LOADOUT	04/09/19	Gross Alpha/Beta	Gross Beta	2.076E-14	1.338E-14	1.679E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210535	P6WH LOADOUT	04/09/19	Gross Alpha/Beta	Gross Alpha	-2.175E-15	5.556E-15	1.039E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210536	P6WH LOADOUT	04/09/19	Gross Alpha/Beta	Gross Alpha	1.222E-15	7.539E-15	1.167E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210536	P6WH LOADOUT	04/09/19	Gross Alpha/Beta	Gross Beta	1.793E-14	1.443E-14	1.886E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210537	P6WH LOADOUT	04/10/19	Gross Alpha/Beta	Gross Beta	1.89E-14	1.371E-14	1.761E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210537	P6WH LOADOUT	04/10/19	Gross Alpha/Beta	Gross Alpha	-1.141E-15	6.256E-15	1.09E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD210538	P6WH LOADOUT	04/10/19	Gross Alpha/Beta	Gross Alpha	2.113E-15	6.854E-15	1.009E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210538	P6WH LOADOUT	04/10/19	Gross Alpha/Beta	Gross Beta	1.351E-14	1.225E-14	1.631E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210539	P6WH LOADOUT	04/10/19	Gross Alpha/Beta	Gross Alpha	-2.232E-15	5.7E-15	1.066E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210539	P6WH LOADOUT	04/10/19	Gross Alpha/Beta	Gross Beta	1.568E-14	1.31E-14	1.723E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210540	P6WH LOADOUT	04/11/19	Gross Alpha/Beta	Gross Beta	2.786E-14	1.453E-14	1.738E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210540	P6WH LOADOUT	04/11/19	Gross Alpha/Beta	Gross Alpha	-1.126E-15	6.174E-15	1.076E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210541	P6WH LOADOUT	04/11/19	Gross Alpha/Beta	Gross Beta	3.008E-14	1.429E-14	1.665E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210541	P6WH LOADOUT	04/11/19	Gross Alpha/Beta	Gross Alpha	0	6.296E-15	1.031E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210542	P6WH LOADOUT	04/11/19	Gross Alpha/Beta	Gross Beta	3.024E-14	1.489E-14	1.753E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210542	P6WH LOADOUT	04/11/19	Gross Alpha/Beta	Gross Alpha	3.407E-15	7.712E-15	1.085E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210543	P6WH LOADOUT	04/15/19	Gross Alpha/Beta	Gross Alpha	-3.422E-15	5.364E-15	1.09E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210543	P6WH LOADOUT	04/15/19	Gross Alpha/Beta	Gross Beta	1.029E-14	1.273E-14	1.761E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210544	P6WH LOADOUT	04/15/19	Gross Alpha/Beta	Gross Alpha	-1.048E-15	5.747E-15	1.001E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210544	P6WH LOADOUT	04/15/19	Gross Alpha/Beta	Gross Beta	2.2E-16	1.058E-14	1.618E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210549	P6WH LOADOUT	04/15/19	Gross Alpha/Beta	Gross Beta	1.925E-14	1.272E-14	1.752E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210549	P6WH LOADOUT	04/15/19	Gross Alpha/Beta	Gross Alpha	-1.151E-15	3.544E-15	9.94E-15	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210549	P6WH LOADOUT	04/15/19	Gross Alpha/Beta	Gross Alpha	-1.151E-15	3.544E-15	9.94E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210549	P6WH LOADOUT	04/15/19	Gross Alpha/Beta	Gross Beta	9.11E-15	1.144E-14	1.752E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210550	P6WH LOADOUT	04/16/19	Gross Alpha/Beta	Gross Beta	2.318E-14	1.3E-14	1.722E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210550	P6WH LOADOUT	04/16/19	Gross Alpha/Beta	Gross Alpha	3.392E-15	5.712E-15	9.765E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210551	P6WH LOADOUT	04/16/19	Gross Alpha/Beta	Gross Beta	2.708E-14	1.282E-14	1.615E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210551	P6WH LOADOUT	04/16/19	Gross Alpha/Beta	Gross Alpha	2.122E-15	4.919E-15	9.162E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210552	P6WH LOADOUT	04/16/19	Gross Alpha/Beta	Gross Beta	1.908E-14	1.26E-14	1.737E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210552	P6WH LOADOUT	04/16/19	Gross Alpha/Beta	Gross Alpha	0	4.188E-15	9.852E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210553	P6WH LOADOUT	04/17/19	Gross Alpha/Beta	Gross Beta	1.988E-14	1.275E-14	1.745E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210553	P6WH LOADOUT	04/17/19	Gross Alpha/Beta	Gross Alpha	-1.146E-15	3.529E-15	9.895E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210554	P6WH LOADOUT	04/17/19	Gross Alpha/Beta	Gross Beta	3.649E-14	1.371E-14	1.589E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210554	P6WH LOADOUT	04/17/19	Gross Alpha/Beta	Gross Alpha	3.131E-15	5.273E-15	9.014E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210555	P6WH LOADOUT	04/17/19	Gross Alpha/Beta	Gross Beta	2.006E-14	1.286E-14	1.76E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210555	P6WH LOADOUT	04/17/19	Gross Alpha/Beta	Gross Alpha	3.468E-15	5.84E-15	9.984E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210556	P6WH LOADOUT	04/18/19	Gross Alpha/Beta	Gross Alpha	-3.515E-15	1.446E-15	1.012E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210556	P6WH LOADOUT	04/18/19	Gross Alpha/Beta	Gross Beta	1.075E-14	1.184E-14	1.784E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210557	P6WH LOADOUT	04/18/19	Gross Alpha/Beta	Gross Alpha	2.122E-15	4.919E-15	9.162E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210557	P6WH LOADOUT	04/18/19	Gross Alpha/Beta	Gross Beta	1.174E-14	1.098E-14	1.615E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210558	P6WH LOADOUT	04/18/19	Gross Alpha/Beta	Gross Alpha	1.151E-15	4.812E-15	9.94E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210558	P6WH LOADOUT	04/18/19	Gross Alpha/Beta	Gross Beta	9.11E-15	1.144E-14	1.752E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210559	P6WH LOADOUT	04/22/19	Gross Alpha/Beta	Gross Alpha	-2.322E-15	2.723E-15	1.003E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210559	P6WH LOADOUT	04/22/19	Gross Alpha/Beta	Gross Beta	1.211E-14	1.192E-14	1.768E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210560	P6WH LOADOUT	04/22/19	Gross Alpha/Beta	Gross Beta	2.583E-14	1.296E-14	1.663E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210560	P6WH LOADOUT	04/22/19	Gross Alpha/Beta	Gross Alpha	2.185E-15	5.065E-15	9.434E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210561	P6WH LOADOUT	04/22/19	Gross Alpha/Beta	Gross Beta	2.599E-14	1.361E-14	1.768E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210561	P6WH LOADOUT	04/22/19	Gross Alpha/Beta	Gross Alpha	-2.322E-15	2.723E-15	1.003E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210562	P6WH LOADOUT	04/23/19	Gross Alpha/Beta	Gross Beta	2.391E-14	1.341E-14	1.776E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210562	P6WH LOADOUT	04/23/19	Gross Alpha/Beta	Gross Alpha	0	4.283E-15	1.007E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210563	P6WH LOADOUT	04/23/19	Gross Alpha/Beta	Gross Beta	1.923E-14	1.198E-14	1.629E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210563	P6WH LOADOUT	04/23/19	Gross Alpha/Beta	Gross Alpha	2.139E-15	4.96E-15	9.238E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210564	P6WH LOADOUT	04/23/19	Gross Alpha/Beta	Gross Beta	3.272E-14	1.443E-14	1.776E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD210564	P6WH LOADOUT	04/23/19	Gross Alpha/Beta	Gross Alpha	-2.333E-15	2.736E-15	1.007E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210565	P6WH LOADOUT	04/24/19	Gross Alpha/Beta	Gross Beta	2.672E-14	1.399E-14	1.817E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210565	P6WH LOADOUT	04/24/19	Gross Alpha/Beta	Gross Alpha	1.193E-15	4.99E-15	1.031E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210566	P6WH LOADOUT	04/24/19	Gross Alpha/Beta	Gross Alpha	-1.111E-15	3.422E-15	9.597E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210566	P6WH LOADOUT	04/24/19	Gross Alpha/Beta	Gross Beta	5.301E-15	1.058E-14	1.692E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210567	P6WH LOADOUT	04/24/19	Gross Alpha/Beta	Gross Beta	2.126E-14	1.324E-14	1.801E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210567	P6WH LOADOUT	04/24/19	Gross Alpha/Beta	Gross Alpha	3.547E-15	5.974E-15	1.021E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210568	P6WH LOADOUT	04/25/19	Gross Alpha/Beta	Gross Beta	2.395E-14	1.582E-14	2.181E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210568	P6WH LOADOUT	04/25/19	Gross Alpha/Beta	Gross Alpha	0	5.258E-15	1.237E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210585	P6WH LOADOUT	05/09/19	Gross Alpha/Beta	Gross Alpha	7.07E-15	6.871E-15	8.832E-15	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210585	P6WH LOADOUT	05/09/19	Gross Alpha/Beta	Gross Beta	1.18E-14	1.218E-14	1.663E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210585	P6WH LOADOUT	05/09/19	Gross Alpha/Beta	Gross Alpha	5.982E-15	6.512E-15	8.832E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210585	P6WH LOADOUT	05/09/19	Gross Alpha/Beta	Gross Beta	4.961E-15	1.136E-14	1.663E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210586	P6WH LOADOUT	04/25/19	Gross Alpha/Beta	Gross Alpha	-3.41E-16	4.159E-15	1.07E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210586	P6WH LOADOUT	04/25/19	Gross Alpha/Beta	Gross Beta	1.652E-14	1.376E-14	2.108E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210586	P6WH LOADOUT	04/25/19	Gross Alpha/Beta	Gross Beta	2.51E-14	1.485E-14	2.108E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210586	P6WH LOADOUT	04/25/19	Gross Alpha/Beta	Gross Alpha	2.387E-15	5.675E-15	1.07E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210587	P6WH LOADOUT	04/25/19	Gross Alpha/Beta	Gross Beta	2.606E-14	1.543E-14	2.189E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210587	P6WH LOADOUT	04/25/19	Gross Alpha/Beta	Gross Alpha	-3.54E-16	4.319E-15	1.111E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210588	P6WH LOADOUT	04/29/19	Gross Alpha/Beta	Gross Alpha	5.06E-15	5.776E-15	8.354E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210588	P6WH LOADOUT	04/29/19	Gross Alpha/Beta	Gross Beta	1.089E-14	1.049E-14	1.646E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210589	P6WH LOADOUT	04/29/19	Gross Alpha/Beta	Gross Alpha	2.069E-15	4.92E-15	9.273E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210589	P6WH LOADOUT	04/29/19	Gross Alpha/Beta	Gross Beta	1.655E-14	1.222E-14	1.827E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210590	P6WH LOADOUT	04/29/19	Gross Alpha/Beta	Gross Alpha	-2.89E-16	3.525E-15	9.066E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210590	P6WH LOADOUT	04/29/19	Gross Alpha/Beta	Gross Beta	1.327E-14	1.157E-14	1.787E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210591	P6WH LOADOUT	04/30/19	Gross Alpha/Beta	Gross Alpha	1.979E-15	4.704E-15	8.867E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210591	P6WH LOADOUT	04/30/19	Gross Alpha/Beta	Gross Beta	-4.801E-15	8.762E-15	1.747E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210592	P6WH LOADOUT	04/30/19	Gross Alpha/Beta	Gross Alpha	-2.079E-15	3.83E-15	1.304E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210592	P6WH LOADOUT	04/30/19	Gross Alpha/Beta	Gross Beta	1.386E-14	1.595E-14	2.57E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210593	P6WH LOADOUT	04/30/19	Gross Alpha/Beta	Gross Alpha	3.123E-15	5.245E-15	8.906E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210593	P6WH LOADOUT	04/30/19	Gross Alpha/Beta	Gross Beta	1.304E-14	1.137E-14	1.755E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210594	P6WH LOADOUT	05/01/19	Gross Alpha/Beta	Gross Alpha	-2.79E-16	3.402E-15	8.752E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210594	P6WH LOADOUT	05/01/19	Gross Alpha/Beta	Gross Beta	1.492E-14	1.144E-14	1.725E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210595	P6WH LOADOUT	05/01/19	Gross Alpha/Beta	Gross Alpha	4.977E-15	5.682E-15	8.218E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210595	P6WH LOADOUT	05/01/19	Gross Alpha/Beta	Gross Beta	1.203E-14	1.049E-14	1.619E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210596	P6WH LOADOUT	05/01/19	Gross Alpha/Beta	Gross Beta	2.733E-14	1.315E-14	1.755E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210596	P6WH LOADOUT	05/01/19	Gross Alpha/Beta	Gross Alpha	3.123E-15	5.245E-15	8.906E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210597	P6WH LOADOUT	05/02/19	Gross Alpha/Beta	Gross Beta	2.054E-14	1.215E-14	1.725E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210597	P6WH LOADOUT	05/02/19	Gross Alpha/Beta	Gross Alpha	8.37E-16	4.07E-15	8.752E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210598	P6WH LOADOUT	05/02/19	Gross Alpha/Beta	Gross Alpha	8.16E-16	3.966E-15	8.53E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210598	P6WH LOADOUT	05/02/19	Gross Alpha/Beta	Gross Beta	4.277E-15	9.766E-15	1.681E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210599	P6WH LOADOUT	05/02/19	Gross Alpha/Beta	Gross Beta	2.027E-14	1.269E-14	1.827E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210599	P6WH LOADOUT	05/02/19	Gross Alpha/Beta	Gross Alpha	-1.478E-15	2.723E-15	9.273E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210600	P6WH LOADOUT	05/06/19	Gross Alpha/Beta	Gross Alpha	2.041E-15	4.853E-15	9.148E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210600	P6WH LOADOUT	05/06/19	Gross Alpha/Beta	Gross Beta	-1.284E-15	9.611E-15	1.803E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210601	P6WH LOADOUT	05/06/19	Gross Alpha/Beta	Gross Beta	2.086E-14	1.172E-14	1.639E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210601	P6WH LOADOUT	05/06/19	Gross Alpha/Beta	Gross Alpha	-2.65E-16	3.234E-15	8.319E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD210602	P6WH LOADOUT	05/06/19	Gross Alpha/Beta	Gross Alpha	3.096E-15	5.199E-15	8.828E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210602	P6WH LOADOUT	05/06/19	Gross Alpha/Beta	Gross Beta	1.222E-14	1.117E-14	1.74E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210603	P6WH LOADOUT	05/07/19	Gross Alpha/Beta	Gross Beta	2.304E-14	1.263E-14	1.755E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210603	P6WH LOADOUT	05/07/19	Gross Alpha/Beta	Gross Alpha	8.52E-16	4.141E-15	8.906E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210604	P6WH LOADOUT	05/07/19	Gross Alpha/Beta	Gross Beta	2.82E-14	1.26E-14	1.639E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210604	P6WH LOADOUT	05/07/19	Gross Alpha/Beta	Gross Alpha	3.978E-15	5.342E-15	8.319E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210605	P6WH LOADOUT	05/07/19	Gross Alpha/Beta	Gross Beta	2.09E-14	1.237E-14	1.755E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210605	P6WH LOADOUT	05/07/19	Gross Alpha/Beta	Gross Alpha	8.52E-16	4.141E-15	8.906E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210606	P6WH LOADOUT	05/09/19	Gross Alpha/Beta	Gross Alpha	4.139E-15	6.23E-15	9.602E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210606	P6WH LOADOUT	05/09/19	Gross Alpha/Beta	Gross Beta	-2.046E-15	1.142E-14	1.807E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210607	P6WH LOADOUT	05/09/19	Gross Alpha/Beta	Gross Alpha	2.903E-15	5.657E-15	9.429E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210607	P6WH LOADOUT	05/09/19	Gross Alpha/Beta	Gross Beta	8.949E-15	1.257E-14	1.775E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210608	P6WH LOADOUT	05/13/19	Gross Alpha/Beta	Gross Alpha	2.778E-15	5.413E-15	9.023E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210608	P6WH LOADOUT	05/13/19	Gross Alpha/Beta	Gross Beta	1.346E-14	1.261E-14	1.698E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210609	P6WH LOADOUT	05/13/19	Gross Alpha/Beta	Gross Beta	2.276E-14	1.311E-14	1.615E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210609	P6WH LOADOUT	05/13/19	Gross Alpha/Beta	Gross Alpha	5.811E-15	6.325E-15	8.579E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210610	P6WH LOADOUT	05/13/19	Gross Alpha/Beta	Gross Alpha	6.164E-15	6.71E-15	9.101E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210610	P6WH LOADOUT	05/13/19	Gross Alpha/Beta	Gross Beta	1.146E-14	1.247E-14	1.713E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210611	P6WH LOADOUT	05/14/19	Gross Alpha/Beta	Gross Alpha	1.689E-15	4.998E-15	9.141E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210611	P6WH LOADOUT	05/14/19	Gross Alpha/Beta	Gross Beta	1.292E-14	1.269E-14	1.721E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210612	P6WH LOADOUT	05/28/19	Gross Alpha/Beta	Gross Beta	2.267E-14	1.306E-14	1.608E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210612	P6WH LOADOUT	05/28/19	Gross Alpha/Beta	Gross Alpha	6.839E-15	6.646E-15	8.544E-15	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210613	P6WH LOADOUT	05/14/19	Gross Alpha/Beta	Gross Alpha	1.689E-15	4.998E-15	9.141E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210613	P6WH LOADOUT	05/14/19	Gross Alpha/Beta	Gross Beta	1.08E-14	1.244E-14	1.721E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210614	P6WH LOADOUT	05/16/19	Gross Alpha/Beta	Gross Alpha	1.225E-14	8.746E-15	9.472E-15	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210614	P6WH LOADOUT	05/16/19	Gross Alpha/Beta	Gross Beta	3.687E-14	1.574E-14	1.783E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210615	P6WH LOADOUT	05/16/19	Gross Alpha/Beta	Gross Alpha	9.245E-15	7.539E-15	8.832E-15	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210615	P6WH LOADOUT	05/16/19	Gross Alpha/Beta	Gross Beta	3.644E-14	1.489E-14	1.663E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210616	P6WH LOADOUT	05/16/19	Gross Alpha/Beta	Gross Beta	5.165E-14	1.8E-14	1.894E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210616	P6WH LOADOUT	05/16/19	Gross Alpha/Beta	Gross Alpha	5.577E-15	6.989E-15	1.006E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210617	P6WH LOADOUT	05/20/19	Gross Alpha/Beta	Gross Alpha	5.202E-15	6.519E-15	9.387E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210617	P6WH LOADOUT	05/20/19	Gross Alpha/Beta	Gross Beta	3.818E-15	1.19E-14	1.767E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210618	P6WH LOADOUT	05/20/19	Gross Alpha/Beta	Gross Alpha	3.713E-15	5.589E-15	8.614E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210618	P6WH LOADOUT	05/20/19	Gross Alpha/Beta	Gross Beta	7.508E-15	1.141E-14	1.621E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210619	P6WH LOADOUT	05/20/19	Gross Alpha/Beta	Gross Alpha	4.01E-15	6.036E-15	9.303E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210619	P6WH LOADOUT	05/20/19	Gross Alpha/Beta	Gross Beta	8.829E-15	1.241E-14	1.751E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210620	P6WH LOADOUT	05/21/19	Gross Alpha/Beta	Gross Beta	2.548E-14	1.468E-14	1.807E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210620	P6WH LOADOUT	05/21/19	Gross Alpha/Beta	Gross Alpha	-5.91E-16	4.045E-15	9.602E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210621	P6WH LOADOUT	05/21/19	Gross Alpha/Beta	Gross Alpha	1.572E-15	4.653E-15	8.509E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210621	P6WH LOADOUT	05/21/19	Gross Alpha/Beta	Gross Beta	1.533E-14	1.219E-14	1.602E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210622	P6WH LOADOUT	05/21/19	Gross Alpha/Beta	Gross Beta	1.843E-14	1.323E-14	1.706E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210622	P6WH LOADOUT	05/21/19	Gross Alpha/Beta	Gross Alpha	-5.58E-16	3.818E-15	9.062E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210623	P6WH LOADOUT	05/22/19	Gross Alpha/Beta	Gross Beta	2.346E-14	1.456E-14	1.824E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210623	P6WH LOADOUT	05/22/19	Gross Alpha/Beta	Gross Alpha	2.984E-15	5.814E-15	9.691E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210624	P6WH LOADOUT	05/22/19	Gross Alpha/Beta	Gross Alpha	-5.26E-16	3.6E-15	8.544E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210624	P6WH LOADOUT	05/22/19	Gross Alpha/Beta	Gross Beta	1.076E-14	1.171E-14	1.608E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210629	P6WH LOADOUT	05/08/19	Gross Alpha/Beta	Gross Beta	3.444E-14	1.756E-14	2.424E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD210629	P6WH LOADOUT	05/08/19	Gross Alpha/Beta	Gross Alpha	3.311E-15	6.37E-15	1.069E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210629	P6WH LOADOUT	05/08/19	Gross Alpha/Beta	Gross Alpha	1.294E-14	9.365E-15	1.069E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210629	P6WH LOADOUT	05/08/19	Gross Alpha/Beta	Gross Beta	3.444E-14	1.756E-14	2.424E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210630	P6WH LOADOUT	05/08/19	Gross Alpha/Beta	Gross Beta	2.679E-14	1.608E-14	2.3E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210630	P6WH LOADOUT	05/08/19	Gross Alpha/Beta	Gross Alpha	3.141E-15	6.044E-15	1.014E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210631	P6WH LOADOUT	05/08/19	Gross Alpha/Beta	Gross Beta	3.015E-14	1.695E-14	2.392E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210631	P6WH LOADOUT	05/08/19	Gross Alpha/Beta	Gross Alpha	5.642E-15	7.134E-15	1.055E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210632	P6WH LOADOUT	05/15/19	Gross Alpha/Beta	Gross Alpha	3.224E-15	6.203E-15	1.041E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210632	P6WH LOADOUT	05/15/19	Gross Alpha/Beta	Gross Beta	1.843E-14	1.559E-14	2.361E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210633	P6WH LOADOUT	05/15/19	Gross Alpha/Beta	Gross Alpha	5.268E-15	6.66E-15	9.847E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210633	P6WH LOADOUT	05/15/19	Gross Alpha/Beta	Gross Beta	2.101E-14	1.511E-14	2.233E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210634	P6WH LOADOUT	05/15/19	Gross Alpha/Beta	Gross Alpha	8.91E-16	5.308E-15	1.055E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210634	P6WH LOADOUT	05/15/19	Gross Alpha/Beta	Gross Beta	1.944E-14	1.588E-14	2.392E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210635	P6WH LOADOUT	05/22/19	Gross Alpha/Beta	Gross Alpha	4.377E-15	6.605E-15	1.036E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210635	P6WH LOADOUT	05/22/19	Gross Alpha/Beta	Gross Beta	1.986E-14	1.567E-14	2.35E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210636	P6WH LOADOUT	05/23/19	Gross Alpha/Beta	Gross Beta	3.221E-14	1.774E-14	2.492E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210636	P6WH LOADOUT	05/23/19	Gross Alpha/Beta	Gross Alpha	5.877E-15	7.431E-15	1.099E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210637	P6WH LOADOUT	05/23/19	Gross Alpha/Beta	Gross Alpha	1.068E-14	8.227E-15	9.726E-15	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210637	P6WH LOADOUT	05/23/19	Gross Alpha/Beta	Gross Beta	1.863E-14	1.471E-14	2.206E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210638	P6WH LOADOUT	05/23/19	Gross Alpha/Beta	Gross Alpha	7.912E-15	7.791E-15	1.041E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210638	P6WH LOADOUT	05/23/19	Gross Alpha/Beta	Gross Beta	1.164E-14	1.488E-14	2.361E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210639	P6WH LOADOUT	05/28/19	Gross Alpha/Beta	Gross Beta	2.913E-14	1.673E-14	2.371E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210639	P6WH LOADOUT	05/28/19	Gross Alpha/Beta	Gross Alpha	9.125E-15	8.178E-15	1.045E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210640	P6WH LOADOUT	05/28/19	Gross Alpha/Beta	Gross Alpha	5.52E-15	6.979E-15	1.032E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210640	P6WH LOADOUT	05/28/19	Gross Alpha/Beta	Gross Beta	1.528E-14	1.514E-14	2.34E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210641	P6WH LOADOUT	05/28/19	Gross Alpha/Beta	Gross Beta	2.679E-14	1.608E-14	2.3E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210641	P6WH LOADOUT	05/28/19	Gross Alpha/Beta	Gross Alpha	8.852E-15	7.933E-15	1.014E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210642	P6WH LOADOUT	05/29/19	Gross Alpha/Beta	Gross Beta	3.552E-14	1.997E-14	2.818E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210642	P6WH LOADOUT	05/29/19	Gross Alpha/Beta	Gross Alpha	-3.5E-16	5.591E-15	1.243E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210643	P6WH LOADOUT	05/29/19	Gross Alpha/Beta	Gross Alpha	2.304E-15	6.447E-15	1.169E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210643	P6WH LOADOUT	05/29/19	Gross Alpha/Beta	Gross Beta	2.24E-14	1.768E-14	2.651E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210644	P6WH LOADOUT	05/29/19	Gross Alpha/Beta	Gross Alpha	-1.687E-15	4.67E-15	1.199E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210644	P6WH LOADOUT	05/29/19	Gross Alpha/Beta	Gross Beta	2.383E-14	1.822E-14	2.718E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210645	P6WH LOADOUT	05/30/19	Gross Alpha/Beta	Gross Alpha	9.19E-16	5.478E-15	1.089E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210645	P6WH LOADOUT	05/30/19	Gross Alpha/Beta	Gross Beta	1.217E-14	1.557E-14	2.469E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210646	P6WH LOADOUT	05/30/19	Gross Alpha/Beta	Gross Alpha	6.8E-15	7.49E-15	1.05E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210646	P6WH LOADOUT	05/30/19	Gross Alpha/Beta	Gross Beta	1.631E-14	1.549E-14	2.382E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210647	P6WH LOADOUT	05/30/19	Gross Alpha/Beta	Gross Alpha	-3E-16	4.788E-15	1.064E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210647	P6WH LOADOUT	05/30/19	Gross Alpha/Beta	Gross Beta	1.19E-14	1.522E-14	2.414E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210648	P6WH LOADOUT	06/03/19	Gross Alpha/Beta	Gross Alpha	9.19E-16	5.478E-15	1.089E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210648	P6WH LOADOUT	06/03/19	Gross Alpha/Beta	Gross Beta	2.165E-14	1.655E-14	2.469E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210651	P6WH LOADOUT	06/03/19	Gross Alpha/Beta	Gross Beta	2.51E-14	1.313E-14	1.645E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210651	P6WH LOADOUT	06/03/19	Gross Alpha/Beta	Gross Alpha	2.166E-15	6.58E-15	9.355E-15	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210651	P6WH LOADOUT	06/03/19	Gross Alpha/Beta	Gross Beta	2.714E-14	1.336E-14	1.645E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210651	P6WH LOADOUT	06/03/19	Gross Alpha/Beta	Gross Alpha	1.083E-15	6.212E-15	9.355E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210652	P6WH LOADOUT	06/03/19	Gross Alpha/Beta	Gross Alpha	-1.141E-15	5.691E-15	9.852E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210652	P6WH LOADOUT	06/03/19	Gross Alpha/Beta	Gross Beta	9.209E-15	1.178E-14	1.732E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD210653	P6WH LOADOUT	06/04/19	Gross Alpha/Beta	Gross Beta	2.472E-14	1.383E-14	1.763E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210653	P6WH LOADOUT	06/04/19	Gross Alpha/Beta	Gross Alpha	4.645E-15	7.786E-15	1.003E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210654	P6WH LOADOUT	06/04/19	Gross Alpha/Beta	Gross Beta	1.929E-14	1.264E-14	1.673E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210654	P6WH LOADOUT	06/04/19	Gross Alpha/Beta	Gross Alpha	2.203E-15	6.692E-15	9.515E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210655	P6WH LOADOUT	06/04/19	Gross Alpha/Beta	Gross Beta	3.897E-14	1.531E-14	1.747E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210655	P6WH LOADOUT	06/04/19	Gross Alpha/Beta	Gross Alpha	3.452E-15	7.362E-15	9.94E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210656	P6WH LOADOUT	06/05/19	Gross Alpha/Beta	Gross Alpha	1.569E-14	1.038E-14	9.68E-15	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210656	P6WH LOADOUT	06/05/19	Gross Alpha/Beta	Gross Beta	2.95E-14	1.399E-14	1.702E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210657	P6WH LOADOUT	06/05/19	Gross Alpha/Beta	Gross Beta	1.921E-14	1.259E-14	1.666E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210657	P6WH LOADOUT	06/05/19	Gross Alpha/Beta	Gross Alpha	0	5.896E-15	9.474E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210658	P6WH LOADOUT	06/05/19	Gross Alpha/Beta	Gross Beta	2.818E-14	1.361E-14	1.666E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210658	P6WH LOADOUT	06/05/19	Gross Alpha/Beta	Gross Alpha	2.194E-15	6.664E-15	9.474E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210659	P6WH LOADOUT	06/06/19	Gross Alpha/Beta	Gross Beta	3.175E-14	1.428E-14	1.709E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210659	P6WH LOADOUT	06/06/19	Gross Alpha/Beta	Gross Alpha	0	6.05E-15	9.722E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210660	P6WH LOADOUT	06/06/19	Gross Alpha/Beta	Gross Beta	3.121E-14	1.404E-14	1.68E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210660	P6WH LOADOUT	06/06/19	Gross Alpha/Beta	Gross Alpha	2.213E-15	6.721E-15	9.556E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210661	P6WH LOADOUT	06/06/19	Gross Alpha/Beta	Gross Beta	3.428E-14	1.446E-14	1.695E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210661	P6WH LOADOUT	06/06/19	Gross Alpha/Beta	Gross Alpha	1.116E-15	6.4E-15	9.638E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210662	P6WH LOADOUT	06/10/19	Gross Alpha/Beta	Gross Beta	1.896E-14	1.321E-14	1.771E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210662	P6WH LOADOUT	06/10/19	Gross Alpha/Beta	Gross Alpha	2.333E-15	7.086E-15	1.007E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210663	P6WH LOADOUT	06/10/19	Gross Alpha/Beta	Gross Alpha	4.296E-15	7.202E-15	9.277E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210663	P6WH LOADOUT	06/10/19	Gross Alpha/Beta	Gross Beta	1.07E-14	1.135E-14	1.631E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210664	P6WH LOADOUT	06/10/19	Gross Alpha/Beta	Gross Alpha	-1.146E-15	5.716E-15	9.895E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210664	P6WH LOADOUT	06/10/19	Gross Alpha/Beta	Gross Beta	1.285E-14	1.228E-14	1.74E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210665	P6WH LOADOUT	06/11/19	Gross Alpha/Beta	Gross Beta	2.06E-14	1.311E-14	1.724E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210665	P6WH LOADOUT	06/11/19	Gross Alpha/Beta	Gross Alpha	0	6.104E-15	9.808E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210666	P6WH LOADOUT	06/11/19	Gross Alpha/Beta	Gross Beta	2.191E-14	1.256E-14	1.611E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210666	P6WH LOADOUT	06/11/19	Gross Alpha/Beta	Gross Alpha	6.365E-15	7.727E-15	9.162E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210667	P6WH LOADOUT	06/11/19	Gross Alpha/Beta	Gross Beta	2.522E-14	1.379E-14	1.747E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD210667	P6WH LOADOUT	06/11/19	Gross Alpha/Beta	Gross Alpha	4.603E-15	7.717E-15	9.94E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212222	P6WH LOADOUT	06/12/19	Gross Alpha/Beta	Gross Alpha	-1.172E-15	5.846E-15	1.012E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212222	P6WH LOADOUT	06/12/19	Gross Alpha/Beta	Gross Beta	1.757E-14	1.31E-14	1.779E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212223	P6WH LOADOUT	06/12/19	Gross Alpha/Beta	Gross Beta	2.082E-14	1.223E-14	1.578E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212223	P6WH LOADOUT	06/12/19	Gross Alpha/Beta	Gross Alpha	2.079E-15	6.315E-15	8.978E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212224	P6WH LOADOUT	06/12/19	Gross Alpha/Beta	Gross Beta	2.821E-14	1.389E-14	1.709E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212224	P6WH LOADOUT	06/12/19	Gross Alpha/Beta	Gross Alpha	4.503E-15	7.548E-15	9.722E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212232	P6WH LOADOUT	06/10/19	Gross Alpha/Beta	Gross Beta	2.147E-14	3.068E-14	2.025E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212232	P6WH LOADOUT	06/10/19	Gross Alpha/Beta	Gross Alpha	1.714E-15	6.348E-15	1.133E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212232	P6WH LOADOUT	06/10/19	Gross Alpha/Beta	Gross Beta	3.402E-14	3.151E-14	2.025E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212232	P6WH LOADOUT	06/10/19	Gross Alpha/Beta	Gross Alpha	3.248E-15	7.053E-15	1.133E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212233	P6WH LOADOUT	06/11/19	Gross Alpha/Beta	Gross Beta	3.304E-14	2.385E-14	1.499E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212233	P6WH LOADOUT	06/11/19	Gross Alpha/Beta	Gross Alpha	3.539E-15	5.695E-15	8.382E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212234	P6WH LOADOUT	06/13/19	Gross Alpha/Beta	Gross Beta	2.071E-14	2.838E-14	1.869E-14	µCi/mL	UJ	T02	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212234	P6WH LOADOUT	06/13/19	Gross Alpha/Beta	Gross Alpha	1.582E-15	5.86E-15	1.045E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212235	P6WH LOADOUT	06/18/19	Gross Alpha/Beta	Gross Beta	3.58E-14	2.534E-14	1.59E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212235	P6WH LOADOUT	06/18/19	Gross Alpha/Beta	Gross Alpha	4.959E-15	6.508E-15	8.891E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212236	P6WH LOADOUT	06/19/19	Gross Alpha/Beta	Gross Beta	2.636E-14	2.379E-14	1.525E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD212236	P6WH LOADOUT	06/19/19	Gross Alpha/Beta	Gross Alpha	8.227E-15	7.433E-15	8.532E-15	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212237	P6WH LOADOUT	06/13/19	Gross Alpha/Beta	Gross Beta	3.089E-14	2.37E-14	1.499E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212237	P6WH LOADOUT	06/13/19	Gross Alpha/Beta	Gross Alpha	5.81E-15	6.546E-15	8.382E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212238	P6WH LOADOUT	06/13/19	Gross Alpha/Beta	Gross Beta	2.389E-14	2.156E-14	1.383E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212238	P6WH LOADOUT	06/13/19	Gross Alpha/Beta	Gross Alpha	-9.26E-16	3.163E-15	7.735E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212239	P6WH LOADOUT	06/13/19	Gross Alpha/Beta	Gross Beta	3.247E-14	2.343E-14	1.473E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212239	P6WH LOADOUT	06/13/19	Gross Alpha/Beta	Gross Alpha	3.478E-15	5.597E-15	8.237E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212240	P6WH LOADOUT	06/17/19	Gross Alpha/Beta	Gross Beta	2.48E-14	3.398E-14	2.238E-14	µCi/mL	UJ	T02	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212240	P6WH LOADOUT	06/17/19	Gross Alpha/Beta	Gross Alpha	5.286E-15	8.506E-15	1.252E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212241	P6WH LOADOUT	06/17/19	Gross Alpha/Beta	Gross Alpha	2.469E-15	5.362E-15	8.61E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212241	P6WH LOADOUT	06/17/19	Gross Alpha/Beta	Gross Beta	1.412E-14	2.318E-14	1.539E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212242	P6WH LOADOUT	06/17/19	Gross Alpha/Beta	Gross Beta	3.137E-14	3.574E-14	2.33E-14	µCi/mL	UJ	T02	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212242	P6WH LOADOUT	06/17/19	Gross Alpha/Beta	Gross Alpha	1.972E-15	7.304E-15	1.303E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212243	P6WH LOADOUT	06/18/19	Gross Alpha/Beta	Gross Beta	2.777E-14	2.276E-14	1.447E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212243	P6WH LOADOUT	06/18/19	Gross Alpha/Beta	Gross Alpha	4.516E-15	5.926E-15	8.097E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212244	P6WH LOADOUT	06/18/19	Gross Alpha/Beta	Gross Beta	2.531E-14	2.174E-14	1.388E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212244	P6WH LOADOUT	06/18/19	Gross Alpha/Beta	Gross Alpha	3.279E-15	5.277E-15	7.766E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212245	P6WH LOADOUT	06/18/19	Gross Alpha/Beta	Gross Beta	2.908E-14	2.33E-14	1.479E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212245	P6WH LOADOUT	06/18/19	Gross Alpha/Beta	Gross Alpha	3.493E-15	5.621E-15	8.273E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212246	P6WH LOADOUT	06/19/19	Gross Alpha/Beta	Gross Beta	3.015E-14	2.265E-14	1.429E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212246	P6WH LOADOUT	06/19/19	Gross Alpha/Beta	Gross Alpha	3.376E-15	5.432E-15	7.995E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212247	P6WH LOADOUT	06/19/19	Gross Alpha/Beta	Gross Beta	2.653E-14	2.174E-14	1.383E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212247	P6WH LOADOUT	06/19/19	Gross Alpha/Beta	Gross Alpha	4.314E-15	5.661E-15	7.735E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212248	P6WH LOADOUT	06/19/19	Gross Alpha/Beta	Gross Alpha	1.154E-14	8.35E-15	8.419E-15	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212248	P6WH LOADOUT	06/19/19	Gross Alpha/Beta	Gross Beta	3.462E-14	2.405E-14	1.505E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212249	P6WH LOADOUT	06/20/19	Gross Alpha/Beta	Gross Beta	2.94E-14	2.305E-14	1.46E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212249	P6WH LOADOUT	06/20/19	Gross Alpha/Beta	Gross Alpha	2.342E-15	5.086E-15	8.166E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212250	P6WH LOADOUT	06/20/19	Gross Alpha/Beta	Gross Beta	3.524E-14	2.24E-14	1.388E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212250	P6WH LOADOUT	06/20/19	Gross Alpha/Beta	Gross Alpha	3.279E-15	5.277E-15	7.766E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212251	P6WH LOADOUT	06/20/19	Gross Alpha/Beta	Gross Beta	3.878E-14	2.385E-14	1.473E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212251	P6WH LOADOUT	06/20/19	Gross Alpha/Beta	Gross Alpha	2.362E-15	5.13E-15	8.237E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212257	P6WH LOADOUT	06/24/19	Gross Alpha/Beta	Gross Beta	3.828E-14	4.698E-14	2.173E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212257	P6WH LOADOUT	06/24/19	Gross Alpha/Beta	Gross Alpha	1.121E-15	7.751E-15	9.975E-15	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212257	P6WH LOADOUT	06/24/19	Gross Alpha/Beta	Gross Beta	4.273E-14	4.714E-14	2.173E-14	µCi/mL	UJ	T02	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212257	P6WH LOADOUT	06/24/19	Gross Alpha/Beta	Gross Alpha	4.577E-15	8.723E-15	9.975E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212258	P6WH LOADOUT	06/24/19	Gross Alpha/Beta	Gross Beta	2.553E-14	4.502E-14	2.101E-14	µCi/mL	UJ	T02	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212258	P6WH LOADOUT	06/24/19	Gross Alpha/Beta	Gross Alpha	-3.371E-15	6.028E-15	9.642E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212259	P6WH LOADOUT	06/24/19	Gross Alpha/Beta	Gross Beta	3.383E-14	4.683E-14	2.173E-14	µCi/mL	UJ	T02	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212259	P6WH LOADOUT	06/24/19	Gross Alpha/Beta	Gross Alpha	6.881E-15	9.318E-15	9.975E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212260	P6WH LOADOUT	06/25/19	Gross Alpha/Beta	Gross Beta	4.041E-14	4.869E-14	2.251E-14	µCi/mL	UJ	T02	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212260	P6WH LOADOUT	06/25/19	Gross Alpha/Beta	Gross Alpha	2.354E-15	8.376E-15	1.033E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212261	P6WH LOADOUT	06/25/19	Gross Alpha/Beta	Gross Beta	2.696E-14	4.507E-14	2.101E-14	µCi/mL	UJ	T02	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212261	P6WH LOADOUT	06/25/19	Gross Alpha/Beta	Gross Alpha	5.538E-15	8.724E-15	9.642E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212262	P6WH LOADOUT	06/25/19	Gross Alpha/Beta	Gross Beta	3.551E-14	4.916E-14	2.282E-14	µCi/mL	UJ	T02	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212262	P6WH LOADOUT	06/25/19	Gross Alpha/Beta	Gross Alpha	4.804E-15	9.157E-15	1.047E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212263	P6WH LOADOUT	06/26/19	Gross Alpha/Beta	Gross Beta	2.23E-14	1.782E-14	8.107E-15	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212263	P6WH LOADOUT	06/26/19	Gross Alpha/Beta	Gross Alpha	2.137E-15	3.366E-15	3.72E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD212264	P6WH LOADOUT	06/26/19	Gross Alpha/Beta	Gross Beta	3.429E-14	4.131E-14	1.91E-14	µCi/mL	UJ	T02	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212264	P6WH LOADOUT	06/26/19	Gross Alpha/Beta	Gross Alpha	4.022E-15	7.666E-15	8.766E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212265	P6WH LOADOUT	06/26/19	Gross Alpha/Beta	Gross Alpha	3.813E-15	3.744E-15	3.679E-15	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212265	P6WH LOADOUT	06/26/19	Gross Alpha/Beta	Gross Beta	2.671E-14	1.779E-14	8.016E-15	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212266	P6WH LOADOUT	06/27/19	Gross Alpha/Beta	Gross Beta	2.787E-14	4.783E-14	2.231E-14	µCi/mL	UJ	T02	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212266	P6WH LOADOUT	06/27/19	Gross Alpha/Beta	Gross Alpha	8.246E-15	9.858E-15	1.024E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212267	P6WH LOADOUT	06/27/19	Gross Alpha/Beta	Gross Beta	4.2E-14	4.634E-14	2.137E-14	µCi/mL	UJ	T02	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212267	P6WH LOADOUT	06/27/19	Gross Alpha/Beta	Gross Alpha	3.367E-15	8.268E-15	9.806E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212268	P6WH LOADOUT	06/27/19	Gross Alpha/Beta	Gross Beta	3.168E-14	4.796E-14	2.231E-14	µCi/mL	UJ	T02	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212268	P6WH LOADOUT	06/27/19	Gross Alpha/Beta	Gross Alpha	3.516E-15	8.634E-15	1.024E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212269	P6WH LOADOUT	07/01/19	Gross Alpha/Beta	Gross Beta	5.089E-14	4.744E-14	2.173E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212269	P6WH LOADOUT	07/01/19	Gross Alpha/Beta	Gross Alpha	-1.183E-15	7.032E-15	9.975E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212270	P6WH LOADOUT	07/01/19	Gross Alpha/Beta	Gross Beta	4.97E-14	4.569E-14	2.092E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212270	