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SRNS-TR-2018-00099

Savannah River Site

2017 Environmental Monitoring Program Data Report

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Savannah River Site
**2017 Environmental Monitoring
Program Data Report**

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PREFACE

The SRS Environmental Monitoring Program consists of both nonradiological and radiological monitoring of the environment within the SRS boundary and a 2,000-square-mile area beyond the Site's boundary. The purpose of this monitoring is to determine impacts, if any, from SRS operations to the surrounding communities and the environment.

This document presents data from Savannah River Site (SRS) routine effluent monitoring, environmental surveillance and groundwater monitoring programs. Information in this document is summarized in the *Savannah River Site Environmental Report for 2017* (SRNS-RP-2018-00470), referred to hereafter as the ASER. Every effort has been made to present the data in this report in the same order in which it is discussed in the ASER.

The data provided in this report is used to:

- Meet requirements of multiple environmental permits under which SRS operates,
- Meet requirements of DOE Order 458.1, "Radiation Protection of the Public and the Environment," which established as the annual public dose standard for the public and biota dose limits for plants and animals that are at levels that would provide protection of the public and environment from the effects of radiation resulting from DOE activities,
- Meet groundwater sampling requirements identified in the Federal Facility Agreement for the Savannah River Site-approved monitoring plans and Resource Conservation and Recovery Act permits.

Tables 1 through 3 provide general information supporting the remaining tables present in this document.

Tables 4 through 10 present the raw data summarized in Chapter 4, "Nonradiological Environmental Monitoring Program" of the *Savannah River Site Environmental Report for 2017*.

Tables 11 through 39 present the raw data summarized in Chapter 5, "Radiological Environmental Monitoring Program" of the *Savannah River Site Environmental Report for 2017*.

Table 40 through 44 present the raw data summarized in Chapter 8, "Quality Assurance" of the *Savannah River Site Environmental Report for 2017*.

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Table of Contents

PREFACE	5
TABLE OF CONTENTS.....	7
SAMPLING LOCATION INFORMATION.....	9
RADIONUCLIDE NOMENCLATURE	11
UNITS OF MEASURE, SCIENTIFIC NOTATION, AND CONVERSION TABLES	13
MAPS.....	15
SAMPLE MEDIA INFORMATION	27
TABLE 1 SAMPLE MEDIA VOLUMES AND ANALYTICAL METHODS	27
TABLE 2 REPRESENTATIVE MINIMUM DETECTABLE CONCENTRATIONS FOR RADIOLOGICAL ANALYSES.....	30
TABLE 3 NONRADIOLOGICAL ENVIRONMENTAL SURVEILLANCE PRACTICAL QUANTITATION LIMITS (PQLs).....	39
DATA TABLES SUPPORTING THE NONRADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM.....	42
TABLE 4 NATIONAL POLLUTION DISCHARGE ELIMINATION SYSTEM INDUSTRIAL WASTEWATER FLOW DATA	42
TABLE 5 NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM INDUSTRIAL WASTEWATER CHEMICAL MONITORING DATA.....	70
TABLE 6 NPDES INDUSTRIAL STORMWATER BENCHMARK MONITORING DATA.....	85
TABLE 7 NPDES INDUSTRIAL STORMWATER VISUAL MONITORING DATA	90
TABLE 8 SRS STREAM AND SAVANNAH RIVER SURFACE WATER