P6WH LOADOUT	07/01/19	Gross Alpha/Beta	Gross Alpha	4.406E-15	8.397E-15	9.602E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212271	P6WH LOADOUT	07/01/19	Gross Alpha/Beta	Gross Beta	5.089E-14	4.744E-14	2.173E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212271	P6WH LOADOUT	07/01/19	Gross Alpha/Beta	Gross Alpha	4.577E-15	8.723E-15	9.975E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212272	P6WH LOADOUT	07/02/19	Gross Alpha/Beta	Gross Beta	3.895E-14	4.781E-14	2.212E-14	µCi/mL	UJ	T02	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212272	P6WH LOADOUT	07/02/19	Gross Alpha/Beta	Gross Alpha	1.14E-15	7.887E-15	1.015E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212273	P6WH LOADOUT	07/02/19	Gross Alpha/Beta	Gross Beta	5.634E-14	4.725E-14	2.155E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212273	P6WH LOADOUT	07/02/19	Gross Alpha/Beta	Gross Alpha	-3.1E-17	7.337E-15	9.889E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212274	P6WH LOADOUT	07/02/19	Gross Alpha/Beta	Gross Alpha	1.121E-15	7.751E-15	9.975E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212274	P6WH LOADOUT	07/02/19	Gross Alpha/Beta	Gross Beta	4.893E-15	4.584E-14	2.173E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212275	P6WH LOADOUT	07/03/19	Gross Alpha/Beta	Gross Beta	3.192E-14	1.81E-14	2.542E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212275	P6WH LOADOUT	07/03/19	Gross Alpha/Beta	Gross Alpha	3.14E-16	5.351E-15	1.172E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212275	P6WH LOADOUT	07/03/19	Gross Alpha/Beta	Gross Alpha	4.078E-15	6.899E-15	1.172E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212275	P6WH LOADOUT	07/03/19	Gross Alpha/Beta	Gross Beta	2.384E-14	1.73E-14	2.542E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212276	P6WH LOADOUT	07/03/19	Gross Alpha/Beta	Gross Alpha	7.263E-15	7.564E-15	1.085E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212276	P6WH LOADOUT	07/03/19	Gross Alpha/Beta	Gross Beta	1.384E-14	1.519E-14	2.354E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212277	P6WH LOADOUT	07/03/19	Gross Alpha/Beta	Gross Beta	3.177E-14	1.801E-14	2.53E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212277	P6WH LOADOUT	07/03/19	Gross Alpha/Beta	Gross Alpha	7.806E-15	8.129E-15	1.166E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212278	P6WH LOADOUT	07/08/19	Gross Alpha/Beta	Gross Alpha	3.826E-15	6.474E-15	1.099E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212278	P6WH LOADOUT	07/08/19	Gross Alpha/Beta	Gross Beta	2.009E-14	1.6E-14	2.385E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212279	P6WH LOADOUT	07/08/19	Gross Alpha/Beta	Gross Alpha	8.963E-15	7.721E-15	1.014E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212279	P6WH LOADOUT	07/08/19	Gross Alpha/Beta	Gross Beta	1.574E-14	1.448E-14	2.201E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212280	P6WH LOADOUT	07/08/19	Gross Alpha/Beta	Gross Alpha	5.026E-15	6.923E-15	1.104E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212280	P6WH LOADOUT	07/08/19	Gross Alpha/Beta	Gross Beta	2.247E-14	1.63E-14	2.396E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212281	P6WH LOADOUT	07/09/19	Gross Alpha/Beta	Gross Beta	3.998E-14	1.801E-14	2.396E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212281	P6WH LOADOUT	07/09/19	Gross Alpha/Beta	Gross Alpha	3.843E-15	6.503E-15	1.104E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212282	P6WH LOADOUT	07/09/19	Gross Alpha/Beta	Gross Beta	2.904E-14	1.613E-14	2.256E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212282	P6WH LOADOUT	07/09/19	Gross Alpha/Beta	Gross Alpha	4.733E-15	6.519E-15	1.04E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212283	P6WH LOADOUT	07/09/19	Gross Alpha/Beta	Gross Beta	4.148E-14	1.841E-14	2.439E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212283	P6WH LOADOUT	07/09/19	Gross Alpha/Beta	Gross Alpha	3.913E-15	6.62E-15	1.124E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212284	P6WH LOADOUT	07/10/19	Gross Alpha/Beta	Gross Beta	3.079E-14	1.676E-14	2.334E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212284	P6WH LOADOUT	07/10/19	Gross Alpha/Beta	Gross Alpha	-2.016E-15	3.679E-15	1.076E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212285	P6WH LOADOUT	07/10/19	Gross Alpha/Beta	Gross Beta	3.463E-14	1.635E-14	2.201E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212285	P6WH LOADOUT	07/10/19	Gross Alpha/Beta	Gross Alpha	5.704E-15	6.725E-15	1.014E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212286	P6WH LOADOUT	07/10/19	Gross Alpha/Beta	Gross Beta	3.586E-14	1.749E-14	2.375E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD212286	P6WH LOADOUT	07/10/19	Gross Alpha/Beta	Gross Alpha	1.084E-14	8.661E-15	1.095E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212287	P6WH LOADOUT	07/11/19	Gross Alpha/Beta	Gross Alpha	5.14E-15	7.08E-15	1.129E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212287	P6WH LOADOUT	07/11/19	Gross Alpha/Beta	Gross Beta	1.908E-14	1.628E-14	2.45E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212288	P6WH LOADOUT	07/11/19	Gross Alpha/Beta	Gross Alpha	1.375E-15	5.181E-15	1.027E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212288	P6WH LOADOUT	07/11/19	Gross Alpha/Beta	Gross Beta	5.312E-15	1.356E-14	2.228E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212289	P6WH LOADOUT	07/11/19	Gross Alpha/Beta	Gross Alpha	5.995E-15	5.378E-15	3.244E-15	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212289	P6WH LOADOUT	07/11/19	Gross Alpha/Beta	Gross Beta	5.054E-14	1.284E-14	2.041E-15	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212289	P6WH LOADOUT	07/11/19	Gross Alpha/Beta	Gross Alpha	1.199E-14	7.628E-15	3.244E-15	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212289	P6WH LOADOUT	07/11/19	Gross Alpha/Beta	Gross Beta	5.582E-14	1.355E-14	2.041E-15	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212290	P6WH LOADOUT	07/15/19	Gross Alpha/Beta	Gross Alpha	6.257E-15	5.613E-15	3.386E-15	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212290	P6WH LOADOUT	07/15/19	Gross Alpha/Beta	Gross Beta	4.881E-14	1.286E-14	2.13E-15	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212291	P6WH LOADOUT	07/15/19	Gross Alpha/Beta	Gross Alpha	6.874E-15	5.632E-15	3.1E-15	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212291	P6WH LOADOUT	07/15/19	Gross Alpha/Beta	Gross Beta	4.829E-14	1.227E-14	1.95E-15	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212292	P6WH LOADOUT	07/15/19	Gross Alpha/Beta	Gross Beta	5.202E-14	1.313E-14	2.07E-15	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212292	P6WH LOADOUT	07/15/19	Gross Alpha/Beta	Gross Alpha	1.216E-15	2.433E-15	3.29E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212293	P6WH LOADOUT	07/16/19	Gross Alpha/Beta	Gross Beta	3.334E-14	1.032E-14	2.051E-15	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212293	P6WH LOADOUT	07/16/19	Gross Alpha/Beta	Gross Alpha	1.205E-15	2.411E-15	3.26E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212294	P6WH LOADOUT	07/16/19	Gross Alpha/Beta	Gross Beta	2.826E-14	8.942E-15	1.821E-15	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212294	P6WH LOADOUT	07/16/19	Gross Alpha/Beta	Gross Alpha	1.07E-15	2.14E-15	2.894E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212295	P6WH LOADOUT	07/16/19	Gross Alpha/Beta	Gross Alpha	8.277E-15	6.283E-15	3.2E-15	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212295	P6WH LOADOUT	07/16/19	Gross Alpha/Beta	Gross Beta	2.306E-14	8.439E-15	2.013E-15	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212296	P6WH LOADOUT	07/17/19	Gross Alpha/Beta	Gross Alpha	-2.913E-15	3.038E-15	9.064E-15	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212296	P6WH LOADOUT	07/17/19	Gross Alpha/Beta	Gross Beta	1.042E-14	1.261E-14	1.671E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212296	P6WH LOADOUT	07/17/19	Gross Alpha/Beta	Gross Alpha	1.456E-15	5.319E-15	9.064E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212296	P6WH LOADOUT	07/17/19	Gross Alpha/Beta	Gross Beta	1.18E-14	1.277E-14	1.671E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212297	P6WH LOADOUT	07/17/19	Gross Alpha/Beta	Gross Alpha	3.46E-16	4.614E-15	8.625E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212297	P6WH LOADOUT	07/17/19	Gross Alpha/Beta	Gross Beta	1.123E-14	1.215E-14	1.59E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212298	P6WH LOADOUT	07/17/19	Gross Alpha/Beta	Gross Alpha	6.004E-15	7.105E-15	9.341E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212298	P6WH LOADOUT	07/17/19	Gross Alpha/Beta	Gross Beta	9.324E-15	1.284E-14	1.722E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212299	P6WH LOADOUT	07/18/19	Gross Alpha/Beta	Gross Alpha	3.802E-15	6.428E-15	9.465E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212299	P6WH LOADOUT	07/18/19	Gross Alpha/Beta	Gross Beta	9.448E-15	1.301E-14	1.745E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212300	P6WH LOADOUT	07/18/19	Gross Alpha/Beta	Gross Beta	2.496E-14	1.364E-14	1.59E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212300	P6WH LOADOUT	07/18/19	Gross Alpha/Beta	Gross Alpha	3.465E-15	5.857E-15	8.625E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212301	P6WH LOADOUT	07/18/19	Gross Alpha/Beta	Gross Beta	2.146E-14	1.423E-14	1.73E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212301	P6WH LOADOUT	07/18/19	Gross Alpha/Beta	Gross Alpha	2.638E-15	5.954E-15	9.382E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212302	P6WH LOADOUT	07/22/19	Gross Alpha/Beta	Gross Alpha	2.906E-15	6.558E-15	1.033E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212302	P6WH LOADOUT	07/22/19	Gross Alpha/Beta	Gross Beta	1.032E-14	1.42E-14	1.905E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212303	P6WH LOADOUT	07/22/19	Gross Alpha/Beta	Gross Beta	3.388E-14	1.591E-14	1.785E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212303	P6WH LOADOUT	07/22/19	Gross Alpha/Beta	Gross Alpha	1.555E-15	5.68E-15	9.679E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212304	P6WH LOADOUT	07/22/19	Gross Alpha/Beta	Gross Beta	2.898E-14	1.618E-14	1.896E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212304	P6WH LOADOUT	07/22/19	Gross Alpha/Beta	Gross Alpha	2.892E-15	6.526E-15	1.028E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212305	P6WH LOADOUT	07/23/19	Gross Alpha/Beta	Gross Alpha	3.7E-16	4.932E-15	9.22E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212305	P6WH LOADOUT	07/23/19	Gross Alpha/Beta	Gross Beta	1.13E-14	1.291E-14	1.7E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212306	P6WH LOADOUT	07/23/19	Gross Alpha/Beta	Gross Beta	2.384E-14	1.361E-14	1.603E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212306	P6WH LOADOUT	07/23/19	Gross Alpha/Beta	Gross Alpha	4.541E-15	6.269E-15	8.695E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212307	P6WH LOADOUT	07/23/19	Gross Alpha/Beta	Gross Beta	2.109E-14	1.398E-14	1.7E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212307	P6WH LOADOUT	07/23/19	Gross Alpha/Beta	Gross Alpha	5.926E-15	7.013E-15	9.22E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD212308	P6WH LOADOUT	07/24/19	Gross Alpha/Beta	Gross Beta	2.165E-14	1.36E-14	1.636E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212308	P6WH LOADOUT	07/24/19	Gross Alpha/Beta	Gross Alpha	6.774E-15	7.086E-15	8.876E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212309	P6WH LOADOUT	07/24/19	Gross Alpha/Beta	Gross Beta	1.934E-14	1.282E-14	1.559E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212309	P6WH LOADOUT	07/24/19	Gross Alpha/Beta	Gross Alpha	1.359E-15	4.961E-15	8.455E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212310	P6WH LOADOUT	07/24/19	Gross Alpha/Beta	Gross Beta	2.318E-14	1.421E-14	1.7E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212310	P6WH LOADOUT	07/24/19	Gross Alpha/Beta	Gross Alpha	3.704E-15	6.261E-15	9.22E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212311	P6WH LOADOUT	07/25/19	Gross Alpha/Beta	Gross Beta	2.236E-14	1.443E-14	1.745E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212311	P6WH LOADOUT	07/25/19	Gross Alpha/Beta	Gross Alpha	3.802E-15	6.428E-15	9.465E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212312	P6WH LOADOUT	07/25/19	Gross Alpha/Beta	Gross Beta	1.813E-14	1.313E-14	1.623E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212312	P6WH LOADOUT	07/25/19	Gross Alpha/Beta	Gross Alpha	-7.07E-16	4.204E-15	8.803E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212313	P6WH LOADOUT	07/25/19	Gross Alpha/Beta	Gross Alpha	2.581E-15	5.826E-15	9.18E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212313	P6WH LOADOUT	07/25/19	Gross Alpha/Beta	Gross Beta	1.508E-15	1.172E-14	1.693E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212314	P6WH LOADOUT	07/29/19	Gross Alpha/Beta	Gross Alpha	3.79E-16	5.041E-15	9.423E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212314	P6WH LOADOUT	07/29/19	Gross Alpha/Beta	Gross Beta	8.692E-15	1.287E-14	1.737E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212315	P6WH LOADOUT	07/29/19	Gross Alpha/Beta	Gross Alpha	4.541E-15	6.269E-15	8.695E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212315	P6WH LOADOUT	07/29/19	Gross Alpha/Beta	Gross Beta	1.198E-14	1.232E-14	1.603E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212329	P6WH LOADOUT	07/29/19	Gross Alpha/Beta	Gross Alpha	-5.81E-16	4.148E-15	1.059E-14	µCi/mL			Plant 6WH (General Area)-Perimeter Air
SLD212329	P6WH LOADOUT	07/29/19	Gross Alpha/Beta	Gross Beta	1.397E-14	1.66E-14	2.382E-14	µCi/mL			Plant 6WH (General Area)-Perimeter Air
SLD212329	P6WH LOADOUT	07/29/19	Gross Alpha/Beta	Gross Alpha	4.067E-15	6.236E-15	1.059E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD212329	P6WH LOADOUT	07/29/19	Gross Alpha/Beta	Gross Beta	1.547E-14	1.674E-14	2.382E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD212330	P6WH LOADOUT	07/30/19	Gross Alpha/Beta	Gross Alpha	2.943E-15	5.86E-15	1.073E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD212330	P6WH LOADOUT	07/30/19	Gross Alpha/Beta	Gross Beta	1.946E-14	1.732E-14	2.413E-14	µCi/mL	UJ	T04, T05	Plant 6WH (General Area)-Perimeter Air
SLD212331	P6WH LOADOUT	07/30/19	Gross Alpha/Beta	Gross Alpha	5.975E-15	6.598E-15	9.9E-15	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD212331	P6WH LOADOUT	07/30/19	Gross Alpha/Beta	Gross Beta	1.726E-14	1.592E-14	2.227E-14	µCi/mL	UJ	T04, T05	Plant 6WH (General Area)-Perimeter Air
SLD212332	P6WH LOADOUT	07/30/19	Gross Alpha/Beta	Gross Alpha	5.91E-16	4.839E-15	1.078E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD212332	P6WH LOADOUT	07/30/19	Gross Alpha/Beta	Gross Beta	1.879E-14	1.732E-14	2.424E-14	µCi/mL	UJ	T04, T05	Plant 6WH (General Area)-Perimeter Air
SLD212333	P6WH LOADOUT	07/31/19	Gross Alpha/Beta	Gross Alpha	4.233E-15	6.49E-15	1.102E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD212333	P6WH LOADOUT	07/31/19	Gross Alpha/Beta	Gross Beta	2.466E-14	1.822E-14	2.479E-14	µCi/mL	UJ	T04, T05	Plant 6WH (General Area)-Perimeter Air
SLD212334	P6WH LOADOUT	07/31/19	Gross Alpha/Beta	Gross Beta	3.055E-14	1.714E-14	2.227E-14	µCi/mL	J	T04, T20	Plant 6WH (General Area)-Perimeter Air
SLD212334	P6WH LOADOUT	07/31/19	Gross Alpha/Beta	Gross Alpha	2.716E-15	5.407E-15	9.9E-15	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD212335	P6WH LOADOUT	07/31/19	Gross Alpha/Beta	Gross Alpha	7.687E-15	7.567E-15	1.078E-14	µCi/mL	UJ	T04, T05	Plant 6WH (General Area)-Perimeter Air
SLD212335	P6WH LOADOUT	07/31/19	Gross Alpha/Beta	Gross Beta	2.031E-14	1.747E-14	2.424E-14	µCi/mL	UJ	T04, T05	Plant 6WH (General Area)-Perimeter Air
SLD212336	P6WH LOADOUT	08/01/19	Gross Alpha/Beta	Gross Alpha	5.492E-15	6.993E-15	1.112E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD212336	P6WH LOADOUT	08/01/19	Gross Alpha/Beta	Gross Beta	1.703E-14	1.766E-14	2.502E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD212337	P6WH LOADOUT	08/01/19	Gross Alpha/Beta	Gross Beta	3.113E-14	1.713E-14	2.218E-14	µCi/mL	J	T04, T20	Plant 6WH (General Area)-Perimeter Air
SLD212337	P6WH LOADOUT	08/01/19	Gross Alpha/Beta	Gross Alpha	2.705E-15	5.385E-15	9.86E-15	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD212338	P6WH LOADOUT	08/01/19	Gross Alpha/Beta	Gross Beta	3.097E-14	1.845E-14	2.424E-14	µCi/mL	J	T04, T20	Plant 6WH (General Area)-Perimeter Air
SLD212338	P6WH LOADOUT	08/01/19	Gross Alpha/Beta	Gross Alpha	1.774E-15	5.387E-15	1.078E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD212339	P6WH LOADOUT	08/05/19	Gross Alpha/Beta	Gross Alpha	9.323E-15	8.339E-15	1.133E-14	µCi/mL	UJ	T04, T05	Plant 6WH (General Area)-Perimeter Air
SLD212339	P6WH LOADOUT	08/05/19	Gross Alpha/Beta	Gross Beta	2.455E-14	1.866E-14	2.548E-14	µCi/mL	UJ	T04, T05	Plant 6WH (General Area)-Perimeter Air
SLD212340	P6WH LOADOUT	08/05/19	Gross Alpha/Beta	Gross Beta	3.503E-14	1.766E-14	2.245E-14	µCi/mL	J	T04, T20	Plant 6WH (General Area)-Perimeter Air
SLD212340	P6WH LOADOUT	08/05/19	Gross Alpha/Beta	Gross Alpha	1.643E-15	4.99E-15	9.981E-15	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD212341	P6WH LOADOUT	08/05/19	Gross Alpha/Beta	Gross Beta	4.2E-14	1.958E-14	2.446E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD212341	P6WH LOADOUT	08/05/19	Gross Alpha/Beta	Gross Alpha	1.79E-15	5.435E-15	1.087E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD212342	P6WH LOADOUT	08/06/19	Gross Alpha/Beta	Gross Beta	5.23E-14	2.878E-14	3.727E-14	µCi/mL	J	T04, T20	Plant 6WH (General Area)-Perimeter Air
SLD212342	P6WH LOADOUT	08/06/19	Gross Alpha/Beta	Gross Alpha	1.545E-14	1.274E-14	1.657E-14	µCi/mL	UJ	T04, T05	Plant 6WH (General Area)-Perimeter Air
SLD212343	P6WH LOADOUT	08/06/19	Gross Alpha/Beta	Gross Beta	4.219E-14	1.966E-14	2.457E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD212343	P6WH LOADOUT	08/06/19	Gross Alpha/Beta	Gross Alpha	1.019E-14	8.396E-15	1.092E-14	µCi/mL	UJ	T04, T05	Plant 6WH (General Area)-Perimeter Air
SLD212344	P6WH LOADOUT	08/06/19	Gross Alpha/Beta	Gross Beta	8.459E-14	3.024E-14	3.512E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD212344	P6WH LOADOUT	08/06/19	Gross Alpha/Beta	Gross Alpha	8.57E-16	7.01E-15	1.561E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD212345	P6WH LOADOUT	08/07/19	Gross Alpha/Beta	Gross Beta	4.537E-14	2.214E-14	2.795E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD212345	P6WH LOADOUT	08/07/19	Gross Alpha/Beta	Gross Alpha	2.045E-15	6.212E-15	1.243E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD212346	P6WH LOADOUT	08/07/19	Gross Alpha/Beta	Gross Beta	3.043E-14	1.812E-14	2.382E-14	µCi/mL	J	T04, T20	Plant 6WH (General Area)-Perimeter Air
SLD212346	P6WH LOADOUT	08/07/19	Gross Alpha/Beta	Gross Alpha	6.391E-15	7.057E-15	1.059E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD212347	P6WH LOADOUT	08/07/19	Gross Alpha/Beta	Gross Beta	3.465E-14	2.021E-14	2.647E-14	µCi/mL	J	T04, T20	Plant 6WH (General Area)-Perimeter Air
SLD212347	P6WH LOADOUT	08/07/19	Gross Alpha/Beta	Gross Alpha	-6.46E-16	4.609E-15	1.177E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD212348	P6WH LOADOUT	08/08/19	Gross Alpha/Beta	Gross Alpha	8.272E-15	8.143E-15	1.16E-14	µCi/mL	UJ	T04, T05	Plant 6WH (General Area)-Perimeter Air
SLD212348	P6WH LOADOUT	08/08/19	Gross Alpha/Beta	Gross Beta	2.513E-14	1.91E-14	2.609E-14	µCi/mL	UJ	T04, T05	Plant 6WH (General Area)-Perimeter Air
SLD212349	P6WH LOADOUT	08/08/19	Gross Alpha/Beta	Gross Beta	1.915E-14	1.238E-14	1.667E-14	µCi/mL			Plant 6WH (General Area)-Perimeter Air
SLD212349	P6WH LOADOUT	08/08/19	Gross Alpha/Beta	Gross Alpha	3.35E-15	5.155E-15	7.767E-15	µCi/mL			Plant 6WH (General Area)-Perimeter Air
SLD212349	P6WH LOADOUT	08/08/19	Gross Alpha/Beta	Gross Beta	2.881E-14	1.35E-14	1.667E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD212349	P6WH LOADOUT	08/08/19	Gross Alpha/Beta	Gross Alpha	7.581E-15	6.686E-15	7.767E-15	µCi/mL	UJ	T04, T05	Plant 6WH (General Area)-Perimeter Air
SLD212350	P6WH LOADOUT	08/08/19	Gross Alpha/Beta	Gross Beta	2.224E-14	1.323E-14	1.747E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212350	P6WH LOADOUT	08/08/19	Gross Alpha/Beta	Gross Alpha	5.729E-15	6.256E-15	8.142E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212351	P6WH LOADOUT	08/12/19	Gross Alpha/Beta	Gross Alpha	-6.197E-15	2.064E-14	5.46E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212351	P6WH LOADOUT	08/12/19	Gross Alpha/Beta	Gross Beta	-2.061E-14	6.69E-14	1.172E-13	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212352	P6WH LOADOUT	08/12/19	Gross Alpha/Beta	Gross Beta	2.722E-14	1.871E-14	2.554E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212352	P6WH LOADOUT	08/12/19	Gross Alpha/Beta	Gross Alpha	9.994E-15	9.708E-15	1.19E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212353	P6WH LOADOUT	08/12/19	Gross Alpha/Beta	Gross Alpha	1.239E-15	2.544E-14	5.46E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212353	P6WH LOADOUT	08/12/19	Gross Alpha/Beta	Gross Beta	2.789E-14	7.361E-14	1.172E-13	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212354	P6WH LOADOUT	08/13/19	Gross Alpha/Beta	Gross Beta	2.169E-14	1.402E-14	1.888E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212354	P6WH LOADOUT	08/13/19	Gross Alpha/Beta	Gross Alpha	7.389E-15	7.177E-15	8.798E-15	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212355	P6WH LOADOUT	08/13/19	Gross Alpha/Beta	Gross Beta	3.111E-14	1.485E-14	1.844E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212355	P6WH LOADOUT	08/13/19	Gross Alpha/Beta	Gross Alpha	2.536E-15	5.198E-15	8.594E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212356	P6WH LOADOUT	08/13/19	Gross Alpha/Beta	Gross Beta	2.895E-14	1.466E-14	1.853E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212356	P6WH LOADOUT	08/13/19	Gross Alpha/Beta	Gross Alpha	6.075E-15	6.634E-15	8.634E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212357	P6WH LOADOUT	08/14/19	Gross Alpha/Beta	Gross Beta	3.767E-14	1.596E-14	1.906E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212357	P6WH LOADOUT	08/14/19	Gross Alpha/Beta	Gross Alpha	3.831E-15	5.895E-15	8.882E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212358	P6WH LOADOUT	08/14/19	Gross Alpha/Beta	Gross Beta	4.243E-14	1.494E-14	1.66E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212358	P6WH LOADOUT	08/14/19	Gross Alpha/Beta	Gross Alpha	6.496E-15	6.31E-15	7.735E-15	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212359	P6WH LOADOUT	08/14/19	Gross Alpha/Beta	Gross Beta	2.817E-14	1.426E-14	1.803E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212359	P6WH LOADOUT	08/14/19	Gross Alpha/Beta	Gross Alpha	2.479E-15	5.081E-15	8.4E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212360	P6WH LOADOUT	08/15/19	Gross Alpha/Beta	Gross Beta	2.415E-14	1.437E-14	1.897E-14	µCi/mL	J	T04, T20	Plant 6WH (General Area)-Perimeter Air
SLD212360	P6WH LOADOUT	08/15/19	Gross Alpha/Beta	Gross Alpha	7.424E-15	7.212E-15	8.84E-15	µCi/mL	UJ	T04, T05	Plant 6WH (General Area)-Perimeter Air
SLD212361	P6WH LOADOUT	08/15/19	Gross Alpha/Beta	Gross Beta	3.512E-14	1.403E-14	1.639E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD212361	P6WH LOADOUT	08/15/19	Gross Alpha/Beta	Gross Alpha	2.254E-15	4.621E-15	7.639E-15	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD212362	P6WH LOADOUT	08/15/19	Gross Alpha/Beta	Gross Beta	3.161E-14	1.455E-14	1.787E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD212362	P6WH LOADOUT	08/15/19	Gross Alpha/Beta	Gross Alpha	4.724E-15	5.976E-15	8.324E-15	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD212363	P6WH LOADOUT	08/19/19	Gross Alpha/Beta	Gross Beta	2.422E-14	1.37E-14	1.787E-14	µCi/mL	J	T04, T20	Plant 6WH (General Area)-Perimeter Air
SLD212363	P6WH LOADOUT	08/19/19	Gross Alpha/Beta	Gross Alpha	3.59E-15	5.525E-15	8.324E-15	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD212364	P6WH LOADOUT	08/19/19	Gross Alpha/Beta	Gross Beta	2.348E-14	1.329E-14	1.732E-14	µCi/mL	J	T04, T20	Plant 6WH (General Area)-Perimeter Air
SLD212364	P6WH LOADOUT	08/19/19	Gross Alpha/Beta	Gross Alpha	7.878E-15	6.947E-15	8.071E-15	µCi/mL	UJ	T04, T05	Plant 6WH (General Area)-Perimeter Air
SLD212365	P6WH LOADOUT	08/19/19	Gross Alpha/Beta	Gross Beta	3.623E-14	1.468E-14	1.725E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD212365	P6WH LOADOUT	08/19/19	Gross Alpha/Beta	Gross Alpha	2.371E-15	4.861E-15	8.036E-15	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD212366	P6WH LOADOUT	08/20/19	Gross Alpha/Beta	Gross Alpha	5.016E-15	6.346E-15	8.84E-15	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD212366	P6WH LOADOUT	08/20/19	Gross Alpha/Beta	Gross Beta	1.315E-14	1.303E-14	1.897E-14	µCi/mL	UJ	T04, T05	Plant 6WH (General Area)-Perimeter Air
SLD212367	P6WH LOADOUT	08/20/19	Gross Alpha/Beta	Gross Beta	3.295E-14	1.375E-14	1.633E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD212367	P6WH LOADOUT	08/20/19	Gross Alpha/Beta	Gross Alpha	5.353E-15	5.846E-15	7.608E-15	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD212368	P6WH LOADOUT	08/20/19	Gross Alpha/Beta	Gross Alpha	-1.34E-15	2.266E-15	2.191E-15	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD212368	P6WH LOADOUT	08/20/19	Gross Alpha/Beta	Gross Beta	-2.562E-14	5.67E-15	6.12E-15	µCi/mL	UJ	T06, T07	Plant 6WH (General Area)-Perimeter Air
SLD212369	P6WH LOADOUT	08/21/19	Gross Alpha/Beta	Gross Alpha	5.409E-15	7.138E-15	1.067E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212369	P6WH LOADOUT	08/21/19	Gross Alpha/Beta	Gross Beta	2.329E-14	1.802E-14	2.546E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212369	P6WH LOADOUT	08/21/19	Gross Alpha/Beta	Gross Beta	4.214E-14	1.982E-14	2.546E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212369	P6WH LOADOUT	08/21/19	Gross Alpha/Beta	Gross Alpha	5.409E-15	7.138E-15	1.067E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212370	P6WH LOADOUT	08/21/19	Gross Alpha/Beta	Gross Beta	3.487E-14	1.721E-14	2.237E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212370	P6WH LOADOUT	08/21/19	Gross Alpha/Beta	Gross Alpha	8.107E-15	7.385E-15	9.376E-15	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212371	P6WH LOADOUT	08/21/19	Gross Alpha/Beta	Gross Beta	2.875E-14	1.797E-14	2.453E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212371	P6WH LOADOUT	08/21/19	Gross Alpha/Beta	Gross Alpha	1.532E-15	5.397E-15	1.028E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212372	P6WH LOADOUT	08/22/19	Gross Alpha/Beta	Gross Alpha	-9.41E-16	4.232E-15	1.052E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212372	P6WH LOADOUT	08/22/19	Gross Alpha/Beta	Gross Beta	2.296E-14	1.777E-14	2.51E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212373	P6WH LOADOUT	08/22/19	Gross Alpha/Beta	Gross Beta	2.59E-14	1.619E-14	2.209E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212373	P6WH LOADOUT	08/22/19	Gross Alpha/Beta	Gross Alpha	3.589E-15	5.783E-15	9.26E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212374	P6WH LOADOUT	08/22/19	Gross Alpha/Beta	Gross Beta	5.086E-14	2.003E-14	2.453E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212374	P6WH LOADOUT	08/22/19	Gross Alpha/Beta	Gross Alpha	8.888E-15	8.097E-15	1.028E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212375	P6WH LOADOUT	08/26/19	Gross Alpha/Beta	Gross Alpha	1.74E-15	6.128E-15	1.167E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212375	P6WH LOADOUT	08/26/19	Gross Alpha/Beta	Gross Beta	4.856E-15	1.765E-14	2.785E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212376	P6WH LOADOUT	08/26/19	Gross Alpha/Beta	Gross Beta	2.372E-14	1.682E-14	2.345E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212376	P6WH LOADOUT	08/26/19	Gross Alpha/Beta	Gross Alpha	4.982E-15	6.574E-15	9.829E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212377	P6WH LOADOUT	08/26/19	Gross Alpha/Beta	Gross Alpha	4.258E-15	6.86E-15	1.099E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212377	P6WH LOADOUT	08/26/19	Gross Alpha/Beta	Gross Beta	1.216E-14	1.739E-14	2.621E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212378	P6WH LOADOUT	08/27/19	Gross Alpha/Beta	Gross Alpha	4.196E-15	6.761E-15	1.083E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212378	P6WH LOADOUT	08/27/19	Gross Alpha/Beta	Gross Beta	2.446E-14	1.837E-14	2.583E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212379	P6WH LOADOUT	08/27/19	Gross Alpha/Beta	Gross Alpha	7.019E-15	7.063E-15	9.416E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212379	P6WH LOADOUT	08/27/19	Gross Alpha/Beta	Gross Beta	1.91E-14	1.576E-14	2.247E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212380	P6WH LOADOUT	08/27/19	Gross Alpha/Beta	Gross Beta	2.888E-14	1.805E-14	2.464E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212380	P6WH LOADOUT	08/27/19	Gross Alpha/Beta	Gross Alpha	3.08E-16	4.829E-15	1.033E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212381	P6WH LOADOUT	08/28/19	Gross Alpha/Beta	Gross Beta	2.945E-14	1.885E-14	2.583E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212381	P6WH LOADOUT	08/28/19	Gross Alpha/Beta	Gross Alpha	5.487E-15	7.241E-15	1.083E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212382	P6WH LOADOUT	08/28/19	Gross Alpha/Beta	Gross Alpha	2.506E-15	5.386E-15	9.337E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212382	P6WH LOADOUT	08/28/19	Gross Alpha/Beta	Gross Beta	2.038E-14	1.577E-14	2.228E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212383	P6WH LOADOUT	08/28/19	Gross Alpha/Beta	Gross Beta	2.742E-14	1.799E-14	2.475E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212383	P6WH LOADOUT	08/28/19	Gross Alpha/Beta	Gross Alpha	7.733E-15	7.782E-15	1.038E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212384	P6WH LOADOUT	08/29/19	Gross Alpha/Beta	Gross Alpha	1.576E-15	5.55E-15	1.057E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212384	P6WH LOADOUT	08/29/19	Gross Alpha/Beta	Gross Beta	-2.097E-15	1.531E-14	2.522E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212385	P6WH LOADOUT	08/29/19	Gross Alpha/Beta	Gross Alpha	1.132E-14	8.255E-15	9.26E-15	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212385	P6WH LOADOUT	08/29/19	Gross Alpha/Beta	Gross Beta	2.803E-14	1.639E-14	2.209E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212386	P6WH LOADOUT	08/29/19	Gross Alpha/Beta	Gross Beta	3.676E-14	1.846E-14	2.408E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212386	P6WH LOADOUT	08/29/19	Gross Alpha/Beta	Gross Alpha	1.505E-15	5.3E-15	1.009E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212387	P6WH LOADOUT	09/03/19	Gross Alpha/Beta	Gross Beta	4.986E-14	2.038E-14	2.522E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212387	P6WH LOADOUT	09/03/19	Gross Alpha/Beta	Gross Alpha	6.619E-15	7.511E-15	1.057E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212388	P6WH LOADOUT	09/03/19	Gross Alpha/Beta	Gross Alpha	1.237E-14	8.517E-15	9.222E-15	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD212388	P6WH LOADOUT	09/03/19	Gross Alpha/Beta	Gross Beta	5.767E-14	1.906E-14	2.2E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD212406	P6WH LOADOUT	09/03/19	Gross Alpha/Beta	Gross Beta	4.73E-14	1.621E-14	1.808E-14	µCi/mL			Plant 6WH (General Area)-Perimeter Air
SLD212406	P6WH LOADOUT	09/03/19	Gross Alpha/Beta	Gross Alpha	1.317E-15	5.141E-15	1.062E-14	µCi/mL			Plant 6WH (General Area)-Perimeter Air
SLD212406	P6WH LOADOUT	09/03/19	Gross Alpha/Beta	Gross Beta	5.687E-14	1.72E-14	1.808E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD212406	P6WH LOADOUT	09/03/19	Gross Alpha/Beta	Gross Alpha	1.317E-15	5.141E-15	1.062E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD212407	P6WH LOADOUT	09/04/19	Gross Alpha/Beta	Gross Beta	4.08E-14	1.717E-14	2.077E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD212407	P6WH LOADOUT	09/04/19	Gross Alpha/Beta	Gross Alpha	-1.08E-15	4.628E-15	1.22E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD212408	P6WH LOADOUT	09/04/19	Gross Alpha/Beta	Gross Beta	3.368E-14	1.315E-14	1.584E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD212408	P6WH LOADOUT	09/04/19	Gross Alpha/Beta	Gross Alpha	1.47E-16	4.081E-15	8.956E-15	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD212409	P6WH LOADOUT	09/04/19	Gross Alpha/Beta	Gross Beta	3.791E-14	1.464E-14	1.716E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD212409	P6WH LOADOUT	09/04/19	Gross Alpha/Beta	Gross Alpha	7.677E-15	7.185E-15	1.008E-14	µCi/mL	UJ	T04, T05	Plant 6WH (General Area)-Perimeter Air
SLD212410	P6WH LOADOUT	09/05/19	Gross Alpha/Beta	Gross Beta	2.838E-14	1.552E-14	2.036E-14	µCi/mL	J	T04, T20	Plant 6WH (General Area)-Perimeter Air
SLD212410	P6WH LOADOUT	09/05/19	Gross Alpha/Beta	Gross Alpha	9.105E-15	8.521E-15	1.196E-14	µCi/mL	UJ	T04, T05	Plant 6WH (General Area)-Perimeter Air
SLD212411	P6WH LOADOUT	09/05/19	Gross Alpha/Beta	Gross Beta	2.666E-14	1.425E-14	1.858E-14	µCi/mL	J	T04, T20	Plant 6WH (General Area)-Perimeter Air
SLD212411	P6WH LOADOUT	09/05/19	Gross Alpha/Beta	Gross Alpha	3.672E-15	6.222E-15	1.091E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD212412	P6WH LOADOUT	09/05/19	Gross Alpha/Beta	Gross Beta	2.512E-14	1.313E-14	1.702E-14	µCi/mL	J	T04, T20	Plant 6WH (General Area)-Perimeter Air
SLD212412	P6WH LOADOUT	09/05/19	Gross Alpha/Beta	Gross Alpha	5.488E-15	6.45E-15	9.996E-15	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD212413	P6WH LOADOUT	09/09/19	Gross Alpha/Beta	Gross Alpha	1.472E-14	9.785E-15	1.138E-14	µCi/mL	J	T04, T20	Plant 6WH (General Area)-Perimeter Air
SLD212413	P6WH LOADOUT	09/09/19	Gross Alpha/Beta	Gross Beta	5.464E-14	1.779E-14	1.938E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD212414	P6WH LOADOUT	09/09/19	Gross Alpha/Beta	Gross Beta	5.981E-14	1.75E-14	1.808E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD212414	P6WH LOADOUT	09/09/19	Gross Alpha/Beta	Gross Alpha	6.96E-15	7.22E-15	1.062E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD212415	P6WH LOADOUT	09/09/19	Gross Alpha/Beta	Gross Beta	5.649E-14	1.627E-14	1.667E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD212415	P6WH LOADOUT	09/09/19	Gross Alpha/Beta	Gross Alpha	7.456E-15	6.978E-15	9.791E-15	µCi/mL	UJ	T04, T05	Plant 6WH (General Area)-Perimeter Air
SLD212416	P6WH LOADOUT	09/10/19	Gross Alpha/Beta	Gross Beta	8.585E-14	2.107E-14	1.966E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD212416	P6WH LOADOUT	09/10/19	Gross Alpha/Beta	Gross Alpha	1.002E-14	8.596E-15	1.155E-14	µCi/mL	UJ	T04, T05	Plant 6WH (General Area)-Perimeter Air
SLD212417	P6WH LOADOUT	09/10/19	Gross Alpha/Beta	Gross Alpha	1.386E-14	9.212E-15	1.072E-14	µCi/mL	J	T04, T20	Plant 6WH (General Area)-Perimeter Air
SLD212417	P6WH LOADOUT	09/10/19	Gross Alpha/Beta	Gross Beta	7.149E-14	1.876E-14	1.825E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD212418	P6WH LOADOUT	09/10/19	Gross Alpha/Beta	Gross Alpha	1.075E-14	8.002E-15	9.955E-15	µCi/mL	J	T04, T20	Plant 6WH (General Area)-Perimeter Air
SLD212418	P6WH LOADOUT	09/10/19	Gross Alpha/Beta	Gross Beta	5.951E-14	1.675E-14	1.695E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD212419	P6WH LOADOUT	09/11/19	Gross Alpha/Beta	Gross Beta	8.963E-14	2.175E-14	2.015E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD212419	P6WH LOADOUT	09/11/19	Gross Alpha/Beta	Gross Alpha	6.499E-15	7.637E-15	1.184E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD212420	P6WH LOADOUT	09/11/19	Gross Alpha/Beta	Gross Beta	6.232E-14	1.823E-14	1.884E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD212420	P6WH LOADOUT	09/11/19	Gross Alpha/Beta	Gross Alpha	1.078E-14	8.572E-15	1.107E-14	µCi/mL	UJ	T04, T05	Plant 6WH (General Area)-Perimeter Air
SLD212421	P6WH LOADOUT	09/11/19	Gross Alpha/Beta	Gross Alpha	1.405E-14	8.897E-15	1.004E-14	µCi/mL	J	T04, T20	Plant 6WH (General Area)-Perimeter Air
SLD212421	P6WH LOADOUT	09/11/19	Gross Alpha/Beta	Gross Beta	6.766E-14	1.764E-14	1.709E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD216025	P6WH LOADOUT	09/12/19	Gross Alpha/Beta	Gross Beta	6.053E-14	2.303E-14	2.762E-14	µCi/mL			Plant 6WH (General Area)-Perimeter Air
SLD216025	P6WH LOADOUT	09/12/19	Gross Alpha/Beta	Gross Alpha	1.036E-14	1.067E-14	1.305E-14	µCi/mL			Plant 6WH (General Area)-Perimeter Air
SLD216025	P6WH LOADOUT	09/12/19	Gross Alpha/Beta	Gross Beta	5.881E-14	2.288E-14	2.762E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD216025	P6WH LOADOUT	09/12/19	Gross Alpha/Beta	Gross Alpha	1.303E-14	1.134E-14	1.305E-14	µCi/mL	UJ	T04, T05	Plant 6WH (General Area)-Perimeter Air
SLD216026	P6WH LOADOUT	09/12/19	Gross Alpha/Beta	Gross Beta	5.103E-14	2.08E-14	2.546E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD216026	P6WH LOADOUT	09/12/19	Gross Alpha/Beta	Gross Alpha	5.85E-15	8.849E-15	1.203E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD216027	P6WH LOADOUT	09/12/19	Gross Alpha/Beta	Gross Beta	5.929E-14	2.002E-14	2.311E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD216027	P6WH LOADOUT	09/12/19	Gross Alpha/Beta	Gross Alpha	9.785E-15	9.213E-15	1.092E-14	µCi/mL	UJ	T04, T05	Plant 6WH (General Area)-Perimeter Air
SLD216028	P6WH LOADOUT	09/16/19	Gross Alpha/Beta	Gross Alpha	1.615E-14	1.163E-14	1.237E-14	µCi/mL	J	T04, T20	Plant 6WH (General Area)-Perimeter Air
SLD216028	P6WH LOADOUT	09/16/19	Gross Alpha/Beta	Gross Beta	7.287E-14	2.317E-14	2.618E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD216029	P6WH LOADOUT	09/16/19	Gross Alpha/Beta	Gross Alpha	1.294E-14	1.05E-14	1.176E-14	µCi/mL	J	T04, T20	Plant 6WH (General Area)-Perimeter Air
SLD216029	P6WH LOADOUT	09/16/19	Gross Alpha/Beta	Gross Beta	7.236E-14	2.229E-14	2.488E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD216030	P6WH LOADOUT	09/16/19	Gross Alpha/Beta	Gross Beta	4.781E-14	1.86E-14	2.246E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD216030	P6WH LOADOUT	09/16/19	Gross Alpha/Beta	Gross Alpha	8.42E-15	8.678E-15	1.061E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD216031	P6WH LOADOUT	09/17/19	Gross Alpha/Beta	Gross Beta	6.39E-14	2.24E-14	2.618E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD216031	P6WH LOADOUT	09/17/19	Gross Alpha/Beta	Gross Alpha	7.283E-15	9.451E-15	1.237E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD216032	P6WH LOADOUT	09/17/19	Gross Alpha/Beta	Gross Alpha	1.57E-14	1.131E-14	1.203E-14	µCi/mL	J	T04, T20	Plant 6WH (General Area)-Perimeter Air
SLD216032	P6WH LOADOUT	09/17/19	Gross Alpha/Beta	Gross Beta	7.482E-14	2.287E-14	2.546E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD216033	P6WH LOADOUT	09/17/19	Gross Alpha/Beta	Gross Alpha	1.697E-14	1.06E-14	1.052E-14	µCi/mL	J	T04, T20	Plant 6WH (General Area)-Perimeter Air
SLD216033	P6WH LOADOUT	09/17/19	Gross Alpha/Beta	Gross Beta	7.38E-14	2.072E-14	2.228E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD216034	P6WH LOADOUT	09/18/19	Gross Alpha/Beta	Gross Beta	6.053E-14	2.303E-14	2.762E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD216034	P6WH LOADOUT	09/18/19	Gross Alpha/Beta	Gross Alpha	3.675E-15	8.819E-15	1.305E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD216035	P6WH LOADOUT	09/18/19	Gross Alpha/Beta	Gross Beta	5.79E-14	2.133E-14	2.534E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD216035	P6WH LOADOUT	09/18/19	Gross Alpha/Beta	Gross Alpha	3.371E-15	8.091E-15	1.197E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD216036	P6WH LOADOUT	09/18/19	Gross Alpha/Beta	Gross Beta	5.503E-14	1.929E-14	2.255E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD216036	P6WH LOADOUT	09/18/19	Gross Alpha/Beta	Gross Alpha	7.363E-15	8.431E-15	1.065E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD216037	P6WH LOADOUT	09/19/19	Gross Alpha/Beta	Gross Beta	7.633E-14	2.035E-14	1.978E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216037	P6WH LOADOUT	09/19/19	Gross Alpha/Beta	Gross Alpha	6.362E-15	7.155E-15	9.32E-15	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216037	P6WH LOADOUT	09/19/19	Gross Alpha/Beta	Gross Beta	9.184E-14	2.185E-14	1.978E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216037	P6WH LOADOUT	09/19/19	Gross Alpha/Beta	Gross Alpha	5.111E-15	6.697E-15	9.32E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216038	P6WH LOADOUT	09/19/19	Gross Alpha/Beta	Gross Beta	5.597E-14	1.604E-14	1.624E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216038	P6WH LOADOUT	09/19/19	Gross Alpha/Beta	Gross Alpha	6.252E-15	6.229E-15	7.653E-15	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216039	P6WH LOADOUT	09/19/19	Gross Alpha/Beta	Gross Alpha	1.083E-14	8.343E-15	8.881E-15	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216039	P6WH LOADOUT	09/19/19	Gross Alpha/Beta	Gross Beta	8.673E-14	2.074E-14	1.884E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216040	P6WH LOADOUT	09/23/19	Gross Alpha/Beta	Gross Alpha	-1.098E-15	3.506E-15	8.923E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216040	P6WH LOADOUT	09/23/19	Gross Alpha/Beta	Gross Beta	1.602E-14	1.328E-14	1.893E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216041	P6WH LOADOUT	09/23/19	Gross Alpha/Beta	Gross Alpha	8.5E-17	3.612E-15	7.591E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216041	P6WH LOADOUT	09/23/19	Gross Alpha/Beta	Gross Beta	1.563E-14	1.154E-14	1.611E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216042	P6WH LOADOUT	09/23/19	Gross Alpha/Beta	Gross Alpha	9.4E-17	3.981E-15	8.367E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216042	P6WH LOADOUT	09/23/19	Gross Alpha/Beta	Gross Beta	1.722E-14	1.272E-14	1.776E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216043	P6WH LOADOUT	09/24/19	Gross Alpha/Beta	Gross Beta	3.495E-14	1.397E-14	1.644E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216043	P6WH LOADOUT	09/24/19	Gross Alpha/Beta	Gross Alpha	4.248E-15	5.567E-15	7.748E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216044	P6WH LOADOUT	09/24/19	Gross Alpha/Beta	Gross Beta	3.241E-14	1.579E-14	1.988E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216044	P6WH LOADOUT	09/24/19	Gross Alpha/Beta	Gross Alpha	1.363E-15	5.119E-15	9.367E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216045	P6WH LOADOUT	09/24/19	Gross Alpha/Beta	Gross Beta	3.2E-14	1.474E-14	1.824E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216045	P6WH LOADOUT	09/24/19	Gross Alpha/Beta	Gross Alpha	3.559E-15	5.726E-15	8.597E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216046	P6WH LOADOUT	09/25/19	Gross Alpha/Beta	Gross Beta	3.553E-14	1.42E-14	1.672E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216046	P6WH LOADOUT	09/25/19	Gross Alpha/Beta	Gross Alpha	3.262E-15	5.247E-15	7.877E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216047	P6WH LOADOUT	09/25/19	Gross Alpha/Beta	Gross Beta	3.94E-14	1.645E-14	1.968E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216047	P6WH LOADOUT	09/25/19	Gross Alpha/Beta	Gross Alpha	3.84E-15	6.177E-15	9.274E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216048	P6WH LOADOUT	09/25/19	Gross Alpha/Beta	Gross Alpha	1.247E-15	3.513E-15	4.781E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216048	P6WH LOADOUT	09/25/19	Gross Alpha/Beta	Gross Beta	-3.402E-15	7.597E-15	1.143E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216049	P6WH LOADOUT	09/26/19	Gross Alpha/Beta	Gross Alpha	2.186E-15	4.759E-15	7.812E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216049	P6WH LOADOUT	09/26/19	Gross Alpha/Beta	Gross Beta	2.395E-15	1.012E-14	1.658E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216050	P6WH LOADOUT	09/26/19	Gross Alpha/Beta	Gross Beta	2.482E-14	1.521E-14	2.038E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216050	P6WH LOADOUT	09/26/19	Gross Alpha/Beta	Gross Alpha	6.557E-15	7.374E-15	9.606E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216051	P6WH LOADOUT	09/26/19	Gross Alpha/Beta	Gross Alpha	1.245E-15	4.677E-15	8.558E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216051	P6WH LOADOUT	09/26/19	Gross Alpha/Beta	Gross Beta	1.612E-14	1.283E-14	1.816E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216052	P6WH LOADOUT	09/30/19	Gross Alpha/Beta	Gross Beta	4.56E-14	1.588E-14	1.768E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD216052	P6WH LOADOUT	09/30/19	Gross Alpha/Beta	Gross Alpha	4.568E-15	5.986E-15	8.33E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216053	P6WH LOADOUT	09/30/19	Gross Alpha/Beta	Gross Beta	3.635E-14	1.518E-14	1.816E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216053	P6WH LOADOUT	09/30/19	Gross Alpha/Beta	Gross Alpha	8.14E-15	7.34E-15	8.558E-15	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216054	P6WH LOADOUT	09/30/19	Gross Alpha/Beta	Gross Beta	4.032E-14	1.527E-14	1.76E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216054	P6WH LOADOUT	09/30/19	Gross Alpha/Beta	Gross Alpha	1.207E-15	4.532E-15	8.294E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216064	P6WH LOADOUT	10/01/19	Gross Alpha/Beta	Gross Beta	2.722E-14	1.508E-14	1.886E-14	µCi/mL			Plant 6WH (General Area)-Perimeter Air
SLD216064	P6WH LOADOUT	10/01/19	Gross Alpha/Beta	Gross Alpha	-3E-16	4.919E-15	1.064E-14	µCi/mL			Plant 6WH (General Area)-Perimeter Air
SLD216064	P6WH LOADOUT	10/01/19	Gross Alpha/Beta	Gross Beta	3.582E-14	1.603E-14	1.886E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD216064	P6WH LOADOUT	10/01/19	Gross Alpha/Beta	Gross Alpha	8.088E-15	8.044E-15	1.064E-14	µCi/mL	UJ	T04, T05	Plant 6WH (General Area)-Perimeter Air
SLD216065	P6WH LOADOUT	10/01/19	Gross Alpha/Beta	Gross Alpha	1.091E-14	8.468E-15	9.933E-15	µCi/mL	J	T04, T20	Plant 6WH (General Area)-Perimeter Air
SLD216065	P6WH LOADOUT	10/01/19	Gross Alpha/Beta	Gross Beta	2.979E-14	1.457E-14	1.761E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD216066	P6WH LOADOUT	10/01/19	Gross Alpha/Beta	Gross Beta	2.681E-14	1.336E-14	1.625E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD216066	P6WH LOADOUT	10/01/19	Gross Alpha/Beta	Gross Alpha	3.87E-15	5.921E-15	9.163E-15	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD216067	P6WH LOADOUT	10/02/19	Gross Alpha/Beta	Gross Beta	4.129E-14	1.685E-14	1.923E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD216067	P6WH LOADOUT	10/02/19	Gross Alpha/Beta	Gross Alpha	7.023E-15	7.821E-15	1.085E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD216068	P6WH LOADOUT	10/02/19	Gross Alpha/Beta	Gross Beta	3.489E-14	1.424E-14	1.625E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD216068	P6WH LOADOUT	10/02/19	Gross Alpha/Beta	Gross Alpha	3.87E-15	5.921E-15	9.163E-15	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD216069	P6WH LOADOUT	10/02/19	Gross Alpha/Beta	Gross Beta	3.579E-14	1.527E-14	1.769E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD216069	P6WH LOADOUT	10/02/19	Gross Alpha/Beta	Gross Alpha	9.832E-15	8.197E-15	9.977E-15	µCi/mL	UJ	T04, T05	Plant 6WH (General Area)-Perimeter Air
SLD216070	P6WH LOADOUT	10/08/19	Gross Alpha/Beta	Gross Beta	3.151E-14	1.635E-14	2.01E-14	µCi/mL	J	T04, T20	Plant 6WH (General Area)-Perimeter Air
SLD216070	P6WH LOADOUT	10/08/19	Gross Alpha/Beta	Gross Alpha	-1.596E-15	4.579E-15	1.134E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD216071	P6WH LOADOUT	10/08/19	Gross Alpha/Beta	Gross Beta	2.703E-14	1.347E-14	1.638E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD216071	P6WH LOADOUT	10/08/19	Gross Alpha/Beta	Gross Alpha	7.023E-15	6.984E-15	9.238E-15	µCi/mL	UJ	T04, T05	Plant 6WH (General Area)-Perimeter Air
SLD216072	P6WH LOADOUT	10/08/19	Gross Alpha/Beta	Gross Beta	3.822E-14	1.606E-14	1.851E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD216072	P6WH LOADOUT	10/08/19	Gross Alpha/Beta	Gross Alpha	-1.47E-15	4.217E-15	1.044E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD216073	P6WH LOADOUT	10/07/19	Gross Alpha/Beta	Gross Beta	3.954E-14	1.637E-14	1.877E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD216073	P6WH LOADOUT	10/07/19	Gross Alpha/Beta	Gross Alpha	5.665E-15	7.25E-15	1.059E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD216074	P6WH LOADOUT	10/07/19	Gross Alpha/Beta	Gross Alpha	1.851E-15	5.275E-15	9.393E-15	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD216074	P6WH LOADOUT	10/07/19	Gross Alpha/Beta	Gross Beta	1.575E-14	1.236E-14	1.665E-14	µCi/mL	UJ	T04, T05	Plant 6WH (General Area)-Perimeter Air
SLD216075	P6WH LOADOUT	10/07/19	Gross Alpha/Beta	Gross Beta	2.181E-14	1.408E-14	1.826E-14	µCi/mL	J	T04, T20	Plant 6WH (General Area)-Perimeter Air
SLD216075	P6WH LOADOUT	10/07/19	Gross Alpha/Beta	Gross Alpha	4.349E-15	6.654E-15	1.03E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD216076	P6WH LOADOUT	10/03/19	Gross Alpha/Beta	Gross Alpha	2.201E-15	6.272E-15	1.117E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD216076	P6WH LOADOUT	10/03/19	Gross Alpha/Beta	Gross Beta	5.606E-15	1.309E-14	1.98E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD216077	P6WH LOADOUT	10/03/19	Gross Alpha/Beta	Gross Alpha	-3.467E-15	2.362E-15	9.472E-15	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD216077	P6WH LOADOUT	10/03/19	Gross Alpha/Beta	Gross Beta	7.537E-15	1.145E-14	1.679E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD216078	P6WH LOADOUT	10/03/19	Gross Alpha/Beta	Gross Alpha	-1.47E-15	4.217E-15	1.044E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD216078	P6WH LOADOUT	10/03/19	Gross Alpha/Beta	Gross Beta	2.173E-15	1.184E-14	1.851E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD216079	P6WH LOADOUT	10/09/19	Gross Alpha/Beta	Gross Beta	4.231E-14	1.519E-14	1.652E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD216079	P6WH LOADOUT	10/09/19	Gross Alpha/Beta	Gross Alpha	3.934E-15	6.019E-15	9.315E-15	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD216080	P6WH LOADOUT	10/09/19	Gross Alpha/Beta	Gross Beta	4.498E-14	1.761E-14	1.98E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD216080	P6WH LOADOUT	10/09/19	Gross Alpha/Beta	Gross Alpha	7.232E-15	8.055E-15	1.117E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD216081	P6WH LOADOUT	10/09/19	Gross Alpha/Beta	Gross Beta	4.709E-14	1.752E-14	1.932E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD216081	P6WH LOADOUT	10/09/19	Gross Alpha/Beta	Gross Alpha	-2.761E-15	3.656E-15	1.09E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD216082	P6WH LOADOUT	10/10/19	Gross Alpha/Beta	Gross Beta	3.777E-14	1.499E-14	1.694E-14	µCi/mL	=		Plant 6WH (General Area)-Perimeter Air
SLD216082	P6WH LOADOUT	10/10/19	Gross Alpha/Beta	Gross Alpha	5.11E-15	6.54E-15	9.553E-15	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD216083	P6WH LOADOUT	10/10/19	Gross Alpha/Beta	Gross Alpha	2.304E-15	6.566E-15	1.169E-14	µCi/mL	UJ	T06	Plant 6WH (General Area)-Perimeter Air
SLD216083	P6WH LOADOUT	10/10/19	Gross Alpha/Beta	Gross Beta	1.875E-14	1.528E-14	2.073E-14	µCi/mL	UJ	T04, T05	Plant 6WH (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD216090	P6WH LOADOUT	10/10/19	Gross Alpha/Beta	Gross Beta	3.85E-14	2.169E-14	2.669E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216090	P6WH LOADOUT	10/10/19	Gross Alpha/Beta	Gross Alpha	1.087E-14	9.12E-15	1.165E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216090	P6WH LOADOUT	10/10/19	Gross Alpha/Beta	Gross Beta	4.344E-14	2.21E-14	2.669E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216090	P6WH LOADOUT	10/10/19	Gross Alpha/Beta	Gross Alpha	8.312E-15	8.358E-15	1.165E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216091	P6WH LOADOUT	10/14/19	Gross Alpha/Beta	Gross Alpha	3.849E-15	6.082E-15	1.002E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216091	P6WH LOADOUT	10/14/19	Gross Alpha/Beta	Gross Beta	1.824E-14	1.738E-14	2.296E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216092	P6WH LOADOUT	10/14/19	Gross Alpha/Beta	Gross Beta	4.034E-14	2.193E-14	2.682E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216092	P6WH LOADOUT	10/14/19	Gross Alpha/Beta	Gross Alpha	7.067E-15	7.989E-15	1.171E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216093	P6WH LOADOUT	10/14/19	Gross Alpha/Beta	Gross Alpha	1.814E-15	5.74E-15	1.102E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216093	P6WH LOADOUT	10/14/19	Gross Alpha/Beta	Gross Beta	2.161E-14	1.924E-14	2.524E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216094	P6WH LOADOUT	10/15/19	Gross Alpha/Beta	Gross Beta	3.151E-14	1.878E-14	2.334E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216094	P6WH LOADOUT	10/15/19	Gross Alpha/Beta	Gross Alpha	-5.59E-16	4.261E-15	1.019E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216095	P6WH LOADOUT	10/15/19	Gross Alpha/Beta	Gross Alpha	6.78E-16	5.838E-15	1.236E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216095	P6WH LOADOUT	10/15/19	Gross Alpha/Beta	Gross Beta	2.774E-14	2.189E-14	2.832E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216096	P6WH LOADOUT	10/15/19	Gross Alpha/Beta	Gross Beta	4.226E-14	2.084E-14	2.502E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216096	P6WH LOADOUT	10/15/19	Gross Alpha/Beta	Gross Alpha	4.195E-15	6.627E-15	1.092E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216097	P6WH LOADOUT	10/16/19	Gross Alpha/Beta	Gross Alpha	-1.677E-15	3.629E-15	1.019E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216097	P6WH LOADOUT	10/16/19	Gross Alpha/Beta	Gross Beta	2.142E-14	1.792E-14	2.334E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216098	P6WH LOADOUT	10/16/19	Gross Alpha/Beta	Gross Alpha	2.025E-15	6.407E-15	1.23E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216098	P6WH LOADOUT	10/16/19	Gross Alpha/Beta	Gross Beta	1.282E-14	2.049E-14	2.817E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216099	P6WH LOADOUT	10/16/19	Gross Alpha/Beta	Gross Alpha	-6.27E-16	4.781E-15	1.143E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216099	P6WH LOADOUT	10/16/19	Gross Alpha/Beta	Gross Beta	1.354E-14	1.919E-14	2.619E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216100	P6WH LOADOUT	10/17/19	Gross Alpha/Beta	Gross Alpha	5.54E-16	4.772E-15	1.011E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216100	P6WH LOADOUT	10/17/19	Gross Alpha/Beta	Gross Beta	1.196E-14	1.696E-14	2.315E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216101	P6WH LOADOUT	10/17/19	Gross Alpha/Beta	Gross Alpha	-6.52E-16	4.968E-15	1.188E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216101	P6WH LOADOUT	10/17/19	Gross Alpha/Beta	Gross Beta	1.826E-14	2.031E-14	2.721E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216102	P6WH LOADOUT	10/17/19	Gross Alpha/Beta	Gross Alpha	3.079E-15	6.346E-15	1.122E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216102	P6WH LOADOUT	10/17/19	Gross Alpha/Beta	Gross Beta	1.249E-14	1.877E-14	2.571E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216103	P6WH LOADOUT	10/21/19	Gross Alpha/Beta	Gross Alpha	-4.049E-15	1.857E-15	1.054E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216103	P6WH LOADOUT	10/21/19	Gross Alpha/Beta	Gross Beta	-6.147E-15	1.603E-14	2.415E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216104	P6WH LOADOUT	10/21/19	Gross Alpha/Beta	Gross Beta	2.511E-14	1.653E-14	2.143E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216104	P6WH LOADOUT	10/21/19	Gross Alpha/Beta	Gross Alpha	-2.28E-16	5.1E-15	1.203E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216104	P6WH LOADOUT	10/21/19	Gross Alpha/Beta	Gross Beta	2.154E-14	1.611E-14	2.143E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216104	P6WH LOADOUT	10/21/19	Gross Alpha/Beta	Gross Alpha	-2.28E-16	5.1E-15	1.203E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216105	P6WH LOADOUT	10/21/19	Gross Alpha/Beta	Gross Beta	2.358E-14	1.508E-14	1.944E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216105	P6WH LOADOUT	10/21/19	Gross Alpha/Beta	Gross Alpha	1.033E-15	5.248E-15	1.091E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216106	P6WH LOADOUT	10/22/19	Gross Alpha/Beta	Gross Alpha	-1.73E-16	3.883E-15	9.155E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216106	P6WH LOADOUT	10/22/19	Gross Alpha/Beta	Gross Beta	8.256E-15	1.129E-14	1.632E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216107	P6WH LOADOUT	10/22/19	Gross Alpha/Beta	Gross Alpha	7.961E-15	7.564E-15	1.025E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216107	P6WH LOADOUT	10/22/19	Gross Alpha/Beta	Gross Beta	1.077E-14	1.283E-14	1.827E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216108	P6WH LOADOUT	10/22/19	Gross Alpha/Beta	Gross Alpha	1.048E-15	5.326E-15	1.107E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216108	P6WH LOADOUT	10/22/19	Gross Alpha/Beta	Gross Beta	1.819E-14	1.464E-14	1.973E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216109	P6WH LOADOUT	10/23/19	Gross Alpha/Beta	Gross Beta	1.694E-14	1.224E-14	1.618E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216109	P6WH LOADOUT	10/23/19	Gross Alpha/Beta	Gross Alpha	-1.72E-16	3.851E-15	9.08E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216110	P6WH LOADOUT	10/23/19	Gross Alpha/Beta	Gross Beta	3.739E-14	1.638E-14	1.906E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216110	P6WH LOADOUT	10/23/19	Gross Alpha/Beta	Gross Alpha	-2.03E-16	4.536E-15	1.07E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216111	P6WH LOADOUT	10/23/19	Gross Alpha/Beta	Gross Alpha	9.41E-16	4.779E-15	9.932E-15	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD216111	P6WH LOADOUT	10/23/19	Gross Alpha/Beta	Gross Beta	1.23E-16	1.111E-14	1.77E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216111	P6WH LOADOUT	10/23/19	Gross Alpha/Beta	Gross Alpha	-1.88E-16	4.212E-15	9.932E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216111	P6WH LOADOUT	10/23/19	Gross Alpha/Beta	Gross Beta	1.337E-14	1.278E-14	1.77E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216112	P6WH LOADOUT	10/24/19	Gross Alpha/Beta	Gross Beta	2.502E-14	1.317E-14	1.618E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216112	P6WH LOADOUT	10/24/19	Gross Alpha/Beta	Gross Alpha	2.924E-15	5.258E-15	9.08E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216113	P6WH LOADOUT	10/24/19	Gross Alpha/Beta	Gross Alpha	9.98E-16	5.073E-15	1.054E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216113	P6WH LOADOUT	10/24/19	Gross Alpha/Beta	Gross Beta	1.811E-14	1.403E-14	1.879E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216114	P6WH LOADOUT	10/24/19	Gross Alpha/Beta	Gross Beta	2.027E-14	1.375E-14	1.794E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216114	P6WH LOADOUT	10/24/19	Gross Alpha/Beta	Gross Alpha	-2.479E-15	2.79E-15	1.007E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216118	P6WH LOADOUT	10/28/19	Gross Alpha/Beta	Gross Beta	4.083E-14	1.424E-14	1.669E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216118	P6WH LOADOUT	10/28/19	Gross Alpha/Beta	Gross Alpha	3.381E-15	6.557E-15	9.714E-15	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216118	P6WH LOADOUT	10/28/19	Gross Alpha/Beta	Gross Beta	5.983E-14	1.624E-14	1.669E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216118	P6WH LOADOUT	10/28/19	Gross Alpha/Beta	Gross Alpha	5.462E-15	7.193E-15	9.714E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216119	P6WH LOADOUT	10/28/19	Gross Alpha/Beta	Gross Beta	4.793E-14	1.671E-14	1.959E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216119	P6WH LOADOUT	10/28/19	Gross Alpha/Beta	Gross Alpha	1.13E-14	9.776E-15	1.14E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216120	P6WH LOADOUT	10/28/19	Gross Alpha/Beta	Gross Beta	3.175E-14	1.427E-14	1.851E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216120	P6WH LOADOUT	10/28/19	Gross Alpha/Beta	Gross Alpha	3.752E-15	7.275E-15	1.078E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216121	P6WH LOADOUT	10/29/19	Gross Alpha/Beta	Gross Alpha	2.6E-16	5.472E-15	9.714E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216121	P6WH LOADOUT	10/29/19	Gross Alpha/Beta	Gross Beta	5.542E-15	9.946E-15	1.669E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216122	P6WH LOADOUT	10/29/19	Gross Alpha/Beta	Gross Alpha	4.129E-15	8.006E-15	1.186E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216122	P6WH LOADOUT	10/29/19	Gross Alpha/Beta	Gross Beta	1.754E-14	1.358E-14	2.037E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216123	P6WH LOADOUT	10/29/19	Gross Alpha/Beta	Gross Alpha	5.045E-15	7.851E-15	1.108E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216123	P6WH LOADOUT	10/29/19	Gross Alpha/Beta	Gross Beta	1.639E-14	1.269E-14	1.904E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216124	P6WH LOADOUT	10/30/19	Gross Alpha/Beta	Gross Alpha	-7.87E-16	5.104E-15	9.795E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216124	P6WH LOADOUT	10/30/19	Gross Alpha/Beta	Gross Beta	2.851E-15	9.642E-15	1.682E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216125	P6WH LOADOUT	10/30/19	Gross Alpha/Beta	Gross Alpha	3.22E-16	6.785E-15	1.204E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216125	P6WH LOADOUT	10/30/19	Gross Alpha/Beta	Gross Beta	-7.432E-15	1.02E-14	2.069E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216126	P6WH LOADOUT	10/30/19	Gross Alpha/Beta	Gross Alpha	3.822E-15	7.411E-15	1.098E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216126	P6WH LOADOUT	10/30/19	Gross Alpha/Beta	Gross Beta	2.429E-15	1.07E-14	1.886E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216127	P6WH LOADOUT	10/31/19	Gross Alpha/Beta	Gross Beta	2.619E-14	1.294E-14	1.733E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216127	P6WH LOADOUT	10/31/19	Gross Alpha/Beta	Gross Alpha	7.833E-15	8.079E-15	1.009E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216128	P6WH LOADOUT	10/31/19	Gross Alpha/Beta	Gross Beta	2.622E-14	1.484E-14	2.069E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216128	P6WH LOADOUT	10/31/19	Gross Alpha/Beta	Gross Alpha	3.22E-16	6.785E-15	1.204E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216129	P6WH LOADOUT	10/31/19	Gross Alpha/Beta	Gross Beta	2.084E-14	1.315E-14	1.886E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216129	P6WH LOADOUT	10/31/19	Gross Alpha/Beta	Gross Alpha	2.94E-16	6.185E-15	1.098E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216130	P6WH LOADOUT	11/04/19	Gross Alpha/Beta	Gross Beta	3.631E-14	1.362E-14	1.648E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216130	P6WH LOADOUT	11/04/19	Gross Alpha/Beta	Gross Alpha	2.312E-15	6.14E-15	9.596E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216131	P6WH LOADOUT	11/04/19	Gross Alpha/Beta	Gross Beta	4.526E-14	1.676E-14	2.017E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216131	P6WH LOADOUT	11/04/19	Gross Alpha/Beta	Gross Alpha	6.603E-15	8.696E-15	1.174E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216132	P6WH LOADOUT	11/04/19	Gross Alpha/Beta	Gross Beta	3.675E-14	1.674E-14	1.772E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216132	P6WH LOADOUT	11/04/19	Gross Alpha/Beta	Gross Alpha	4.481E-15	7.076E-15	9.974E-15	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216132	P6WH LOADOUT	11/04/19	Gross Alpha/Beta	Gross Beta	4.122E-14	1.718E-14	1.772E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216132	P6WH LOADOUT	11/04/19	Gross Alpha/Beta	Gross Alpha	4.481E-15	7.076E-15	9.974E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216133	P6WH LOADOUT	11/05/19	Gross Alpha/Beta	Gross Beta	2.112E-14	1.392E-14	1.605E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216133	P6WH LOADOUT	11/05/19	Gross Alpha/Beta	Gross Alpha	-1.122E-15	4.419E-15	9.034E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216134	P6WH LOADOUT	11/05/19	Gross Alpha/Beta	Gross Beta	2.906E-14	1.732E-14	1.958E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216134	P6WH LOADOUT	11/05/19	Gross Alpha/Beta	Gross Alpha	-1.05E-16	5.954E-15	1.102E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD216135	P6WH LOADOUT	11/05/19	Gross Alpha/Beta	Gross Beta	3.078E-14	1.613E-14	1.772E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216135	P6WH LOADOUT	11/05/19	Gross Alpha/Beta	Gross Alpha	1.049E-15	5.854E-15	9.974E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216136	P6WH LOADOUT	11/06/19	Gross Alpha/Beta	Gross Beta	3.096E-14	1.507E-14	1.625E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216136	P6WH LOADOUT	11/06/19	Gross Alpha/Beta	Gross Alpha	5.158E-15	6.823E-15	9.146E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216137	P6WH LOADOUT	11/06/19	Gross Alpha/Beta	Gross Beta	3.838E-14	1.806E-14	1.929E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216137	P6WH LOADOUT	11/06/19	Gross Alpha/Beta	Gross Alpha	3.632E-15	7.286E-15	1.086E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216138	P6WH LOADOUT	11/06/19	Gross Alpha/Beta	Gross Beta	4.86E-14	1.808E-14	1.796E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216138	P6WH LOADOUT	11/06/19	Gross Alpha/Beta	Gross Alpha	8.021E-15	8.234E-15	1.011E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216139	P6WH LOADOUT	11/07/19	Gross Alpha/Beta	Gross Beta	2.682E-14	1.296E-14	1.632E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216139	P6WH LOADOUT	11/07/19	Gross Alpha/Beta	Gross Alpha	-2.55E-16	4.85E-15	9.955E-15	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216139	P6WH LOADOUT	11/07/19	Gross Alpha/Beta	Gross Beta	2.748E-14	1.304E-14	1.632E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216139	P6WH LOADOUT	11/07/19	Gross Alpha/Beta	Gross Alpha	5.862E-15	6.973E-15	9.955E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216140	P6WH LOADOUT	11/07/19	Gross Alpha/Beta	Gross Alpha	5.719E-15	7.87E-15	1.176E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216140	P6WH LOADOUT	11/07/19	Gross Alpha/Beta	Gross Beta	1.754E-14	1.366E-14	1.927E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216141	P6WH LOADOUT	11/07/19	Gross Alpha/Beta	Gross Beta	3.098E-14	1.469E-14	1.84E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216141	P6WH LOADOUT	11/07/19	Gross Alpha/Beta	Gross Alpha	3.16E-15	6.766E-15	1.122E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216142	P6WH LOADOUT	11/12/19	Gross Alpha/Beta	Gross Beta	1.748E-14	1.225E-14	1.693E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216142	P6WH LOADOUT	11/12/19	Gross Alpha/Beta	Gross Alpha	-2.64E-16	5.032E-15	1.033E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216143	P6WH LOADOUT	11/12/19	Gross Alpha/Beta	Gross Alpha	-3.24E-16	6.168E-15	1.266E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216143	P6WH LOADOUT	11/12/19	Gross Alpha/Beta	Gross Beta	1.973E-14	1.481E-14	2.075E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216144	P6WH LOADOUT	11/12/19	Gross Alpha/Beta	Gross Beta	2.557E-14	1.434E-14	1.882E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216144	P6WH LOADOUT	11/12/19	Gross Alpha/Beta	Gross Alpha	-2.94E-16	5.594E-15	1.148E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216145	P6WH LOADOUT	11/13/19	Gross Alpha/Beta	Gross Beta	1.857E-14	1.301E-14	1.799E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216145	P6WH LOADOUT	11/13/19	Gross Alpha/Beta	Gross Alpha	-1.405E-15	4.851E-15	1.097E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216146	P6WH LOADOUT	11/13/19	Gross Alpha/Beta	Gross Beta	2.15E-14	1.459E-14	2.004E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216146	P6WH LOADOUT	11/13/19	Gross Alpha/Beta	Gross Alpha	3.442E-15	7.369E-15	1.222E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216147	P6WH LOADOUT	11/13/19	Gross Alpha/Beta	Gross Alpha	-1.699E-15	5.868E-15	1.327E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216147	P6WH LOADOUT	11/13/19	Gross Alpha/Beta	Gross Beta	1.891E-14	1.531E-14	2.176E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216148	P6WH LOADOUT	11/14/19	Gross Alpha/Beta	Gross Beta	4.128E-14	1.466E-14	1.652E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216148	P6WH LOADOUT	11/14/19	Gross Alpha/Beta	Gross Alpha	2.838E-15	6.076E-15	1.008E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216149	P6WH LOADOUT	11/14/19	Gross Alpha/Beta	Gross Beta	4.853E-14	1.743E-14	1.974E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216149	P6WH LOADOUT	11/14/19	Gross Alpha/Beta	Gross Alpha	3.391E-15	7.261E-15	1.204E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216150	P6WH LOADOUT	11/14/19	Gross Alpha/Beta	Gross Beta	3.484E-14	1.492E-14	1.807E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216150	P6WH LOADOUT	11/14/19	Gross Alpha/Beta	Gross Alpha	-2.539E-15	4.32E-15	1.102E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216151	P6WH LOADOUT	11/18/19	Gross Alpha/Beta	Gross Beta	3.512E-14	1.417E-14	1.679E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216151	P6WH LOADOUT	11/18/19	Gross Alpha/Beta	Gross Alpha	1.836E-15	5.807E-15	1.024E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216152	P6WH LOADOUT	11/18/19	Gross Alpha/Beta	Gross Alpha	1.38E-14	1.052E-14	1.253E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216152	P6WH LOADOUT	11/18/19	Gross Alpha/Beta	Gross Beta	4.632E-14	1.77E-14	2.054E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216153	P6WH LOADOUT	11/18/19	Gross Alpha/Beta	Gross Beta	2.015E-13	3.046E-14	1.857E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216153	P6WH LOADOUT	11/18/19	Gross Alpha/Beta	Gross Alpha	-2.609E-15	4.439E-15	1.133E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216154	P6WH LOADOUT	11/19/19	Gross Alpha/Beta	Gross Beta	1.95E-14	1.212E-14	1.632E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216154	P6WH LOADOUT	11/19/19	Gross Alpha/Beta	Gross Alpha	-2.55E-16	4.85E-15	9.955E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216155	P6WH LOADOUT	11/19/19	Gross Alpha/Beta	Gross Alpha	-1.557E-15	5.377E-15	1.216E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216155	P6WH LOADOUT	11/19/19	Gross Alpha/Beta	Gross Beta	1.814E-14	1.413E-14	1.994E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216156	P6WH LOADOUT	11/19/19	Gross Alpha/Beta	Gross Beta	2.748E-14	1.44E-14	1.857E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216156	P6WH LOADOUT	11/19/19	Gross Alpha/Beta	Gross Alpha	2.03E-15	6.42E-15	1.133E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216157	P6WH LOADOUT	11/21/19	Gross Alpha/Beta	Gross Beta	4.618E-14	1.521E-14	1.659E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD216157	P6WH LOADOUT	11/21/19	Gross Alpha/Beta	Gross Alpha	-1.295E-15	4.473E-15	1.012E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216158	P6WH LOADOUT	11/21/19	Gross Alpha/Beta	Gross Beta	2.817E-14	1.543E-14	2.014E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216158	P6WH LOADOUT	11/21/19	Gross Alpha/Beta	Gross Alpha	-1.572E-15	5.43E-15	1.228E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216159	P6WH LOADOUT	11/21/19	Gross Alpha/Beta	Gross Beta	5.122E-14	1.687E-14	1.84E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216159	P6WH LOADOUT	11/21/19	Gross Alpha/Beta	Gross Alpha	8.906E-15	8.516E-15	1.122E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216159	P6WH LOADOUT	11/21/19	Gross Alpha/Beta	Gross Beta	5.197E-14	1.695E-14	1.84E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216159	P6WH LOADOUT	11/21/19	Gross Alpha/Beta	Gross Alpha	5.459E-15	7.512E-15	1.122E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216160	P6WH LOADOUT	11/20/19	Gross Alpha/Beta	Gross Beta	2.001E-14	1.21E-14	1.619E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216160	P6WH LOADOUT	11/20/19	Gross Alpha/Beta	Gross Alpha	-1.264E-15	4.366E-15	9.876E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216161	P6WH LOADOUT	11/20/19	Gross Alpha/Beta	Gross Beta	2.988E-14	1.533E-14	1.965E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216161	P6WH LOADOUT	11/20/19	Gross Alpha/Beta	Gross Alpha	2.148E-15	6.794E-15	1.199E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216162	P6WH LOADOUT	11/20/19	Gross Alpha/Beta	Gross Beta	3.221E-14	1.448E-14	1.783E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216162	P6WH LOADOUT	11/20/19	Gross Alpha/Beta	Gross Alpha	-2.78E-16	5.298E-15	1.088E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216167	P6WH LOADOUT	11/25/19	Gross Alpha/Beta	Gross Beta	4.973E-14	1.778E-14	2.207E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216167	P6WH LOADOUT	11/25/19	Gross Alpha/Beta	Gross Alpha	1.901E-15	5.187E-15	9.647E-15	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216167	P6WH LOADOUT	11/25/19	Gross Alpha/Beta	Gross Beta	4.484E-14	1.732E-14	2.207E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216167	P6WH LOADOUT	11/25/19	Gross Alpha/Beta	Gross Alpha	2.988E-15	5.626E-15	9.647E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216168	P6WH LOADOUT	11/25/19	Gross Alpha/Beta	Gross Beta	2.747E-14	1.856E-14	2.701E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216168	P6WH LOADOUT	11/25/19	Gross Alpha/Beta	Gross Alpha	7.646E-15	8.297E-15	1.181E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216169	P6WH LOADOUT	11/25/19	Gross Alpha/Beta	Gross Beta	4.212E-14	1.855E-14	2.457E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216169	P6WH LOADOUT	11/25/19	Gross Alpha/Beta	Gross Alpha	4.535E-15	6.716E-15	1.074E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216170	P6WH LOADOUT	11/26/19	Gross Alpha/Beta	Gross Beta	4.101E-14	1.686E-14	2.189E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216170	P6WH LOADOUT	11/26/19	Gross Alpha/Beta	Gross Alpha	2.964E-15	5.58E-15	9.569E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216171	P6WH LOADOUT	11/26/19	Gross Alpha/Beta	Gross Beta	5.521E-14	2.084E-14	2.635E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216171	P6WH LOADOUT	11/26/19	Gross Alpha/Beta	Gross Alpha	9.73E-16	5.622E-15	1.152E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216172	P6WH LOADOUT	11/26/19	Gross Alpha/Beta	Gross Beta	4.524E-14	1.884E-14	2.457E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216172	P6WH LOADOUT	11/26/19	Gross Alpha/Beta	Gross Alpha	6.954E-15	7.546E-15	1.074E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216173	P6WH LOADOUT	11/27/19	Gross Alpha/Beta	Gross Alpha	-2.98E-16	4.587E-15	1.059E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216173	P6WH LOADOUT	11/27/19	Gross Alpha/Beta	Gross Beta	2.235E-14	1.643E-14	2.424E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216174	P6WH LOADOUT	11/27/19	Gross Alpha/Beta	Gross Alpha	9.92E-16	5.734E-15	1.175E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216174	P6WH LOADOUT	11/27/19	Gross Alpha/Beta	Gross Beta	1.115E-14	1.682E-14	2.688E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216175	P6WH LOADOUT	11/27/19	Gross Alpha/Beta	Gross Alpha	5.797E-15	7.208E-15	1.084E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216175	P6WH LOADOUT	11/27/19	Gross Alpha/Beta	Gross Beta	2.364E-14	1.688E-14	2.479E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216176	P6WH LOADOUT	12/02/19	Gross Alpha/Beta	Gross Alpha	4.074E-15	6.034E-15	9.647E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216176	P6WH LOADOUT	12/02/19	Gross Alpha/Beta	Gross Beta	1.125E-14	1.403E-14	2.207E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216177	P6WH LOADOUT	12/02/19	Gross Alpha/Beta	Gross Alpha	9.111E-15	8.851E-15	1.199E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216177	P6WH LOADOUT	12/02/19	Gross Alpha/Beta	Gross Beta	1.224E-14	1.725E-14	2.742E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216178	P6WH LOADOUT	12/02/19	Gross Alpha/Beta	Gross Alpha	3.224E-15	6.07E-15	1.041E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216178	P6WH LOADOUT	12/02/19	Gross Alpha/Beta	Gross Beta	1.743E-14	1.568E-14	2.381E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216179	P6WH LOADOUT	12/03/19	Gross Alpha/Beta	Gross Alpha	8.49E-16	4.908E-15	1.006E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216179	P6WH LOADOUT	12/03/19	Gross Alpha/Beta	Gross Beta	1.465E-14	1.493E-14	2.3E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216180	P6WH LOADOUT	12/03/19	Gross Alpha/Beta	Gross Alpha	-3.007E-15	3.485E-15	1.187E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216180	P6WH LOADOUT	12/03/19	Gross Alpha/Beta	Gross Beta	2.589E-14	1.848E-14	2.715E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216181	P6WH LOADOUT	12/03/19	Gross Alpha/Beta	Gross Alpha	8.99E-16	5.194E-15	1.064E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216181	P6WH LOADOUT	12/03/19	Gross Alpha/Beta	Gross Beta	1.936E-14	1.619E-14	2.435E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216182	P6WH LOADOUT	12/04/19	Gross Alpha/Beta	Gross Beta	3.689E-14	1.673E-14	2.234E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216182	P6WH LOADOUT	12/04/19	Gross Alpha/Beta	Gross Alpha	4.124E-15	6.108E-15	9.766E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD216183	P6WH LOADOUT	12/04/19	Gross Alpha/Beta	Gross Alpha	4.986E-15	7.385E-15	1.181E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216183	P6WH LOADOUT	12/04/19	Gross Alpha/Beta	Gross Beta	1.035E-14	1.681E-14	2.701E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216184	P6WH LOADOUT	12/04/19	Gross Alpha/Beta	Gross Beta	3.387E-14	1.756E-14	2.424E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216184	P6WH LOADOUT	12/04/19	Gross Alpha/Beta	Gross Alpha	8.054E-15	7.823E-15	1.059E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216185	P6WH LOADOUT	12/05/19	Gross Alpha/Beta	Gross Beta	3.031E-14	1.632E-14	2.272E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216185	P6WH LOADOUT	12/05/19	Gross Alpha/Beta	Gross Alpha	9.785E-15	7.997E-15	9.929E-15	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216186	P6WH LOADOUT	12/05/19	Gross Alpha/Beta	Gross Beta	3.54E-14	2.026E-14	2.857E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216186	P6WH LOADOUT	12/05/19	Gross Alpha/Beta	Gross Alpha	2.462E-15	6.716E-15	1.249E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216187	P6WH LOADOUT	12/05/19	Gross Alpha/Beta	Gross Beta	1.878E-14	1.212E-14	1.805E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216187	P6WH LOADOUT	12/05/19	Gross Alpha/Beta	Gross Alpha	8.021E-15	7.486E-15	8.87E-15	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216187	P6WH LOADOUT	12/05/19	Gross Alpha/Beta	Gross Beta	3.769E-14	1.447E-14	1.805E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216187	P6WH LOADOUT	12/05/19	Gross Alpha/Beta	Gross Alpha	3.383E-15	5.855E-15	8.87E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216188	P6WH LOADOUT	12/09/19	Gross Alpha/Beta	Gross Beta	3.478E-14	1.317E-14	1.633E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216188	P6WH LOADOUT	12/09/19	Gross Alpha/Beta	Gross Alpha	3.06E-15	5.296E-15	8.024E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216189	P6WH LOADOUT	12/09/19	Gross Alpha/Beta	Gross Beta	2.804E-14	1.424E-14	1.977E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216189	P6WH LOADOUT	12/09/19	Gross Alpha/Beta	Gross Alpha	1.165E-15	5.307E-15	9.717E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216190	P6WH LOADOUT	12/09/19	Gross Alpha/Beta	Gross Beta	4.994E-14	1.559E-14	1.757E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216190	P6WH LOADOUT	12/09/19	Gross Alpha/Beta	Gross Alpha	4.421E-15	6.132E-15	8.633E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216191	P6WH LOADOUT	12/10/19	Gross Alpha/Beta	Gross Alpha	3.01E-15	5.209E-15	7.893E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216191	P6WH LOADOUT	12/10/19	Gross Alpha/Beta	Gross Beta	8.637E-15	9.677E-15	1.606E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216192	P6WH LOADOUT	12/10/19	Gross Alpha/Beta	Gross Beta	3.836E-14	1.562E-14	1.997E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216192	P6WH LOADOUT	12/10/19	Gross Alpha/Beta	Gross Alpha	3.743E-15	6.479E-15	9.816E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216193	P6WH LOADOUT	12/10/19	Gross Alpha/Beta	Gross Beta	3.047E-14	1.347E-14	1.78E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216193	P6WH LOADOUT	12/10/19	Gross Alpha/Beta	Gross Alpha	1.049E-15	4.779E-15	8.75E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216194	P6WH LOADOUT	12/11/19	Gross Alpha/Beta	Gross Alpha	9.62E-16	4.382E-15	8.024E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216194	P6WH LOADOUT	12/11/19	Gross Alpha/Beta	Gross Beta	1.562E-14	1.079E-14	1.633E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216195	P6WH LOADOUT	12/11/19	Gross Alpha/Beta	Gross Beta	2.246E-14	1.364E-14	1.997E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216195	P6WH LOADOUT	12/11/19	Gross Alpha/Beta	Gross Alpha	-1.39E-15	3.945E-15	9.816E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216196	P6WH LOADOUT	12/11/19	Gross Alpha/Beta	Gross Beta	2.924E-14	1.341E-14	1.797E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216196	P6WH LOADOUT	12/11/19	Gross Alpha/Beta	Gross Alpha	2.213E-15	5.348E-15	8.83E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216197	P6WH LOADOUT	12/12/19	Gross Alpha/Beta	Gross Beta	2.252E-14	1.237E-14	1.612E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216197	P6WH LOADOUT	12/12/19	Gross Alpha/Beta	Gross Alpha	6.12E-16	4.307E-15	8.423E-15	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216197	P6WH LOADOUT	12/12/19	Gross Alpha/Beta	Gross Beta	3.894E-14	1.424E-14	1.612E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216197	P6WH LOADOUT	12/12/19	Gross Alpha/Beta	Gross Alpha	5.857E-15	6.381E-15	8.423E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216198	P6WH LOADOUT	12/12/19	Gross Alpha/Beta	Gross Beta	3.991E-14	1.65E-14	1.962E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216198	P6WH LOADOUT	12/12/19	Gross Alpha/Beta	Gross Alpha	5.852E-15	7.33E-15	1.025E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216199	P6WH LOADOUT	12/12/19	Gross Alpha/Beta	Gross Alpha	6.358E-15	6.927E-15	9.144E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216199	P6WH LOADOUT	12/12/19	Gross Alpha/Beta	Gross Beta	1.108E-14	1.175E-14	1.75E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216200	P6WH LOADOUT	12/17/19	Gross Alpha/Beta	Gross Beta	3.1E-14	1.496E-14	1.877E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216200	P6WH LOADOUT	12/17/19	Gross Alpha/Beta	Gross Alpha	4.376E-15	6.567E-15	9.807E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216201	P6WH LOADOUT	12/18/19	Gross Alpha/Beta	Gross Alpha	1.163E-14	8.327E-15	8.826E-15	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216201	P6WH LOADOUT	12/18/19	Gross Alpha/Beta	Gross Beta	4.152E-14	1.5E-14	1.689E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216202	P6WH LOADOUT	12/18/19	Gross Alpha/Beta	Gross Beta	6.589E-14	1.982E-14	2.045E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216202	P6WH LOADOUT	12/18/19	Gross Alpha/Beta	Gross Alpha	7.429E-15	8.094E-15	1.068E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216203	P6WH LOADOUT	12/18/19	Gross Alpha/Beta	Gross Alpha	1.643E-14	1.01E-14	9.713E-15	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216203	P6WH LOADOUT	12/18/19	Gross Alpha/Beta	Gross Beta	8.751E-14	2.077E-14	1.859E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216204	P6WH LOADOUT	12/19/19	Gross Alpha/Beta	Gross Beta	4.852E-14	1.604E-14	1.734E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air

Table B-3. SLDS Perimeter Air Data Results for CY 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
SLD216204	P6WH LOADOUT	12/19/19	Gross Alpha/Beta	Gross Alpha	7.43E-15	7.232E-15	9.062E-15	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216205	P6WH LOADOUT	12/19/19	Gross Alpha/Beta	Gross Beta	4.115E-14	1.755E-14	2.111E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216205	P6WH LOADOUT	12/19/19	Gross Alpha/Beta	Gross Alpha	7.672E-15	8.358E-15	1.103E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216206	P6WH LOADOUT	12/19/19	Gross Alpha/Beta	Gross Beta	7.753E-14	2.01E-14	1.904E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216206	P6WH LOADOUT	12/19/19	Gross Alpha/Beta	Gross Alpha	4.441E-15	6.664E-15	9.951E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216207	P6WH LOADOUT	12/23/19	Gross Alpha/Beta	Gross Beta	3.794E-14	1.46E-14	1.689E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216207	P6WH LOADOUT	12/23/19	Gross Alpha/Beta	Gross Alpha	5.038E-15	6.31E-15	8.826E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216208	P6WH LOADOUT	12/23/19	Gross Alpha/Beta	Gross Beta	5.818E-14	1.943E-14	2.111E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216208	P6WH LOADOUT	12/23/19	Gross Alpha/Beta	Gross Alpha	7.672E-15	8.358E-15	1.103E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216209	P6WH LOADOUT	12/23/19	Gross Alpha/Beta	Gross Beta	6.048E-14	1.819E-14	1.877E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216209	P6WH LOADOUT	12/23/19	Gross Alpha/Beta	Gross Alpha	3.155E-15	6.092E-15	9.807E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216210	P6WH LOADOUT	12/24/19	Gross Alpha/Beta	Gross Alpha	3.728E-15	5.594E-15	8.354E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216210	P6WH LOADOUT	12/24/19	Gross Alpha/Beta	Gross Beta	1.148E-14	1.091E-14	1.599E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216211	P6WH LOADOUT	12/24/19	Gross Alpha/Beta	Gross Beta	3.022E-14	1.55E-14	1.982E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216211	P6WH LOADOUT	12/24/19	Gross Alpha/Beta	Gross Alpha	4.622E-15	6.936E-15	1.036E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216212	P6WH LOADOUT	12/24/19	Gross Alpha/Beta	Gross Alpha	-1.621E-15	3.405E-15	9.185E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216212	P6WH LOADOUT	12/24/19	Gross Alpha/Beta	Gross Beta	1.262E-14	1.2E-14	1.758E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216213	P6WH LOADOUT	12/26/19	Gross Alpha/Beta	Gross Beta	2.709E-14	1.282E-14	1.599E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216213	P6WH LOADOUT	12/26/19	Gross Alpha/Beta	Gross Alpha	2.688E-15	5.19E-15	8.354E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216214	P6WH LOADOUT	12/26/19	Gross Alpha/Beta	Gross Beta	1.7E-14	1.206E-14	1.675E-14	µCi/mL	J	T04, T20	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216214	P6WH LOADOUT	12/26/19	Gross Alpha/Beta	Gross Alpha	6.36E-16	4.474E-15	8.75E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216215	P6WH LOADOUT	12/26/19	Gross Alpha/Beta	Gross Beta	3.307E-14	1.458E-14	1.774E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216215	P6WH LOADOUT	12/26/19	Gross Alpha/Beta	Gross Alpha	2.982E-15	5.759E-15	9.269E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216216	P6WH LOADOUT	12/30/19	Gross Alpha/Beta	Gross Beta	2.552E-14	1.256E-14	1.586E-14	µCi/mL	=		Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216216	P6WH LOADOUT	12/30/19	Gross Alpha/Beta	Gross Alpha	6.02E-16	4.236E-15	8.286E-15	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216217	P6WH LOADOUT	12/30/19	Gross Alpha/Beta	Gross Beta	2.797E-14	1.955E-14	2.656E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216217	P6WH LOADOUT	12/30/19	Gross Alpha/Beta	Gross Alpha	8.975E-15	9.187E-15	1.181E-14	µCi/mL			Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216217	P6WH LOADOUT	12/30/19	Gross Alpha/Beta	Gross Alpha	-2.992E-15	4.517E-15	1.181E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216217	P6WH LOADOUT	12/30/19	Gross Alpha/Beta	Gross Beta	2.112E-14	1.89E-14	2.656E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216218	P6WH LOADOUT	12/30/19	Gross Alpha/Beta	Gross Alpha	7.017E-15	8.065E-15	1.084E-14	µCi/mL	UJ	T06	Plant 6WH LOADOUT (General Area)-Perimeter Air
SLD216218	P6WH LOADOUT	12/30/19	Gross Alpha/Beta	Gross Beta	2.017E-14	1.742E-14	2.437E-14	µCi/mL	UJ	T04, T05	Plant 6WH LOADOUT (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.

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:

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 2019

Sample Name	Station Name	Sample Collection Date	Method Type	Analyte Name	Analytical Result	Measurement Error	DL	Units	VQ	Validation Reason Code	Sampling Event Name
HIS215149	BA-1	07/01/19	Radiological	Rn-222	0.2	0	0.2	pCi/L	UJ	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2019
HIS219887	BA-1	01/06/20	Radiological	Rn-222	0.2	0	0.2	pCi/L	UJ	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2019
SLD215137	DA-2	07/01/19	Radiological	Rn-222	0.2	0	0.2	pCi/L	UJ	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2019
SLD219905	DA-2	01/06/20	Radiological	Rn-222	0.2	0	0.2	pCi/L	UJ	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2019
SLD215138	DA-3	07/01/19	Radiological	Rn-222	0.2	0	0.2	pCi/L	UJ	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2019
SLD219906	DA-3	01/06/20	Radiological	Rn-222	0.2	0	0.2	pCi/L	UJ	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2019
SLD215139	DA-7	07/01/19	Radiological	Rn-222	0.2	0	0.2	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2019
SLD219907	DA-7	01/06/20	Radiological	Rn-222	0.2	0	0.2	pCi/L	UJ	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2019
SLD215140	DA-8	07/01/19	Radiological	Rn-222	0.2	0	0.2	pCi/L	UJ	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2019
SLD219908	DA-8	01/06/20	Radiological	Rn-222	0.2	0	0.2	pCi/L	UJ	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2019
SLD215140-1	DA-8 DUP	07/01/19	Radiological	Rn-222	0.28	0	0.2	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2019
SLD219908-1	DA-8 DUP	01/06/20	Radiological	Rn-222	0.2	0	0.2	pCi/L	UJ	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2019
SLD215141	DA-9	07/01/19	Radiological	Rn-222	0.2	0	0.2	pCi/L	UJ	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2019
SLD219909	DA-9	01/06/20	Radiological	Rn-222	0.2	0	0.2	pCi/L	UJ	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2019
SLD215142	DI-1	07/01/19	Radiological	Rn-222	0.2	0	0.2	pCi/L	UJ	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2019
SLD219910	DI-1	01/06/20	Radiological	Rn-222	2.3	0	0.2	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2019
SLD215143	DI-2	07/01/19	Radiological	Rn-222	1.12	0	0.2	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-1st Semiannual 2019
SLD219911	DI-2	01/06/20	Radiological	Rn-222	1.3	0	0.2	pCi/L	J	Y01	Environmental Monitoring (Alpha Tracks)-2nd Semiannual 2019

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

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Table C-1. First Quarter Self-Monitoring Report for Excavation-Water Discharge at the SLDS During CY 2019

Parameter	Batch Number	Date of Discharge	Batch Results ^a		Amount Discharged (Gallons)	Total Activity per Discharge (Ci) ^b		MSD Discharge Limit		SOR
Gross Alpha (raw water)	SLDS-BK580	01/02/19 - 01/28/19 (Plant 6WH)	63	pCi/L	177,910	4.2E-05	3,000	pCi/L	0.03	
Gross Beta			18.4	pCi/L		1.2E-05	NA			
Th-228			<0.6	pCi/L		1.9E-07	2,000	pCi/L		
Th-230			<0.5	pCi/L		1.8E-07	1,000	pCi/L		
Th-232			<0.4	pCi/L		1.4E-07	300	pCi/L		
Uranium (KPA)			62.2	pCi/L		4.2E-05	3,000	pCi/L		
Ra-226 ^c			<3.4	pCi/L		1.1E-06	10	pCi/L		
Ra-228 ^{d,e}			<0.6	pCi/L		1.9E-07	30	pCi/L		
TSS			24.9	mg/L		-	-			
Gross Alpha (raw water)	SLDS-BK581	02/04/19 - 02/27/19 (Plant 6WH)	74	pCi/L	239,325	6.7E-05	3,000	pCi/L	0.03	
Gross Beta			22.9	pCi/L		2.1E-05	NA			
Th-228			<1	pCi/L		4.4E-07	2,000	pCi/L		
Th-230			<0.6	pCi/L		2.9E-07	1,000	pCi/L		
Th-232			<0.5	pCi/L		2.4E-07	300	pCi/L		
Uranium (KPA)			83.2	pCi/L		7.5E-05	3,000	pCi/L		
Ra-226 ^c			<2.3	pCi/L		1.0E-06	10	pCi/L		
Ra-228 ^{d,e}			<1	pCi/L		4.4E-07	30	pCi/L		
TSS			63.1	mg/L		-	-			
Gross Alpha (raw water)	SLDS-BK582	03/04/19 - 03/30/19 (Plant 6WH)	48.1	pCi/L	331,922	6.0E-05	3,000	pCi/L	0.02	
Gross Beta			25	pCi/L		3.1E-05	NA			
Th-228			<0.8	pCi/L		5.2E-07	2,000	pCi/L		
Th-230			<0.7	pCi/L		4.6E-07	1,000	pCi/L		
Th-232			<0.5	pCi/L		3.4E-07	300	pCi/L		
Uranium (KPA)			38.3	pCi/L		4.8E-05	3,000	pCi/L		
Ra-226 ^c			<1.9	pCi/L		1.2E-06	10	pCi/L		
Ra-228 ^{d,e}			<0.8	pCi/L		5.2E-07	30	pCi/L		
TSS			114.4	mg/L		-	-			

Total Activity Discharged in First Quarter of CY 2019 (Ci)

Th-228	1.2E-06
Th-230	9.3E-07
Th-232	7.2E-07
Uranium (KPA)	1.7E-04
Ra-226	3.4E-06
Ra-228 ^d	1.2E-06

Total Activity Discharged through 03/31/19 (Ci)

Th-228	1.2E-06
Th-230	9.3E-07
Th-232	7.2E-07
Uranium (KPA)	1.7E-04
Ra-226	3.4E-06
Ra-228 ^d	1.2E-06

Total Volume Discharged in First Quarter of CY 2019 (gallons)

Gallons	749,157
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Total Volume Discharged through 03/31/19 (gallons)

Gallons	749,157
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^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
- KPA - kinetic phosphorescence analysis
- NA - 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 2019

Parameter	Batch Number	Date of Discharge	Batch Results ^a		Amount Discharged (Gallons)	Total Activity per Discharge (Ci) ^b		MSD Discharge Limit		SOR
Gross Alpha (raw water)	SLDS-BK583	04/01/19 - 04/25/19 (Plant 6WH)	51.9	pCi/L	187,095	3.7E-05	3,000	pCi/L	0.02	
Gross Beta			<19.2	pCi/L		6.8E-06	NA			
Th-228			<0.6	pCi/L		2.1E-07	2,000	pCi/L		
Th-230			<0.7	pCi/L		2.4E-07	1,000	pCi/L		
Th-232			<0.5	pCi/L		1.8E-07	300	pCi/L		
Uranium (KPA)			42.8	pCi/L		3.0E-05	3,000	pCi/L		
Ra-226 ^c			<2.2	pCi/L		7.8E-07	10	pCi/L		
Ra-228 ^{d,e}			<0.6	pCi/L		2.1E-07	30	pCi/L		
TSS			49.2	mg/L		-	-			
Gross Alpha (raw water)	SLDS-BK584	05/01/19 - 05/30/19 (Plant 6WH)	36.2	pCi/L	173,630	2.4E-05	3,000	pCi/L	0.02	
Gross Beta			23	pCi/L		1.5E-05	NA			
Th-228			<0.8	pCi/L		2.5E-07	2,000	pCi/L		
Th-230			0.6	pCi/L		4.2E-07	1,000	pCi/L		
Th-232			<0.6	pCi/L		2.0E-07	300	pCi/L		
Uranium (KPA)			33.8	pCi/L		2.2E-05	3,000	pCi/L		
Ra-226 ^c			<2.2	pCi/L		7.1E-07	10	pCi/L		
Ra-228 ^{d,e}			<0.8	pCi/L		2.5E-07	30	pCi/L		
TSS			91.1	mg/L		-	-			
Gross Alpha (raw water)	SLDS-BK585	06/03/19 - 06/27/19 (Plant 6WH)	19.1	pCi/L	80,828	5.8E-06	3,000	pCi/L	0.01	
Gross Beta			<17.4	pCi/L		2.7E-06	NA			
Th-228			<0.6	pCi/L		8.9E-08	2,000	pCi/L		
Th-230			0.8	pCi/L		2.4E-07	1,000	pCi/L		
Th-232			<0.4	pCi/L		6.1E-08	300	pCi/L		
Uranium (KPA)			17.5	pCi/L		5.4E-06	3,000	pCi/L		
Ra-226 ^c			<1.5	pCi/L		2.2E-07	10	pCi/L		
Ra-228 ^{d,e}			<0.6	pCi/L		8.9E-08	30	pCi/L		
TSS			111.7	mg/L		-	-			

Total Activity Discharged in Second Quarter of CY 2019 (Ci)

Th-228	5.5E-07
Th-230	9.1E-07
Th-232	4.4E-07
Uranium (KPA)	5.8E-05
Ra-226	1.7E-06
Ra-228 ^d	5.5E-07

Total Activity Discharged through 06/30/19 (Ci)

Th-228	1.7E-06
Th-230	1.8E-06
Th-232	1.2E-06
Uranium (KPA)	2.2E-04
Ra-226	5.1E-06
Ra-228 ^d	1.7E-06

Total Volume Discharged in Second Quarter of CY 2019 (gallons)

Gallons	441,553
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Total Volume Discharged through 06/30/19 (gallons)

Gallons	1,190,710
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^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
- KPA - kinetic phosphorescence analysis
- NA - 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 2019

Parameter	Batch Number	Date of Discharge	Batch Results ^a		Amount Discharged (Gallons)	Total Activity per Discharge (Ci) ^b	MSD Discharge Limit		SOR
Gross Alpha (raw water)	SLDS-BK586	07/03/19 - 07/25/19 (Plant 6WH)	22.2	pCi/L	106,045	8.9E-06	3,000	pCi/L	0.01
Gross Beta			27	pCi/L		1.1E-05	NA		
Th-228			<0.5	pCi/L		1.1E-07	2,000	pCi/L	
Th-230			1.0	pCi/L		4.0E-07	1,000	pCi/L	
Th-232			<0.5	pCi/L		9.4E-08	300	pCi/L	
Uranium (KPA)			19.4	pCi/L		7.8E-06	3,000	pCi/L	
Ra-226 ^c			<1.4	pCi/L		2.7E-07	10	pCi/L	
Ra-228 ^{d,e}			<0.5	pCi/L		1.1E-07	30	pCi/L	
TSS			159.2	mg/L		-	-		
Gross Alpha (raw water)	SLDS-BK587	08/01/19 - 08/31/19 (Plant 6WH)	48.4	pCi/L	154,059	2.8E-05	3,000	pCi/L	0.01
Gross Beta			35	pCi/L		2.1E-05	NA		
Th-228			<0.6	pCi/L		1.8E-07	2,000	pCi/L	
Th-230			3.6	pCi/L		2.1E-06	1,000	pCi/L	
Th-232			<0.5	pCi/L		1.6E-07	300	pCi/L	
Uranium (KPA)			25.2	pCi/L		1.5E-05	3,000	pCi/L	
Ra-226 ^c			<1.4	pCi/L		4.0E-07	10	pCi/L	
Ra-228 ^{d,e}			<0.6	pCi/L		1.8E-07	30	pCi/L	
TSS			181.7	mg/L		-	-		
Gross Alpha (raw water)	SLDS-BK588	08/05/19 - 08/28/19 (Gunther Salt)	127.9	pCi/L	197,615	9.6E-05	3,000	pCi/L	0.05
Gross Beta			61	pCi/L		4.6E-05	NA		
Th-228			1.0	pCi/L		7.7E-07	2,000	pCi/L	
Th-230			1.7	pCi/L		1.2E-06	1,000	pCi/L	
Th-232			<1.1	pCi/L		4.1E-07	300	pCi/L	
Uranium (KPA)			111.9	pCi/L		8.4E-05	3,000	pCi/L	
Ra-226 ^c			4	pCi/L		2.7E-06	10	pCi/L	
Ra-228 ^{d,e}			1.0	pCi/L		7.7E-07	30	pCi/L	
TSS			102.1	mg/L		-	-		
Gross Alpha (raw water)	SLDS-BK589	09/03/19 - 09/30/19 (Gunther Salt)	126.4	pCi/L	111,605	5.3E-05	3,000	pCi/L	0.05
Gross Beta			52.7	pCi/L		2.2E-05	NA		
Th-228			<1.7	pCi/L		3.5E-07	2,000	pCi/L	
Th-230			2.3	pCi/L		9.6E-07	1,000	pCi/L	
Th-232			<1.2	pCi/L		2.5E-07	300	pCi/L	
Uranium (KPA)			117.5	pCi/L		5.0E-05	3,000	pCi/L	
Ra-226 ^c			3.4	pCi/L		1.4E-06	10	pCi/L	
Ra-228 ^{d,e}			<1.7	pCi/L		3.5E-07	30	pCi/L	
TSS			69.2	mg/L		-	-	-	

Table C-1. Third Quarter Self-Monitoring Report for Excavation-Water Discharge at the SLDS During CY 2019

Parameter	Batch Number	Date of Discharge	Batch Results ^a		Amount Discharged (Gallons)	Total Activity per Discharge (Ci) ^b	MSD Discharge Limit		SOR
Gross Alpha (raw water)	SLDS-BK590	09/12/19 (Plant 6WH)	68.7	pCi/L	11,390	3.0E-06	3,000	pCi/L	0.02
Gross Beta			<16.7	pCi/L		3.6E-07	NA		
Th-228			<0.7	pCi/L		1.5E-08	2,000	pCi/L	
Th-230			1.1	pCi/L		4.7E-08	1,000	pCi/L	
Th-232			<0.4	pCi/L		7.8E-09	300	pCi/L	
Uranium (KPA)			49.5	pCi/L		2.1E-06	3,000	pCi/L	
Ra-226 ^c			<1.2	pCi/L		2.5E-08	10	pCi/L	
Ra-228 ^{d,e}			<0.7	pCi/L		1.5E-08	30	pCi/L	
TSS			<5.5	mg/L		-	-	-	

Total Activity Discharged in Third Quarter of CY 2019 (Ci)

Th-228	1.4E-06
Th-230	4.8E-06
Th-232	9.2E-07
Uranium (KPA)	1.6E-04
Ra-226	4.8E-06
Ra-228^d	1.4E-06

Total Activity Discharged through 09/30/19 (Ci)

Th-228	3.1E-06
Th-230	6.6E-06
Th-232	2.1E-06
Uranium (KPA)	3.8E-04
Ra-226	9.9E-06
Ra-228^d	3.1E-06

Total Volume Discharged in Third Quarter of CY 2019 (gallons)

Gallons	580,714
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Total Volume Discharged through 09/30/19 (gallons)

Gallons	1,771,424
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^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

KPA - kinetic phosphorescence analysis

NA - 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 2019

Parameter	Batch Number	Date of Discharge	Batch Results ^a		Amount Discharged (Gallons)	Total Activity per Discharge (Ci) ^b		MSD Discharge Limit		SOR
Gross Alpha (raw water)	SLDS-BK591	10/01/19 - 10/28/19 (Gunther Salt)	141.3	pCi/L	11,295	6.0E-06	3,000	pCi/L	0.06	
Gross Beta			82	pCi/L		3.5E-06	NA			
Th-228			<1.2	pCi/L		2.6E-08	2,000	pCi/L		
Th-230			1.9	pCi/L		8.1E-08	1,000	pCi/L		
Th-232			<0.8	pCi/L		1.7E-08	300	pCi/L		
Uranium (KPA)			155.3	pCi/L		6.6E-06	3,000	pCi/L		
Ra-226 ^c			3	pCi/L		1.1E-07	10	pCi/L		
Ra-228 ^{d,e}			<1.2	pCi/L		2.6E-08	30	pCi/L		
TSS			94.8	mg/L		-	-			
Gross Alpha (raw water)	SLDS-BK592	10/10/19 - 10/31/19 (Plant 6WH)	32.6	pCi/L	79,100	9.7E-06	3,000	pCi/L	0.01	
Gross Beta			<17.5	pCi/L		2.6E-06	NA			
Th-228			<1.6	pCi/L		2.4E-07	2,000	pCi/L		
Th-230			<0.7	pCi/L		1.1E-07	1,000	pCi/L		
Th-232			<0.9	pCi/L		1.4E-07	300	pCi/L		
Uranium (KPA)			29.4	pCi/L		8.8E-06	3,000	pCi/L		
Ra-226 ^c			<1.7	pCi/L		2.5E-07	10	pCi/L		
Ra-228 ^{d,e}			<1.6	pCi/L		2.4E-07	30	pCi/L		
TSS			15.8	mg/L		-	-			
Gross Alpha (raw water)	SLDS-BK593	11/04/19 - 11/25/19 (Gunther Salt)	94.6	pCi/L	135,745	4.9E-05	3,000	pCi/L	0.04	
Gross Beta			37.6	pCi/L		1.9E-05	NA			
Th-228			1.9	pCi/L		9.6E-07	2,000	pCi/L		
Th-230			2	pCi/L		1.2E-06	1,000	pCi/L		
Th-232			<1.2	pCi/L		3.2E-07	300	pCi/L		
Uranium (KPA)			83.0	pCi/L		4.3E-05	3,000	pCi/L		
Ra-226 ^c			<3	pCi/L		7.8E-07	10	pCi/L		
Ra-228 ^{d,e}			1.9	pCi/L		9.6E-07	30	pCi/L		
TSS			109.7	mg/L		-	-			
Gross Alpha (raw water)	SLDS-BK594	11/21/19 - 11/30/19 (Plant 6WH)	145.0	pCi/L	57,971	3.2E-05	3,000	pCi/L	0.04	
Gross Beta			48.6	pCi/L		1.1E-05	NA			
Th-228			<0.9	pCi/L		9.7E-08	2,000	pCi/L		
Th-230			1.4	pCi/L		3.2E-07	1,000	pCi/L		
Th-232			<0.7	pCi/L		7.3E-08	300	pCi/L		
Uranium (KPA)			120.9	pCi/L		2.7E-05	3,000	pCi/L		
Ra-226 ^c			<0.9	pCi/L		1.0E-07	10	pCi/L		
Ra-228 ^{d,e}			<0.9	pCi/L		9.7E-08	30	pCi/L		
TSS			33.1	mg/L		-	-			
Gross Alpha (raw water)	SLDS-BK595	12/03/19 - 12/12/19 (Gunther Salt)	73.8	pCi/L	38,415	1.1E-05	3,000	pCi/L	0.03	
Gross Beta			29.0	pCi/L		4.2E-06	NA			
Th-228			1.2	pCi/L		1.8E-07	2,000	pCi/L		
Th-230			2.1	pCi/L		3.0E-07	1,000	pCi/L		
Th-232			<0.8	pCi/L		5.7E-08	300	pCi/L		
Uranium (KPA)			43.9	pCi/L		6.4E-06	3,000	pCi/L		
Ra-226 ^c			4.6	pCi/L		6.7E-07	10	pCi/L		
Ra-228 ^{d,e}			1.2	pCi/L		1.8E-07	30	pCi/L		
TSS			9.5	mg/L		-	-			

Table C-1. Fourth Quarter Self-Monitoring Report for Excavation-Water Discharge at the SLDS During CY 2019

Parameter	Batch Number	Date of Discharge	Batch Results ^a		Amount Discharged (Gallons)	Total Activity per Discharge (Ci) ^b	MSD Discharge Limit		SOR
Gross Alpha (raw water)	SLDS-BK596	12/30/19 (Plant 6WH)	107.0	pCi/L	26,034	1.1E-05	3,000	pCi/L	0.03
Gross Beta			59.7	pCi/L		5.9E-06	NA		
Th-228			<0.5	pCi/L		2.4E-08	2,000	pCi/L	
Th-230			1.36	pCi/L		1.3E-07	1,000	pCi/L	
Th-232			<0.3	pCi/L		1.5E-08	300	pCi/L	
Uranium (KPA)			71.7	pCi/L		7.1E-06	3,000	pCi/L	
Ra-226 ^c			<1.6	pCi/L		7.9E-08	10	pCi/L	
Ra-228 ^{d,e}			<0.5	pCi/L		2.4E-08	30	pCi/L	
TSS			15.3	mg/L		-	-		

Total Activity Discharged in Fourth Quarter of CY 2019 (Ci)

Th-228	1.5E-06
Th-230	2.1E-06
Th-232	6.2E-07
Uranium (KPA)	9.8E-05
Ra-226	2.0E-06
Ra-228 ^d	1.5E-06

Total Activity Discharged through 12/31/19 (Ci)

Th-228	4.7E-06
Th-230	8.7E-06
Th-232	2.7E-06
Uranium (KPA)	4.8E-04
Ra-226	1.2E-05
Ra-228 ^d	4.7E-06

Total Volume Discharged in Fourth Quarter of CY 2019 (gallons)

Gallons	348,560
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Total Volume Discharged through 12/31/19 (gallons)

Gallons	2,119,984
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^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

KPA - kinetic phosphorescence analysis

NA - not applicable

SOR - sum of ratios

TSS - total suspended solid(s)

APPENDIX D

**GROUND-WATER FIELD PARAMETER DATA FOR CALENDAR YEAR 2019
AND ANALYTICAL DATA RESULTS FOR CALENDAR YEAR 2019**

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Table D-1. Ground-Water Monitoring First Quarter 2019 - Field Parameters for the SLDS

Station ID	Date Sampled	Purge Rate (mL/minute)	Volume Removed (mL)	pH	Conductivity ($\mu\text{S/cm}$)	Turbidity (NTU)	DO (mg/L)	Temp ($^{\circ}\text{C}$)	ORP (mV)	Depth to Water (ft) at Sampling Time	Depth to Water (ft) (BTOC) 02/20/19
B16W06D	---	---	---	---	---	---	---	---	---	---	24.7
B16W06S	---	---	---	---	---	---	---	---	---	---	25.08
B16W07D	02/20/19	250	3,000	6.53	0.222	51.5	5.79	15.2	25	26.79	26.79
B16W08D	---	---	---	---	---	---	---	---	---	---	27.14
B16W08S	---	---	---	---	---	---	---	---	---	---	22.78
B16W09D	---	---	---	---	---	---	---	---	---	---	22.29
B16W12S	---	---	---	---	---	---	---	---	---	---	14.45
DW14	---	---	---	---	---	---	---	---	---	---	17.18
DW15	---	---	---	---	---	---	---	---	---	---	27.86
DW16	---	---	---	---	---	---	---	---	---	---	23.50
DW17	---	---	---	---	---	---	---	---	---	---	22.46
DW18	---	---	---	---	---	---	---	---	---	---	28.37
DW19RD	03/26/19	100	2,400	6.24	0.186	146	3.39	14.9	-233	7.89	7.89*
DW19RS	03/26/19	45	945	6.5	0.289	192	3.81	13.7	-102	10.36	10.24*
DW21	---	---	---	---	---	---	---	---	---	---	9.37

Table D-1. Ground-Water Monitoring Second Quarter 2019 - Field Parameters for the SLDS

Station ID	Date Sampled	Purge Rate (mL/minute)	Volume Removed (mL)	pH	Conductivity ($\mu\text{S/cm}$)	Turbidity (NTU)	DO (mg/L)	Temp ($^{\circ}\text{C}$)	ORP (mV)	Depth to Water (ft) at Sampling Time	Depth to Water (ft) (BTOC) 05/10/19
B16W06D	---	---	---	---	---	---	---	---	---	---	2.73
B16W06S	---	---	---	---	---	---	---	---	---	---	8.34
B16W07D	---	---	---	---	---	---	---	---	---	---	5.31
B16W08D	05/13/19	300	4,500	6.82	0.185	86.5	3.31	16	-117	5.32	5.28
B16W08S	---	---	---	---	---	---	---	---	---	---	5.94
B16W09D	---	---	---	---	---	---	---	---	---	---	1.84
B16W12S	---	---	---	---	---	---	---	---	---	---	11.42
DW14	---	---	---	---	---	---	---	---	---	---	**
DW15	---	---	---	---	---	---	---	---	---	---	7.23
DW16	05/13/19	300	5,400	6.55	0.15	144	3.12	15.9	-82	2.56	2.5
DW17	---	---	---	---	---	---	---	---	---	---	0.93
DW18	05/13/19	300	4,500	6.95	0.176	138	3.12	15.5	-168	6.97	6.93
DW19RD	05/13/19	100	1,500	6.81	0.178	52	3.04	15.2	-275	2.8	2.72
DW19RS	05/13/19	45	540	7.09	0.141	148	3.13	14.8	-164	6.73	6.45
DW21	---	---	---	---	---	---	---	---	---	---	6.81

Table D-1. Ground-Water Monitoring Third Quarter 2019 - Field Parameters for the SLDS

Station ID	Date Sampled	Purge Rate (mL/minute)	Volume Removed (mL)	pH	Conductivity ($\mu\text{S/cm}$)	Turbidity (NTU)	DO (mg/L)	Temp ($^{\circ}\text{C}$)	ORP (mV)	Depth to Water (ft) at Sampling Time	Depth to Water (ft) (BTOC) 08/08/19
B16W06D	---	---	---	---	---	---	---	---	---	---	***
B16W06S	---	---	---	---	---	---	---	---	---	---	21.22
B16W07D	---	---	---	---	---	---	---	---	---	---	22.47
B16W08D	08/08/19	280	4,200	6.46	0.204	15	3.46	17.4	-133	22.66	22.66
B16W08S	---	---	---	---	---	---	---	---	---	---	18.48
B16W09D	---	---	---	---	---	---	---	---	---	---	17.91
B16W12S	---	---	---	---	---	---	---	---	---	---	12.4
DW14	---	---	---	---	---	---	---	---	---	---	11.81
DW15	---	---	---	---	---	---	---	---	---	---	23.6
DW16	---	---	---	---	---	---	---	---	---	---	19.28
DW17	---	---	---	---	---	---	---	---	---	---	18.09
DW18	---	---	---	---	---	---	---	---	---	---	23.94
DW19RD	08/08/19	100	1,200	6.61	0.187	112	3.43	17.6	-158	19.2	19.2
DW19RS	08/08/19	45	540	6.9	0.175	118	3.38	17.8	-141	13.5	13
DW21	08/08/19	50	450	6.72	0.311	136	3.61	21.6	-173	7.9	7.55

Table D-1. Ground-Water Monitoring Fourth Quarter 2019 - 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) 11/11/19
B16W06D	11/13/19	200	2,400	6.03	0.577	29.3	3.46	15.2	-97	18.13	17.65
B16W06S	11/13/19	100	1,800	6.45	0.14	60.3	3.05	12.9	-152	20.93	19.63
B16W07D	---	---	---	---	---	---	---	---	---	---	20.04
B16W08D	11/13/19	280	2,520	6.28	0.19	43.1	3.5	14.8	-117	20.68	20.2
B16W08S	11/13/19	70	630	6.25	0.165	93.3	4.05	13.8	-67	18.52	17.77
B16W09D	---	---	---	---	---	---	---	---	---	---	15.88
B16W12S	---	---	---	---	---	---	---	---	---	---	13.4
DW14	---	---	---	---	---	---	---	---	---	---	10.92
DW15	---	---	---	---	---	---	---	---	---	---	21.49
DW16	11/14/19	300	4,500	6.35	0.152	44.4	3.07	16	-97	17.75	16.96
DW17	---	---	---	---	---	---	---	---	---	---	15.65
DW18	11/14/19	300	4,500	6.34	0.182	27.3	3.27	15.5	-124	22.3	21.57
DW19RD	11/12/19	150	2,250	6.12	0.2	73.9	3.28	15.9	-107	17.62	17.07
DW19RS	11/12/19	50	750	6.22	0.296	52.5	3.2	15.1	-105	13.4	12.36
DW21	---	---	---	---	---	---	---	---	---	---	7.9

* BTOC date for DW19RD and DW19RS is March 26, 2019 for 1Q2019.

** Measurement could not be taken at DW14 during 2Q2019 because well was obstructed.

*** Measurement could not be taken at B16W06D during 3Q2019 because well was inaccessible (overgrown with poison ivy).

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

BTOC - below top of casing

DO - dissolved oxygen

ORP - oxidation reduction potential

Table D-2. CY 2019 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
SLD217778	B16W06D	11/13/19	SW846 6020	Arsenic	4		4	µg/L	U		No
SLD217778	B16W06D	11/13/19	SW846 6020	Cadmium	0.51		0.2	µg/L	=		No
SLD217778	B16W06D	11/13/19	ML-006	Ra-226	0.588	0.524	0.821	pCi/L	UJ	T04, T05	No
SLD217778	B16W06D	11/13/19	ML-005	Th-228	0.2	0.242	0.488	pCi/L	UJ	T06	No
SLD217778	B16W06D	11/13/19	ML-005	Th-230	0.516	0.293	0.244	pCi/L	J	F01, T04, T20	No
SLD217778	B16W06D	11/13/19	ML-005	Th-232	0.114	0.158	0.302	pCi/L	UJ	T06	No
SLD217779	B16W06D	11/13/19	ML-015	U-234	0.218	0.173	0.172	pCi/L	J	T04, T20	No
SLD210063	B16W06D	11/13/19	ML-015	U-235	0.0399	0.12	0.315	pCi/L	UJ	T06	No
SLD211484	B16W06D	11/13/19	ML-015	U-238	0.121	0.13	0.171	pCi/L	UJ	T06	No
SLD217781	B16W06S	11/13/19	SW846 6020	Arsenic	190		4	µg/L	=		No
SLD217779	B16W06S	11/13/19	SW846 6020	Cadmium	0.31		0.2	µg/L	=		No
SLD217779	B16W06S	11/13/19	ML-006	Ra-226	0.259	0.372	0.764	pCi/L	UJ	T06	No
SLD217779	B16W06S	11/13/19	ML-005	Th-228	1	0.339	0.259	pCi/L	=		No
SLD217779	B16W06S	11/13/19	ML-005	Th-230	2	0.543	0.377	pCi/L	J	F01	No
SLD217779	B16W06S	11/13/19	ML-005	Th-232	0.0179	0.076	0.229	pCi/L	UJ	T06	No
SLD211485	B16W06S	11/13/19	ML-015	U-234	0.0515	0.0847	0.156	pCi/L	UJ	T06	No
SLD217783	B16W06S	11/13/19	ML-015	U-235	-0.0182	0.0771	0.232	pCi/L	UJ	T06	No
SLD211486	B16W06S	11/13/19	ML-015	U-238	0.0147	0.0622	0.187	pCi/L	UJ	T06	No
SLD217784	B16W07D	02/20/19	SW846 6020	Arsenic	30		4	µg/L	=		No
SLD210063	B16W07D	02/20/19	SW846 6020	Cadmium	0.2		0.2	µg/L	U		No
SLD210063	B16W07D	02/20/19	ML-006	Ra-226	0.448	0.435	0.751	pCi/L	UJ	T04, T05	No
SLD210063	B16W07D	02/20/19	ML-005	Th-228	0.375	0.353	0.537	pCi/L	UJ	T04, T05	No
SLD210063	B16W07D	02/20/19	ML-005	Th-230	0.882	0.504	0.405	pCi/L	J	T04, T20	No
SLD210063	B16W07D	02/20/19	ML-005	Th-232	-0.0326	0.135	0.404	pCi/L	UJ	T06	No
SLD210668	B16W07D	02/20/19	ML-015	U-234	0.0443	0.154	0.438	pCi/L	UJ	T06	No
SLD211487	B16W07D	02/20/19	ML-015	U-235	-0.0364	0.189	0.54	pCi/L	UJ	T06	No
SLD215496	B16W07D	02/20/19	ML-015	U-238	-0.0294	0.153	0.436	pCi/L	UJ	T06	No
SLD211484	B16W08D	05/13/19	SW846 6020	Arsenic	16		4	µg/L	=	A05	No
SLD211484	B16W08D	05/13/19	SW846 6020	Cadmium	0.41		0.2	µg/L	=	A05	No
SLD211484	B16W08D	05/13/19	ML-006	Ra-226	0.738	0.836	1.41	pCi/L	UJ	T06	No
SLD211484	B16W08D	05/13/19	ML-005	Th-228	0.273	0.307	0.502	pCi/L	UJ	T06	No
SLD211484	B16W08D	05/13/19	ML-005	Th-230	0.444	0.373	0.46	pCi/L	UJ	T04, T05	No
SLD210669	B16W08D	05/13/19	ML-005	Th-232	-0.0341	0.153	0.459	pCi/L	UJ	T06	No

Table D-2. CY 2019 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
SLD215494	B16W08D	05/13/19	ML-015	U-234	5.73	1.44	0.471	pCi/L	=		No
SLD215494	B16W08D	05/13/19	ML-015	U-235	0.83	0.569	0.417	pCi/L	J	T04, T20	No
SLD215494	B16W08D	05/13/19	ML-015	U-238	6.55	1.56	0.433	pCi/L	=		No
SLD215494	B16W08D	08/08/19	ML-006	Ra-226	-0.141	0.433	1.58	pCi/L	UJ	T06	No
SLD211488	B16W08D	08/08/19	ML-005	Th-228	0.206	0.29	0.584	pCi/L	UJ	T06	No
SLD215497	B16W08D	08/08/19	ML-005	Th-230	0.317	0.316	0.484	pCi/L	UJ	T04, T05	No
SLD217786	B16W08D	08/08/19	ML-005	Th-232	0.0949	0.182	0.392	pCi/L	UJ	T06	No
SLD217780	B16W08D	08/08/19	ML-015	U-234	0.252	0.2	0.199	pCi/L	J	T04, T20	No
SLD217780	B16W08D	08/08/19	ML-015	U-235	0.0461	0.131	0.34	pCi/L	UJ	T06	No
SLD217780	B16W08D	08/08/19	ML-015	U-238	0.195	0.186	0.269	pCi/L	UJ	T04, T05	No
SLD217780	B16W08D	11/13/19	ML-006	Ra-226	0.359	0.429	0.811	pCi/L	UJ	T06	No
SLD215495	B16W08D	11/13/19	ML-005	Th-228	0.248	0.22	0.356	pCi/L	UJ	T04, T05	No
SLD217778	B16W08D	11/13/19	ML-005	Th-230	1.41	0.474	0.188	pCi/L	J	F01	No
SLD217778	B16W08D	11/13/19	ML-005	Th-232	0.124	0.144	0.226	pCi/L	UJ	T06	No
SLD217778	B16W08D	11/13/19	ML-015	U-234	0.00799	0.0697	0.231	pCi/L	UJ	T06	No
SLD217781	B16W08D	11/13/19	ML-015	U-235	0	0.125	0.397	pCi/L	UJ	T06	No
SLD217781	B16W08D	11/13/19	ML-015	U-238	0.103	0.131	0.23	pCi/L	UJ	T06	No
SLD217781	B16W08S	11/13/19	SW846 6020	Arsenic	4		4	µg/L	U		No
SLD217781	B16W08S	11/13/19	SW846 6020	Cadmium	0.37		0.2	µg/L	=		No
SLD217781	B16W08S	11/13/19	ML-006	Ra-226	0.0207	0.318	0.938	pCi/L	UJ	T06	No
SLD217779	B16W08S	11/13/19	ML-005	Th-228	0.311	0.224	0.234	pCi/L	J	T04, T20	No
SLD217779	B16W08S	11/13/19	ML-005	Th-230	1.27	0.463	0.312	pCi/L	J	F01	No
SLD217779	B16W08S	11/13/19	ML-005	Th-232	-0.0183	0.0777	0.234	pCi/L	UJ	T06	No
SLD210063	B16W08S	11/13/19	ML-015	U-234	2.98	0.709	0.268	pCi/L	=		No
SLD211485	B16W08S	11/13/19	ML-015	U-235	0.0802	0.132	0.243	pCi/L	UJ	T06	No
SLD210063	B16W08S	11/13/19	ML-015	U-238	2.76	0.677	0.236	pCi/L	=		No
SLD217783	DW16	05/13/19	SW846 6020	Arsenic	68		4	µg/L	=	A05	No
SLD217783	DW16	05/13/19	SW846 6020	Cadmium	0.48		0.2	µg/L	=	A05	No
SLD217783	DW16	11/14/19	SW846 6020	Arsenic	15		4	µg/L	=		No
SLD217783	DW16	11/14/19	SW846 6020	Cadmium	0.7		0.2	µg/L	=		No
SLD217783	DW16	11/14/19	ML-006	Ra-226	-0.11	0.221	0.928	pCi/L	UJ	T06	No
SLD210063	DW16	11/14/19	ML-005	Th-228	0.187	0.188	0.296	pCi/L	UJ	T06	No
SLD211484	DW16	11/14/19	ML-005	Th-230	1.84	0.567	0.27	pCi/L	J	F01	No

Table D-2. CY 2019 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
SLD211484	DW16	11/14/19	ML-005	Th-232	0.0374	0.112	0.295	pCi/L	UJ	T06	No
SLD211484	DW16	11/14/19	ML-015	U-234	1.26	0.408	0.164	pCi/L	=		No
SLD211486	DW16	11/14/19	ML-015	U-235	0.0954	0.135	0.244	pCi/L	UJ	T06	No
SLD215494	DW16	11/14/19	ML-015	U-238	0.709	0.308	0.244	pCi/L	=		No
SLD217784	DW18	05/13/19	SW846 6020	Arsenic	64		4	µg/L	=	A05	No
SLD215494	DW18	05/13/19	SW846 6020	Cadmium	0.53		0.2	µg/L	=	A05	No
SLD210668	DW18	11/14/19	SW846 6020	Arsenic	86		4	µg/L	=		No
SLD210668	DW18	11/14/19	SW846 6020	Cadmium	0.2		0.2	µg/L	U		No
SLD210668	DW19RD	03/26/19	SW846 6020	Arsenic	7.5		4	µg/L	=		No
SLD210668	DW19RD	03/26/19	SW846 6020	Cadmium	0.4		0.2	µg/L	=		No
SLD210668	DW19RD	03/26/19	ML-006	Ra-226	1.19	0.919	1.2	pCi/L	UJ	T04, T05	No
SLD215494	DW19RD	03/26/19	ML-005	Th-228	0.197	0.258	0.493	pCi/L	UJ	T06	No
SLD217780	DW19RD	03/26/19	ML-005	Th-230	0.0282	0.167	0.494	pCi/L	UJ	T06	No
SLD217780	DW19RD	03/26/19	ML-005	Th-232	0.0423	0.115	0.292	pCi/L	UJ	T06	No
SLD217780	DW19RD	03/26/19	ML-015	U-234	15.9	2.96	0.408	pCi/L	=		No
SLD211487	DW19RD	03/26/19	ML-015	U-235	0.483	0.437	0.545	pCi/L	UJ	T04, T05	No
SLD211487	DW19RD	03/26/19	ML-015	U-238	19.7	3.49	0.367	pCi/L	=		No
SLD211487	DW19RD	05/13/19	SW846 6020	Arsenic	16		4	µg/L	=	A05	No
SLD211487	DW19RD	05/13/19	SW846 6020	Cadmium	1		0.2	µg/L	=	A05	No
SLD211487	DW19RD	05/13/19	ML-006	Ra-226	1.21	0.904	0.912	pCi/L	J	T04, T20	No
SLD217781	DW19RD	05/13/19	ML-005	Th-228	0.371	0.418	0.682	pCi/L	UJ	T06	No
SLD217781	DW19RD	05/13/19	ML-005	Th-230	0	0.262	0.683	pCi/L	UJ	T06	No
SLD217781	DW19RD	05/13/19	ML-005	Th-232	0	0.262	0.681	pCi/L	UJ	T06	No
SLD217783	DW19RD	05/13/19	ML-015	U-234	10	1.92	0.392	pCi/L	=		No
SLD217783	DW19RD	05/13/19	ML-015	U-235	0.549	0.452	0.523	pCi/L	J	T04, T20	No
SLD217783	DW19RD	05/13/19	ML-015	U-238	9.84	1.9	0.451	pCi/L	=		No
SLD215496	DW19RD	08/08/19	SW846 6020	Arsenic	27		4	µg/L	=		No
SLD215496	DW19RD	08/08/19	SW846 6020	Cadmium	0.2		0.2	µg/L	U		No
SLD215496	DW19RD	08/08/19	ML-006	Ra-226	0.706	0.829	1.53	pCi/L	UJ	T06	No
SLD215496	DW19RD	08/08/19	ML-005	Th-228	0.094	0.245	0.615	pCi/L	UJ	T06	No
SLD215496	DW19RD	08/08/19	ML-005	Th-230	0.103	0.197	0.424	pCi/L	UJ	T06	No
SLD210668	DW19RD	08/08/19	ML-005	Th-232	0.0427	0.14	0.391	pCi/L	UJ	T06	No
SLD210668	DW19RD	08/08/19	ML-015	U-234	16.3	2.04	0.272	pCi/L	=		No

Table D-2. CY 2019 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
SLD210668	DW19RD	08/08/19	ML-015	U-235	0.71	0.379	0.336	pCi/L	J	T04, T20	No
SLD211487	DW19RD	08/08/19	ML-015	U-238	15.5	1.96	0.24	pCi/L	=		No
SLD211487	DW19RD	11/12/19	SW846 6020	Cadmium	0.5		0.2	µg/L	=		No
SLD211487	DW19RD	11/12/19	ML-006	Ra-226	0.436	0.523	1.06	pCi/L	UJ	T06	No
SLD215496	DW19RD	11/12/19	ML-005	Th-228	0.434	0.268	0.286	pCi/L	J	T04, T20	No
SLD215496	DW19RD	11/12/19	ML-005	Th-230	1.58	0.517	0.329	pCi/L	J	F01	No
SLD217785	DW19RD	11/12/19	ML-005	Th-232	-0.0181	0.0848	0.328	pCi/L	UJ	T06	No
SLD217785	DW19RD	11/12/19	ML-015	U-234	20.6	2.28	0.214	pCi/L	=		No
SLD217785	DW19RD	11/12/19	ML-015	U-235	1.03	0.43	0.327	pCi/L	=		No
SLD217785	DW19RD	11/12/19	ML-015	U-238	22.1	2.41	0.213	pCi/L	=		No
SLD217785	DW19RS	03/26/19	SW846 6020	Arsenic	10		10	µg/L	U		No
SLD215496	DW19RS	03/26/19	SW846 6020	Cadmium	0.5		0.5	µg/L	U		No
SLD210669	DW19RS	03/26/19	ML-006	Ra-226	0.519	0.647	1.12	pCi/L	UJ	T06	No
SLD210669	DW19RS	03/26/19	ML-005	Th-228	0.446	0.367	0.56	pCi/L	UJ	T04, T05	No
SLD210669	DW19RS	03/26/19	ML-005	Th-230	0.184	0.231	0.396	pCi/L	UJ	T06	No
SLD210669	DW19RS	03/26/19	ML-005	Th-232	-0.0212	0.123	0.481	pCi/L	UJ	T06	No
SLD210669	DW19RS	03/26/19	ML-015	U-234	2.83	0.982	0.475	pCi/L	=		No
SLD217785	DW19RS	03/26/19	ML-015	U-235	0.188	0.314	0.649	pCi/L	UJ	T06	No
SLD217785	DW19RS	03/26/19	ML-015	U-238	2.57	0.922	0.319	pCi/L	=		No
SLD217785	DW19RS	05/13/19	SW846 6020	Arsenic	10		4	µg/L	=	A05	No
SLD211488	DW19RS	05/13/19	SW846 6020	Cadmium	0.2		0.2	µg/L	U	A05	No
SLD211488	DW19RS	05/13/19	ML-006	Ra-226	8.16	2.33	1.11	pCi/L	=		No
SLD211488	DW19RS	05/13/19	ML-005	Th-228	0.305	0.344	0.561	pCi/L	UJ	T06	No
SLD211488	DW19RS	05/13/19	ML-005	Th-230	0.61	0.466	0.562	pCi/L	J	T04, T20	No
SLD211488	DW19RS	05/13/19	ML-005	Th-232	0	0.215	0.56	pCi/L	UJ	T06	No
SLD210669	DW19RS	05/13/19	ML-015	U-234	3.11	0.987	0.463	pCi/L	=		No
SLD210669	DW19RS	05/13/19	ML-015	U-235	0.237	0.302	0.447	pCi/L	UJ	T06	No
SLD210669	DW19RS	05/13/19	ML-015	U-238	2.71	0.91	0.31	pCi/L	=		No
SLD211488	DW19RS	08/08/19	SW846 6020	Arsenic	7.6		4	µg/L	=		No
SLD215497	DW19RS	08/08/19	SW846 6020	Cadmium	0.2		0.2	µg/L	U		No
SLD215497	DW19RS	08/08/19	ML-006	Ra-226	0.329	0.547	1.13	pCi/L	UJ	T06	No
SLD215497	DW19RS	08/08/19	ML-005	Th-228	0.49	0.395	0.545	pCi/L	UJ	T04, T05	No
SLD215497	DW19RS	08/08/19	ML-005	Th-230	0.249	0.293	0.511	pCi/L	UJ	T06	No

Table D-2. CY 2019 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
SLD215497	DW19RS	08/08/19	ML-005	Th-232	0	0.182	0.472	pCi/L	UJ	T06	No
SLD211488	DW19RS	08/08/19	ML-015	U-234	2.2	0.606	0.336	pCi/L	=		No
SLD211488	DW19RS	08/08/19	ML-015	U-235	0.08	0.131	0.243	pCi/L	UJ	T06	No
SLD215497	DW19RS	08/08/19	ML-015	U-238	1.85	0.548	0.266	pCi/L	=		No
SLD215497	DW19RS	11/12/19	SW846 6020	Arsenic	5.7		4	µg/L	=		No
SLD217786	DW19RS	11/12/19	SW846 6020	Cadmium	0.2		0.2	µg/L	U		No
SLD217786	DW19RS	11/12/19	ML-006	Ra-226	0.341	0.475	0.999	pCi/L	UJ	T06	No
SLD217786	DW19RS	11/12/19	ML-005	Th-228	0.104	0.133	0.202	pCi/L	UJ	T06	No
SLD217786	DW19RS	11/12/19	ML-005	Th-230	1.86	0.577	0.301	pCi/L	J	F01	No
SLD217786	DW19RS	11/12/19	ML-005	Th-232	0.0759	0.132	0.279	pCi/L	UJ	T06	No
SLD215497	DW19RS	11/12/19	ML-015	U-234	2.24	0.557	0.166	pCi/L	=		No
SLD217786	DW19RS	11/12/19	ML-015	U-235	0.0675	0.111	0.205	pCi/L	UJ	T06	No
SLD217786	DW19RS	11/12/19	ML-015	U-238	1.5	0.451	0.224	pCi/L	=		No
SLD217786	DW21	08/08/19	SW846 6020	Arsenic	75		4	µg/L	=		No
SLD215495	DW21	08/08/19	SW846 6020	Cadmium	2.7		0.2	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:

- A05 - Holding Times: Samples were not preserved properly.
- F01 - Blanks: Sample data were qualified as a result of the method blank.
- 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 FOR THE ANNUAL
GROUND-WATER MONITORING WELL INSPECTIONS CONDUCTED
AT THE ST. LOUIS DOWNTOWN SITE IN CALENDAR YEAR 2019**

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

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**CALENDAR YEAR 2019 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: 04/25/19 Time: 0925

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

Comments / Observations regarding this well.

Re-mark/label well ID on well lid.

* - SLAPS and SLAPS Vicinity Properties (VPs)

Well Maintenance Checklist

Name of Observer(s): L. Hoover, N. Gross Date: 04/25/19 Time: 0930

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

Comments / Observations regarding this well.

None.

* - SLAPS and SLAPS Vicinity Properties (VPs)

Well Maintenance Checklist

Name of Observer(s): L. Hoover, N. Gross Date: 04/25/18 Time: 0955

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

Comments / Observations regarding this well.

Remark/Label the well ID on the protective casing.

* - SLAPS and SLAPS Vicinity Properties (VPs)

Well Maintenance Checklist

Name of Observer(s): L. Hoover, N. Gross Date: 04/25/19 Time: 0935

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

Comments / Observations regarding this well.

Remark/Label the well ID on the protective casing.

* - SLAPS and SLAPS Vicinity Properties (VPs)

Well Maintenance Checklist

Name of Observer(s): L. Hoover, N. Gross Date: 04/25/19 Time: 0930

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

Comments / Observations regarding this well.

Remark/Label the well ID on the protective casing.

* - SLAPS and SLAPS Vicinity Properties (VPs)

Well Maintenance Checklist

Name of Observer(s): L. Hoover, N. Gross Date: 04/25/19 Time: 1000

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

Comments / Observations regarding this well.

Remark/Label the well ID on the lid.

* - SLAPS and SLAPS Vicinity Properties (VPs)

Well Maintenance Checklist

Name of Observer(s): L. Hoover, N. Gross Date: 04/25/19 Time: 0945

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

Comments / Observations regarding this well.

Paint lid and re-mark/label the well ID on the lid.

* - SLAPS and SLAPS Vicinity Properties (VPs)

Well Maintenance Checklist

Name of Observer(s): L. Hoover, N. Gross Date: 04/25/19 Time: 1030

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

Comments / Observations regarding this well.

Well inaccessible and covered by pallets and gas cylinders. The well will be inspected during the summer event and any deficiencies will be corrected at that time.

* - SLAPS and SLAPS Vicinity Properties (VPs)

Well Maintenance Checklist

Name of Observer(s): L. Hoover, N. Gross Date: 04/25/19 Time: 0945

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

Comments / Observations regarding this well.

Paint and re-mark/label the well ID on the lid.

* - SLAPS and SLAPS Vicinity Properties (VPs)

Well Maintenance Checklist

Name of Observer(s): L. Hoover, N. Gross Date: 04/25/19 Time: 0940

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

Comments / Observations regarding this well.

None.

* - SLAPS and SLAPS Vicinity Properties (VPs)

Well Maintenance Checklist

Name of Observer(s): L. Hoover, N. Gross Date: 04/25/19 Time: 0955

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

Comments / Observations regarding this well.

Flush mount well is located in a low area and grey sediment is infiltrating the well.

Recommend retrofitting to stick up well and redeveloping the well before taking samples

* - SLAPS and SLAPS Vicinity Properties (VPs)

Well Maintenance Checklist

Name of Observer(s): L. Hoover, N. Gross Date: 04/25/19 Time: 0950

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

Comments / Observations regarding this well.

None.

* - SLAPS and SLAPS Vicinity Properties (VPs)

Well Maintenance Checklist

Name of Observer(s): L. Hoover, N. Gross Date: 04/25/19 Time: 0945

Monitoring Well Station Identification: DW19RD SLAPS* SLDS HISS

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

Comments / Observations regarding this well.

Well was installed on 27 February 2019 but the vault and concrete pad have not been is
installed/completed.

* - SLAPS and SLAPS Vicinity Properties (VPs)

Well Maintenance Checklist

Name of Observer(s): L. Hoover, N. Gross Date: 04/25/19 Time: 0945

Monitoring Well Station Identification: DW19RS SLAPS* SLDS HISS

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

Comments / Observations regarding this well.

Well was installed on 26 February 2019 but the vault and concrete pad have not been is
installed/completed.

* - SLAPS and SLAPS Vicinity Properties (VPs)

Well Maintenance Checklist

Name of Observer(s): L. Hoover, N. Gross Date: 04/25/19 Time: 0940

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

Comments / Observations regarding this well.

None.

* - SLAPS and SLAPS Vicinity Properties (VPs)

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**DRILLING LOGS, AS-BUILTS, AND MONITORING WELL CERTIFICATION
REPORTS FOR DW19RS AND DW19RD AT THE ST. LOUIS DOWNTOWN SITE**

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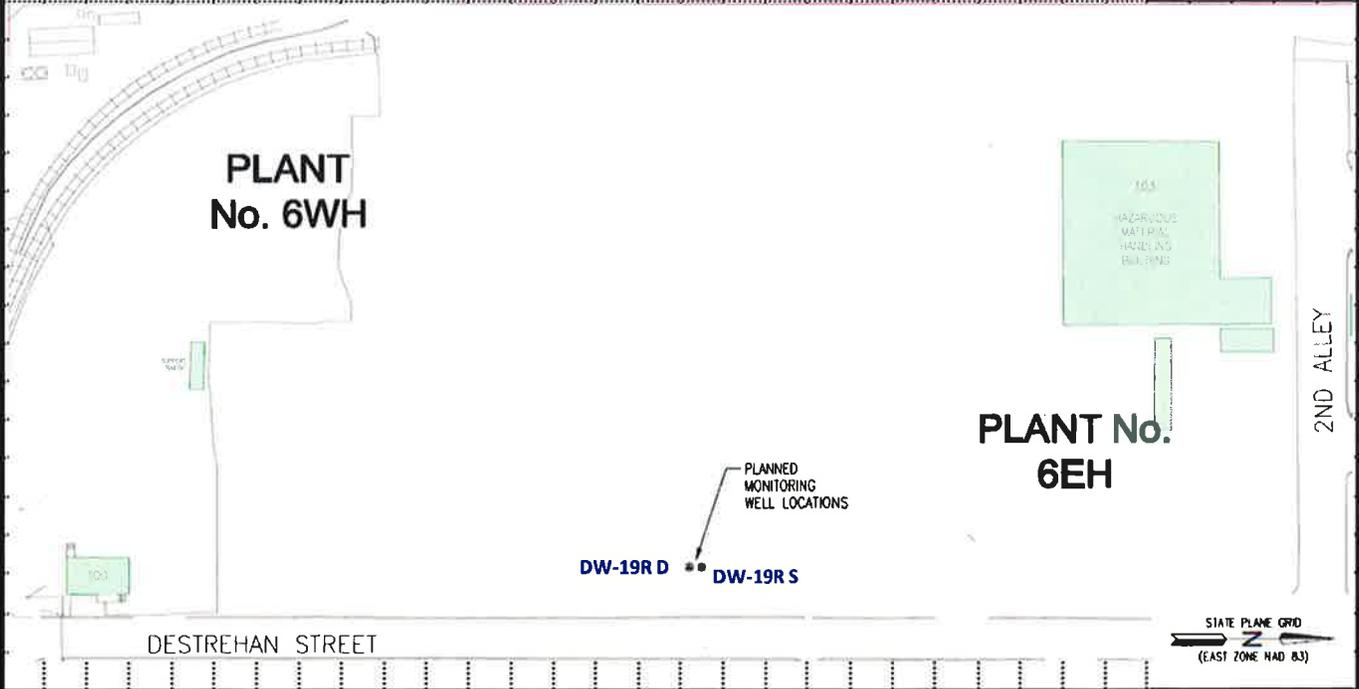
HTWR DRILLING LOG			DISTRICT St. Louis			HOLE NUMBER DW-19R S		
1. COMPANY NAME HGL			2. DRILLING SUBCONTRACTOR HGL			SHEET 1 of 4 SHEETS		
3. PROJECT Replacement Wells at Mallinckrodt Plant 6W FUSRAP/SLDS				4. LOCATION Mallinckrodt Plant 6W				
5. NAME OF DRILLER Patrick Hart (Geotechnology)				6. MANUFACTURER'S DESIGNATION OF DRILL Central Mine Equipment (CME) 550X				
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		CME 550X ATV Drill Rig; 8.25" HSA; 140# Hammer with 30-inch drop 2" OD Split Spoon Sampler			8. HOLE LOCATION 1030139.966 / 908860.644			
9. SURFACE ELEVATION		422.7						
10. DATE STARTED		3/26/2019			11. DATE COMPLETED 3/26/2019			
12. OVERBURDEN THICKNESS		NA						
13. DEPTH DRILLED INTO ROCK		NA						
14. TOTAL DEPTH OF HOLE		29.0 feet						
15. DEPTH GROUNDWATER ENCOUNTERED		NA						
16. DEPTH TO WATER & ELAPSED TIME AFTER DRILLING COMPLETED		NA						
17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY)		NA						
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA		19. TOTAL NUMBER OF CORE BOXES NA		
20. SAMPLES FOR CHEMICAL ANALYSIS		VOC NA	METALS NA	OTHER (SPECIFY) RAD - 0	OTHER (SPECIFY) QA/QC - 0	OTHER (SPECIFY) Archive - 0	21. TOTAL CORE RECOVERY 0%	
22. DISPOSITION OF HOLE		BACKFILLED See Notes		MONITORING WELL NA	OTHER (SPECIFY) NA	23. SIGNATURE OF INSPECTOR		

LOCATION SKETCH / COMMENTS / WITNESSED BY:

SCALE:

NOT TO SCALE

Percentage (%) Terms	
Trace	<5%
Few	5 - 10%
Little	15 - 25%
Some	30 - 45%
Mostly	50 - 100%



PROJECT Replacement Wells at Mallinckrodt Plant 6W		FUSRAP/SLDS		HOLE NUMBER DW-19R S	
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HTRW DRILLING LOG

(CONTINUATION SHEET)

HOLE NUMBER
DW-19R S

Project Replacement Wells at
Mallinckrodt Plant 6W

FUSRAP/
SLDS

Inspector
Mike Flora

Sheet 2 of 4
Sheets

USCS	Depth	DESCRIPTION OF MATERIALS	PID / NaI	Recovery	Analytical Sample No.	Blow Counts	Remarks
FI	0	1" minus limestone gravel (FILL)					Bkgd - 3200 CPM CPM - Counts per minute CPMs are gross numbers 3/26/19 Blind drill to 17.0 feet
	1						
	2						
	3						
	4						
	5						
	6						
	7						
	8						
	9						

Project Replacement Wells at Mallinckrodt Plant 6W

FUSRAP / SLDS

HOLE NO. DW-19R S

HTRW DRILLING LOG (CONTINUATION SHEET)							HOLE NUMBER DW-19R S	
Project Replacement Wells at Mallinckrodt Plant 6W		FUSRAP/ SLDS	Inspector Mike Flora			Sheet 3 of 4	Sheets 4	
USCS	Depth	DESCRIPTION OF MATERIALS	PID / Nal	Recovery	Analytical Sample No.	Blow Counts	Remarks	
	11							
	12							
	13							
	14							
	15							
	16							
ML	17	SILT; few fine sand, dark grey soft to med. stiff, damp	3500			3	2" SPT	
SP	18	SAND; brown, fine grain, loose, moist, poorly graded	3500	18"		5		
ML	18	SILT; dark grey, few fine sand	3500	24"		5		
	19	med. stiff, damp.	-			4		
	19						Blind drill to 27.0 feet	
	20							

Project Replacement Wells at Mallinckrodt Plant 6W

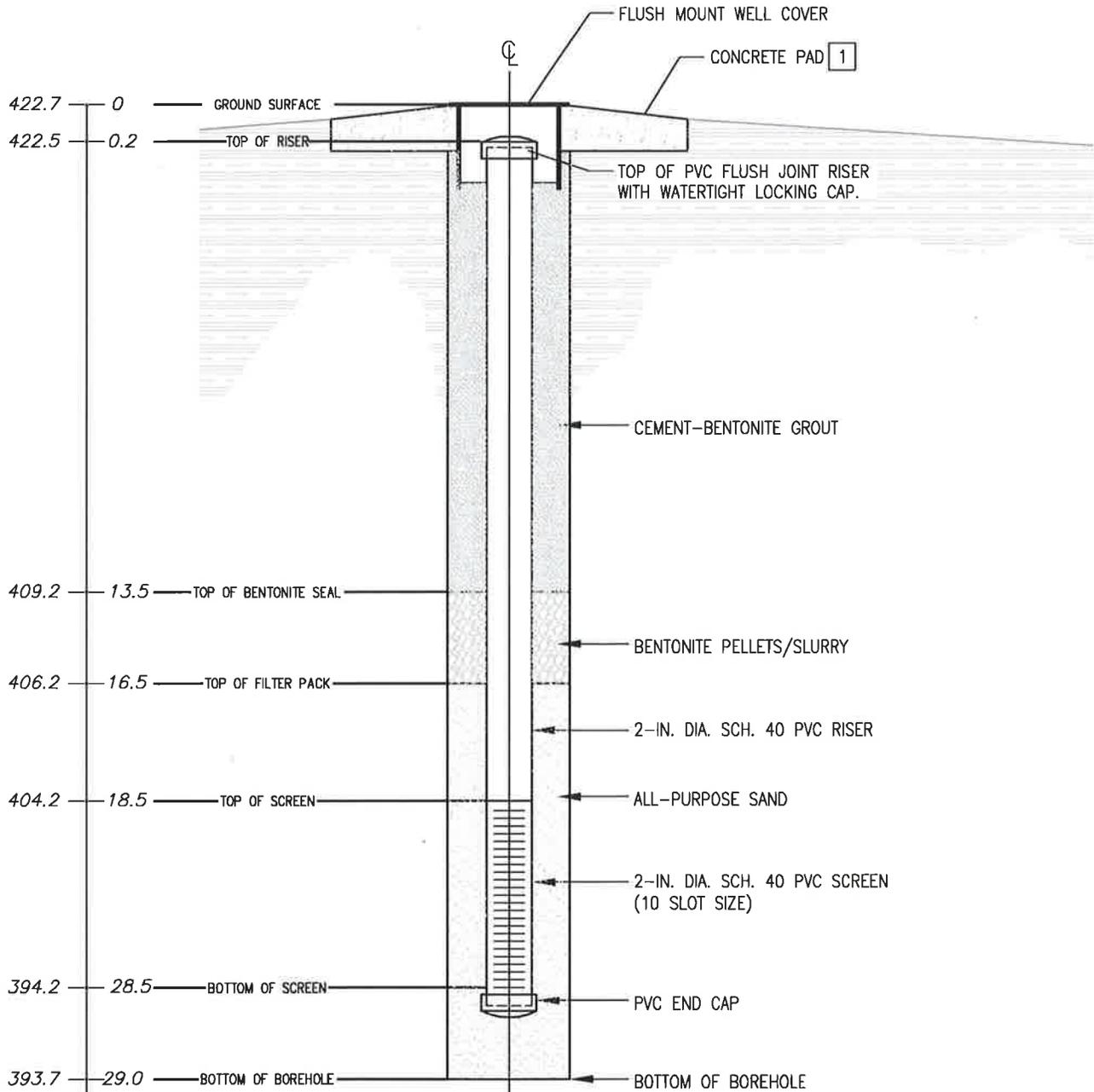
FUSRAP / SLDS

HOLE NO.

DW-19R S

HTRW DRILLING LOG (CONTINUATION SHEET)							HOLE NUMBER DW-19R S	
Project Replacement Wells at Mallinckrodt Plant 6W		FUSRAP/ SLDS	Inspector Mike Flora			Sheet 4 of 4	Sheets	
USCS	Depth	DESCRIPTION OF MATERIALS	PID / Nal	Recovery	Analytical Sample No.	Blow Counts	Remarks	
	20							
	21							
	22							
	23							
	24							
	25							
	26							
CL/ML	27	Silty CLAY; dark grey, med to low plastic, very soft, damp	○			1	2" SPT	
	28	— some laminations	○	20"		1		
			○	24"		2		
	29		○			5		
		TOB @ 29.0 ft. bgs Installed DW-19R S (see well construction diagram)						

Drawing File: 845843-B423
 OFFICE STL



KEYED NOTES:

1 CONCRETE PAD IS 12 INCHES THICK BY 12 FEET LONG BY 6 FEET WIDE.

NOTES:

SEE DRAWING 1 FOR LEGEND AND ABBREVIATIONS

MONITORING WELL COORDINATES IN MISSOURI STATE PLANE EAST (NAD 83) 908860.644' EAST, 1030139.966' NORTH.

THIS DRAWING NOT TO SCALE

Revisions			
Symbol	Descriptions	Date	Approved
0	Issued for Monitoring Well Certificate Record	03/26/19	M. Cummings

U.S. ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT (CEMVS)

Designed by: M. Flora	AS-BUILT FOR MONITORING WELL DW-19R S MALLINCKRODT PLANT No. 6WH FUSRAP ST. LOUIS DOWNTOWN SITE ST. LOUIS, MISSOURI		
Drawn by: L. Parks			
Checked by: M. Cummings	Scale: As Shown	Drawing Number: 3	Sheet: -
Approved by: A. Nell DeYong	Drawing File: 845843B429.dwg	Contract No. WB12P9-16-D-0009	

File: \\MO-SRV-01\Fusrap_cad\845843\Plant 6 all\Phase 3 - Blag 101 Area\845843B429.dwg
 Plot Date/Time: Mar 27, 2019 - 4:39pm
 Plotted By: lparks



MISSOURI DEPARTMENT OF NATURAL RESOURCES
GEOLOGICAL SURVEY PROGRAM
**MONITORING WELL
CERTIFICATION REPORT**

OFFICE USE ONLY		DATE RECEIVED	
REFERENCE NO.		CHECK NO.	
STATE WELL NO.		REVENUE NO.	
ENTERED	APPROVED	DATE	ROUTE

NOTE: This form is not to be used for nested wells

OWNER AND SITE INFORMATION			
PROPERTY OWNER NAME WHERE WELL IS LOCATED U.S. ARMY CORPS OF ENGINEERS	PRIMARY PHONE NUMBER WITH AREA CODE (314) 731-8251	WELL NUMBER DW-19R S	WELL COMPLETION DATE 02/26/2019
PROPERTY OWNER MAILING ADDRESS 2 ANGELRODT STREET	CITY SAINT LOUIS	STATE MO	ZIP CODE 63147
PHYSICAL ADDRESS OF PROPERTY WHERE WELL IS LOCATED 2 ANGELRODT STREET	CITY SAINT LOUIS	COUNTY SAINT LOUIS	
NAME OF SITE, BUSINESS, OR CLEANUP PROJECT PLANT 6 WEST - FUSRAP SLDS	DNR/EPA PROJECT NUMBER OR REGULATORY SITE ID NUMBER (IF APPLICABLE) N/A	VARIANCE NUMBER (IF ISSUED) N/A	
PRIMARY CONTRACTOR NAME (PLEASE PRINT) John C. Bostwick, R.G.	PERMIT NUMBER 003839M	Section 258.607(3), RSMo, requires all primary contractors to comply with all rules and regulations promulgated pursuant to Sections 258.600 to 258.640 RSMo.	

SURFACE COMPLETION			
TYPE <input type="checkbox"/> Above Ground <input checked="" type="checkbox"/> Flush Mount	LENGTH AND DIAMETER OF SURFACE COMPLETION Length <u>1</u> FT. Diameter <u>8</u> IN.	DIAMETER AND DEPTH OF THE HOLE SURFACE COMPLETION WAS PLACED Diameter <u>24</u> IN. Length <u>1</u> FT.	SURFACE COMPLETION GROUT <input checked="" type="checkbox"/> Concrete <input type="checkbox"/> Other
<input checked="" type="checkbox"/> Locking Cap <input type="checkbox"/> Weep Hole			

LOCATION OF WELL (D/M/S FORMAT ONLY)		
Latitude	<u>38</u>	<u>39</u> <u>43.9</u>
Longitude	<u>-90</u>	<u>11</u> <u>22.4</u>
SMALLEST	LARGEST	
<u>NA</u>	<u>NA</u>	
Section	Township North	
Range	<input type="checkbox"/> E <input type="checkbox"/> W	

ANNULAR SEAL Length <u>12.5</u> FT. <input type="checkbox"/> Slurry <input type="checkbox"/> Chips <input type="checkbox"/> Pellets <input type="checkbox"/> Granular <input checked="" type="checkbox"/> Cement/Slurry		RISER OR CASING (IF OPEN HOLE COMPLETION) Riser/Casing Diameter <u>2</u> IN. Riser/Casing Length <u>18.5</u> FT. Diameter Of Drill Hole <u>8</u> IN. Weight Or SDR# <u>S40</u>
---	--	---

TYPE OF WELL (CHECK ONE)		
<input type="checkbox"/> Direct Push	<input type="checkbox"/> Extraction	<input type="checkbox"/> Inclinator
<input type="checkbox"/> Gas Migration	<input type="checkbox"/> Injection	<input type="checkbox"/> Lysimeter
<input checked="" type="checkbox"/> Observation	<input type="checkbox"/> Open Hole	<input type="checkbox"/> Other (specify)
<input type="checkbox"/> Piezometer	<input type="checkbox"/> Standard	
MONITORING FOR (CHECK ALL THAT APPLY)		
<input type="checkbox"/> Explosives	<input type="checkbox"/> Metals	
<input type="checkbox"/> Pesticides/Herbicides	<input type="checkbox"/> Petroleum	
<input checked="" type="checkbox"/> Radionuclides	<input type="checkbox"/> SVOCs	
<input type="checkbox"/> VOCs (non-petroleum)	<input type="checkbox"/> Geotechnical Data	

IF CEMENT/BENTONITE MIX: Bags of Cement Used <u>2</u> % of Bentonite Used <u>20%</u> Water Used Per Bag <u>15</u> GAL.		BENTONITE SEAL Length <u>3.0</u> <input type="checkbox"/> Chips <input checked="" type="checkbox"/> Pellets <input type="checkbox"/> Granular <input type="checkbox"/> Saturated Zone <input checked="" type="checkbox"/> Hydrated
---	--	--

DEPTH		FORMATION DESCRIPTION (OR ATTACH BORING LOG*)
FROM	TO	
0	12	Fill: Compacted Gravel
12	22	Silty Clay to Clay
22	29	Sandy Silt with Clay

SECONDARY FILTER PACK LENGTH <u>N/A</u> FT.		SCREEN Screen Diameter <u>2</u> IN. Screen Length <u>10</u> FT. Diameter Of Drill Hole <u>8</u> IN. Depth To Top <u>18.5</u> FT.
DEPTH TO TOP OF PRIMARY FILTER PACK <u>16.5</u> FT.		SCREEN MATERIAL <input type="checkbox"/> Steel <input checked="" type="checkbox"/> Thermoplastic (PVC) <input type="checkbox"/> Other
LENGTH OF PRIMARY FILTER PACK <u>12.5</u> FT.		

TOTAL DEPTH: <u>29.0</u> FT.	<input checked="" type="checkbox"/> *Boring Log Attached
STATIC WATER LEVEL <u>N/A</u> FT.	PUMP INSTALLED <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No

For cased wells, submit additional as-built diagrams showing well construction details including type and size of all casing, hole diameter and grout used.

I hereby certify that the monitoring well herein described was constructed in accordance with Missouri Department of Natural Resources requirements.

MONITORING WELL INSTALLATION CONTRACTOR 	PERMIT NUMBER 003469M	DATE 03/07/2019	MONITORING WELL INSTALLATION CONTRACTOR APPRENTICE (IF APPLICABLE)	PERMIT NUMBER
---	--------------------------	--------------------	--	---------------

HTWR DRILLING LOG			DISTRICT St. Louis			HOLE NUMBER DW-19R D			
1. COMPANY NAME HGL			2. DRILLING SUBCONTRACTOR HGL			SHEET 1 of 7		SHEETS 7	
3. PROJECT Replacement Wells at Mallinckrodt Plant 6W FUSRAP/SLDS				4. LOCATION Mallinckrodt Plant 6W					
5. NAME OF DRILLER Patrick Hart (Geotechnology)				6. MANUFACTURER'S DESIGNATION OF DRILL Central Mine Equipment (CME) 550X					
7. SIZES AND TYPES OF DRILLING AND SAMPLING EQUIPMENT		CME 550X ATV Drill Rig; 8.25" HSA; 5 7/8" Tri-cone mud rotary; 2" OD Split Spoon Sampler			8. HOLE LOCATION 1030137.349 / 908854.108				
9. SURFACE ELEVATION		422.7							
10. DATE STARTED		3/26/2019			11. DATE COMPLETED 3/27/2019				
12. OVERBURDEN THICKNESS NA				15. DEPTH GROUNDWATER ENCOUNTERED NA					
13. DEPTH DRILLED INTO ROCK NA				16. DEPTH TO WATER & ELAPSED TIME AFTER DRILLING COMPLETED NA					
14. TOTAL DEPTH OF HOLE 53.5 feet				17. OTHER WATER LEVEL MEASUREMENTS (SPECIFY) NA					
18. GEOTECHNICAL SAMPLES		DISTURBED NA		UNDISTURBED NA		19. TOTAL NUMBER OF CORE BOXES NA			
20. SAMPLES FOR CHEMICAL ANALYSIS			VOC NA	METALS NA	OTHER (SPECIFY) RAD - 0	OTHER (SPECIFY) QA/QC - 0	OTHER (SPECIFY) Archive - 0	21. TOTAL CORE RECOVERY 0%	
22. DISPOSITION OF HOLE			BACKFILLED See Notes	MONITORING WELL NA	OTHER (SPECIFY) NA	23. SIGNATURE OF INSPECTOR <i>M. F. [Signature]</i>			
LOCATION SKETCH / COMMENTS / WITNESSED BY:						SCALE:		NOT TO SCALE	
								Percentage (%) Terms	
								Trace	<5%
								Few	5 - 10%
								Little	15 - 25%
								Some	30 - 45%
Mostly	50 - 100%								
PROJECT Replacement Wells at Mallinckrodt Plant 6W						FUSRAP/SLDS		HOLE NUMBER DW-19R D	

HTRW DRILLING LOG

(CONTINUATION SHEET)

HOLE NUMBER
DW-19R D

Project Replacement Wells at Mallinckrodt Plant 6W FUSRAP/SLDS Inspector Mike Flora Sheet 2 of 7

USCS	Depth	DESCRIPTION OF MATERIALS	PID / Nat	Recovery	Analytical Sample No.	Blow Counts	Remarks
							Bkgd - 3200 CPM CPM - Counts per minute CPMs are gross numbers 3/26/19 Blind drill to 29.0 feet using 8 1/4" HSA to set 6.0" steel casing.
	1						
	2						
	3						
	4						
	5						
	6						
	7						
	8						
	9						

Project Replacement Wells at Mallinckrodt Plant 6W FUSRAP / SLDS HOLE NO. DW-19R D

HTRW DRILLING LOG (CONTINUATION SHEET)						HOLE NUMBER DW-19R D	
Project Replacement Wells at Mallinckrodt Plant 6W		FUSRAP/ SLDS	Inspector Mike Flora			Sheet 3 of 7	Sheets 7
USCS	Depth	DESCRIPTION OF MATERIALS	PID / Nal	Recovery	Analytical Sample No.	Blow Counts	Remarks
	10						
	11						
	12						
	13						
	14						
	15						
	16						
	17						
	18						
	19						
	20						

HTRW DRILLING LOG (CONTINUATION SHEET)						HOLE NUMBER DW-19R D		
Project Replacement Wells at Mallinckrodt Plant 6W			FUSRAP/ SLDS		Inspector Mike Flora		Sheet 4 of 7	Sheets 7
USCS	Depth	DESCRIPTION OF MATERIALS	PID / Nat	Recovery	Analytical Sample No.	Blow Counts	Remarks	
	20							
	21							
	22							
	23							
	24							
	25							
	26							
	27							
	28							
	29						<i>Casing set 3/27/19 Mud rotary with 5 7/8" tri-cone bit.</i>	
	30							

Project Replacement Wells at Mallinckrodt Plant 6W

FUSRAP / SLDS

HOLE NO.

DW-19R D

HTRW DRILLING LOG

(CONTINUATION SHEET)

HOLE NUMBER
DW-19R D

Project Replacement Wells at
Mallinckrodt Plant 6W

FUSRAP/
SLDS

Inspector Mike Flora

Sheet 5 of 7 Sheets

USCS	Depth	DESCRIPTION OF MATERIALS	PID / Nal	Recovery	Analytical Sample No.	Blow Counts	Remarks
	30						
	31						
	32						
	33						
	34						
	35						
	36						
	37						
	38						
	39						
	40						

Project Replacement Wells at Mallinckrodt Plant 6W

FUSRAP / SLDS

HOLE NO. DW-19R D

HTRW DRILLING LOG

(CONTINUATION SHEET)

HOLE NUMBER
DW-19R D

Project Replacement Wells at Mallinckrodt Plant 6W FUSRAP/SLDS Inspector Mike Flora Sheet 6 of 7

USCS	Depth	DESCRIPTION OF MATERIALS	PID / NaI	Recovery	Analytical Sample No.	Blow Counts	Remarks	
	40							
	41							
SM	42	Sandy SILT; dark gray, trace coarse sand, non-plastic, soft very moist	0			3	2" SPT	
SP		SAND; dark gray, fine grain, med. dense, very moist to wet, poorly graded.	0	3500				
SW	43	SAND; gray-brown to brown, med. to fine grain, trace coarse grain, med. dense, wet	0	3500	20"	12		
			0	3500		24"	21	
			0	3500		11		
	44			350				
	45							
	46							
	47							
	48							
	49							

Project Replacement Wells at Mallinckrodt Plant 6W FUSRAP / SLDS HOLE NO. DW-19R D

HTRW DRILLING LOG

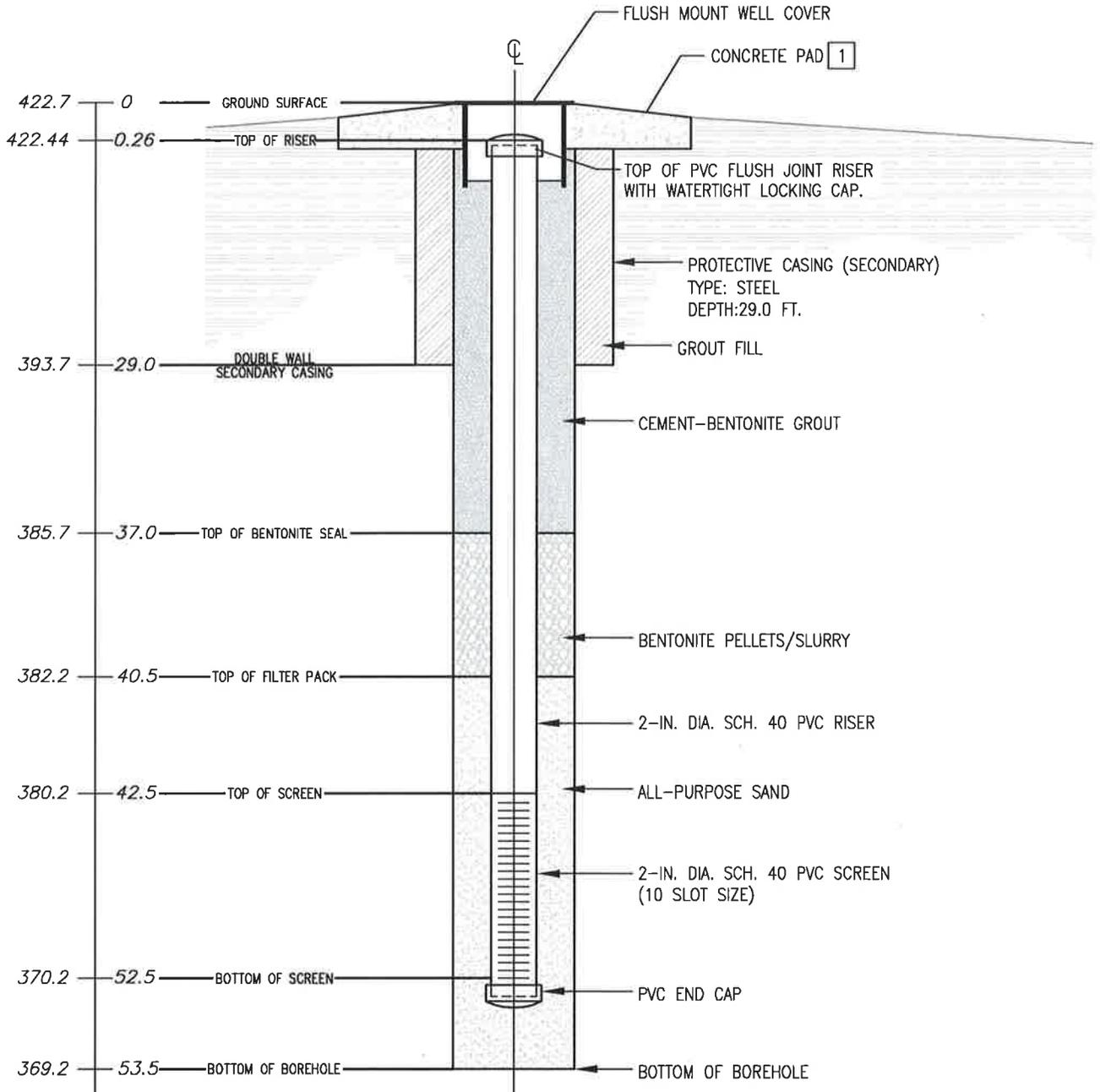
(CONTINUATION SHEET)

HOLE NUMBER
DW-19R D

Project Replacement Wells at Mallinckrodt Plant 6W FUSRAP/SLDS Inspector Mike Flora Sheet 7 of 7

USCS	Depth	DESCRIPTION OF MATERIALS	PID / Nat	Recovery	Analytical Sample No.	Blow Counts	Remarks
SW	51	SAND; grey, med. grain, trace coarse grain, med. dense, wet, well graded.				12	2" SPT
	52					16	
						13	
	53					10	
	54	TOB @ 53.5 feet bgs Installed DW-19R D (see well construction diagram)					
	55						
	56						
	57						
	58						
	59						

Project Replacement Wells at Mallinckrodt Plant 6W FUSRAP / SLDS HOLE NO. DW-19R D



DEPTH (FEET MSL)
 DEPTH (FEET BGS)

KEYED NOTES:

1 CONCRETE PAD IS 12 INCHES THICK BY 12 FEET LONG BY 6 FEET WIDE.

NOTES:

SEE DRAWING 1 FOR LEGEND AND ABBREVIATIONS
 MONITORING WELL COORDINATES IN MISSOURI STATE PLANE EAST (NAD 83) 908854.408' EAST, 1030137.349' NORTH.

THIS DRAWING NOT TO SCALE

Revisions			
Symbol	Descriptions	Date	Approved
0	Issued for Monitoring Well Certificate Record	03/26/19	M. Cummings

U.S. ARMY CORPS OF ENGINEERS
ST. LOUIS DISTRICT (CEMVS)

Designed by: M. Flora	AS-BUILT FOR MONITORING WELL DW-19R D MALLINCKRODT PLANT No. 6WH FUSRAP ST. LOUIS DOWNTOWN SITE ST. LOUIS, MISSOURI		
Drawn by: L. Parks			
Checked by: M. Cummings	Scale: As Shown	Drawing Number: 2	Sheet: -
Approved by: A. Nell DeYong	Drawing File: 845843B429.dwg	Contract No. W912P9-16-D-0009	

File: \\MO-SRV-01\Fusrap_cad\845843\Print 6 all\Phase 3 - Bldg 101 Area\845843B429.dwg
 Plot Date/Time: Mar 27, 2019 - 4:38pm
 Plotted By: lparks



MISSOURI DEPARTMENT OF NATURAL RESOURCES
GEOLOGICAL SURVEY PROGRAM
**MONITORING WELL
CERTIFICATION REPORT**

OFFICE USE ONLY		DATE RECEIVED	
REFERENCE NO.		CHECK NO.	
STATE WELL NO.		REVENUE NO.	
ENTERED	APPROVED	DATE	ROUTE / /

NOTE: This form is not to be used for nested wells

OWNER AND SITE INFORMATION

PROPERTY OWNER NAME WHERE WELL IS LOCATED U.S. ARMY CORPS OF ENGINEERS	PRIMARY PHONE NUMBER WITH AREA CODE (314) 731-8251	WELL NUMBER DW-19R D	WELL COMPLETION DATE 02/27/2019
PROPERTY OWNER MAILING ADDRESS 2 ANGELRODT STREET	CITY SAINT LOUIS	STATE MO	ZIP CODE 63147
PHYSICAL ADDRESS OF PROPERTY WHERE WELL IS LOCATED 2 ANGELRODT STREET	CITY SAINT LOUIS	COUNTY SAINT LOUIS	
NAME OF SITE, BUSINESS, OR CLEANUP PROJECT PLANT 6 WEST - FUSRAP SLDS	DNR/EPA PROJECT NUMBER OR REGULATORY SITE ID NUMBER (IF APPLICABLE) N/A	VARIANCE NUMBER (IF ISSUED) N/A	
PRIMARY CONTRACTOR NAME (PLEASE PRINT) John C. Bostwick, R.G.	PERMIT NUMBER 003839M	Section 256.607(3), RSMo, requires all primary contractors to comply with all rules and regulations promulgated pursuant to Sections 256.600 to 256.640 RSMo.	

SURFACE COMPLETION

TYPE	LENGTH AND DIAMETER OF SURFACE COMPLETION	DIAMETER AND DEPTH OF THE HOLE SURFACE COMPLETION WAS PLACED	SURFACE COMPLETION GROUT
<input type="checkbox"/> Above Ground	Length <u>1</u> FT. Diameter <u>8</u> IN.	Diameter <u>24</u> IN. Length <u>1</u> FT.	<input checked="" type="checkbox"/> Concrete <input type="checkbox"/> Other
<input checked="" type="checkbox"/> Flush Mount			
<input checked="" type="checkbox"/> Locking Cap <input type="checkbox"/> Weep Hole			

LOCATION OF WELL (D/M/S FORMAT ONLY)		
Latitude	<u>38</u>	<u>39</u> <u>43.9</u>
Longitude	<u>-90</u>	<u>11</u> <u>22.2</u>

SMALLEST	LARGEST
<u>NA</u>	<u>NA</u>
Section	North
Range	<input type="checkbox"/> E <input type="checkbox"/> W

Elevation <u>422.44</u> FT.	
ANNULAR SEAL Length <u>36</u> FT.	

RISER OR CASING (IF OPEN HOLE COMPLETION)

Riser/Casing Diameter 2 IN.
Riser/Casing Length 42.5 FT.
Diameter Of Drill Hole 12 IN.
Weight Or SDR# S40

MATERIAL

Steel Thermoplastic (PVC)
 Other

BENTONITE SEAL

Length 3.5

Chips Pellets Granular
 Saturated Zone Hydrated

SCREEN

Screen Diameter 2 IN.
Screen Length 10 FT.
Diameter Of Drill Hole 6 IN.
Depth To Top 42.5 FT.

SCREEN MATERIAL

Steel Thermoplastic (PVC)
 Other

TYPE OF WELL (CHECK ONE)

Direct Push Extraction Inclinator
 Gas Migration Injection Lysimeter
 Observation Open Hole Other (specify)
 Piezometer Standard

MONITORING FOR (CHECK ALL THAT APPLY)

Explosives Metals
 Pesticides/Herbicides Petroleum
 Radionuclides SVOCs
 VOCs (non-petroleum) Geotechnical Data

DEPTH		FORMATION DESCRIPTION (OR ATTACH BORING LOG*)
FROM	TO	
0	12	Fill: Compacted Gravel
12	22	Silty Clay to Clay
22	53.5	Sandy Silt with Clay
TOTAL DEPTH: <u>53.5</u> FT.		<input checked="" type="checkbox"/> *Boring Log Attached

IF CEMENT/BENTONITE MIX:

Bags of Cement Used 5
% of Bentonite Used 20%
Water Used Per Bag 15 GAL.

SECONDARY FILTER PACK LENGTH

N/A FT.

DEPTH TO TOP OF PRIMARY FILTER PACK

40.5 FT.

LENGTH OF PRIMARY FILTER PACK

13 FT.

For cased wells, submit additional as-built diagrams showing well construction details including type and size of all casing, hole diameter and grout used.

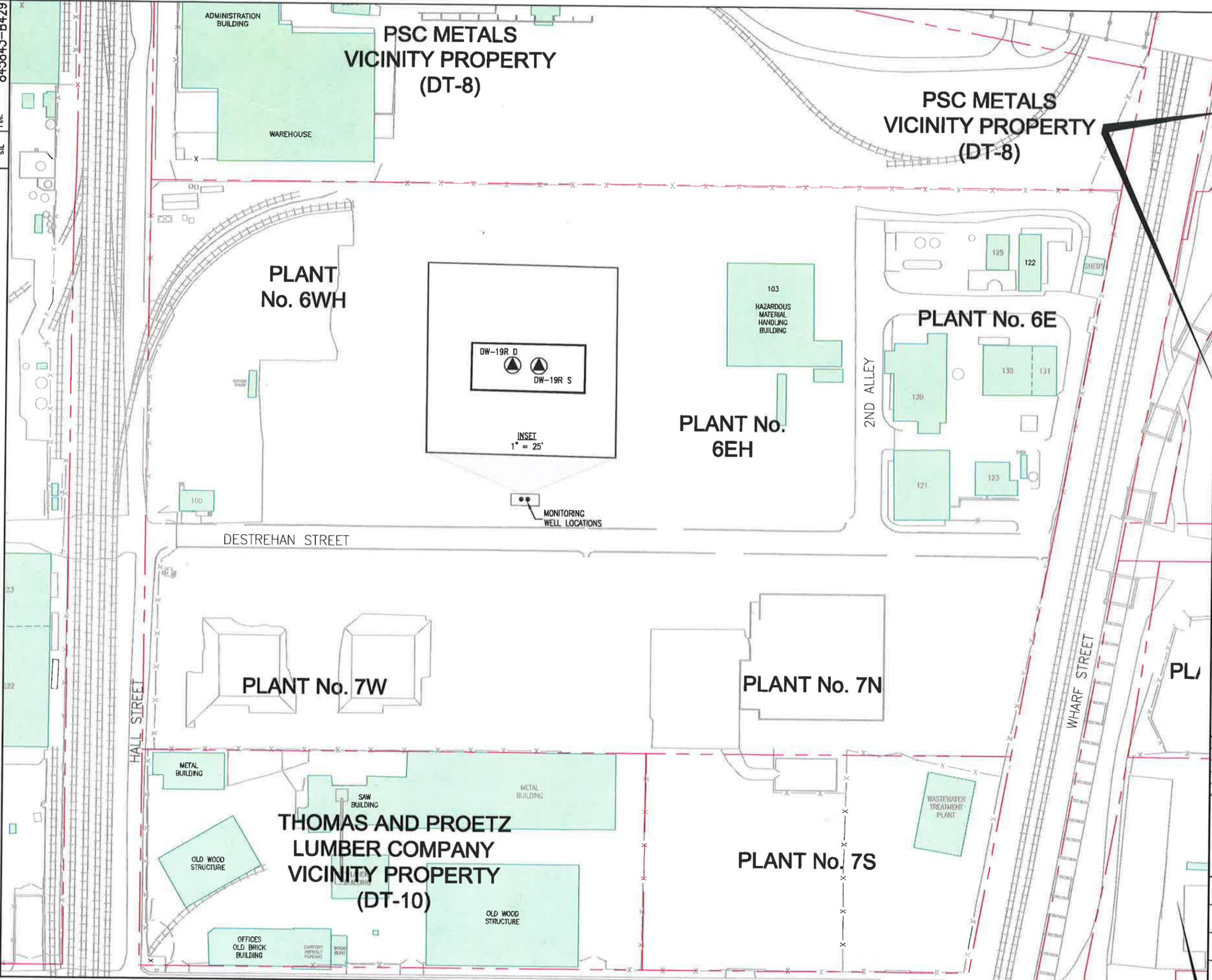
I hereby certify that the monitoring well herein described was constructed in accordance with Missouri Department of Natural Resources requirements.

MONITORING WELL INSTALLATION CONTRACTOR	PERMIT NUMBER	DATE	MONITORING WELL INSTALLATION CONTRACTOR APPRENTICE (IF APPLICABLE)	PERMIT NUMBER
	003469M	03/07/2019		

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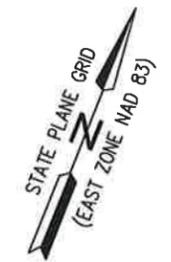
OFFICE Drawing File:
STL 845843-B429

File: \\MO-SRV-01\yusrop_cad\845843\Plant 6 all\Phase 3 - Bldg 101 Area\845843B429.dwg
Plot Date/Time: Mar 27, 2019 - 4:37pm
Plotted By: park



- LEGEND:**
- APPROXIMATE PROPERTY LINE
 - EDGE OF PAVEMENT
 - RAILROAD TRACKS
 - ROAD CENTERLINE
 - EXISTING BUILDING (INCLUDING TEMPORARY BUILDING)
 - PLANNED CONCRETE PAD
 - LOCATION OF MONITORING WELL

- ABBREVIATIONS:**
- BGS = BELOW GROUND SURFACE
 - DIA. = DIAMETER
 - FT. = FEET
 - IN. = INCH
 - MSL = MEAN SEA LEVEL
 - PVC = POLYVINYL CHLORIDE
 - SCH. = SCHEDULE



Revisions			
Symbol	Descriptions	Date	Approved
0	Issued for Monitoring Well Certificate Record	03/26/2019	M. Cummings

Designed by: M. Flora		MONITORING WELL AS-BUILT LOCATION	
Drawn by: M. Herzog			
Checked by: M. Cummings	Date: 03/25/2019	Drawing Number: 1	Sheet: -
Drawing File: 845843B429.dwg		Contract No. W912P9-16-D-0009	

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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 290 m northeast of Gunter Salt (DT-4), 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 Mallinckrodt fenceline (DT-10) and between 80 to 290 m from the SLDS loadout area and excavation areas.

Airborne Radioactive Particulates

An EDE 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 Destrehan Street, Gunther Salt (DT-4), and Plant 6 Loadout. The USEPA CAP88-PC modeling code was used to calculate dose to the receptor from the SLDS excavation areas and loadout area (Leidos 2020). The distances and directions of the maximally exposed receptor from the excavated areas are presented on Figure A-1 of Appendix A. Details related to calculation of EDE for the maximally exposed receptor are contained in Appendix A.

External Gamma Pathway

Because station DA-8 was the TLD with the highest dose and was located between the receptor and Gunther Salt, the TLD results from this location were used for the dose calculations. The station DA-8 TLD measured an annual exposure, above background, of 6.8 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).

$$H_1 = 6.8 \text{ mrem/year}$$

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

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

$$H_2 = 3.0 \text{ mrem/year}$$

where:

H_2 = exposure rate to the receptor

H_1 = exposure rate to the TLDs

h_2 = distance from the source to the receptor = 290 m

h_1 = distance from the source to the TLDs = 185 m

L = average distance from centerline of the line source (H_1) to the end of the line source = 120 m

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

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

$$H_{MEI} = 0.7 \text{ mrem/year}$$

Airborne Radon Pathway

The radon data from Stations DA-8 was used to determine dose due to radon and decay chain isotopes. Appendix B presents the radon results at all stations. Station DA-8 ATDs measured annual exposures above background of 0.0 pCi/L based on 8,760 hours of continuous exposure. Because the radon results at all ATD locations was 0.0 pCi/L, exposure to the receptor from radon (and decay chain isotopes) did not require estimation using a dispersion factor (C_2).

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

$$S_1 = \left[\frac{(0.0) \text{ pCi/L}}{1} \right] = 0.0 \text{ pCi/L}$$

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

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

$$S_{MEI} = 0.0 \text{ mrem/year}$$

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 based on NCRP 97, Section 4, one (1) WL = 100 pCi/L and 0.7 outdoor equilibrium factor
- 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

$$\begin{aligned} TEDE &= CEDE \text{ (airborne particulates)} + H_{MEI} \text{ (external gamma)} + S_{MEI} \text{ (airborne radon)} \\ TEDE &= <0.1 \text{ mrem/year} + 0.7 \text{ mrem/year} + 0.0 \text{ mrem/year} = 0.7 \text{ mrem/year} \end{aligned}$$

where:

- CEDE = committed effective dose equivalent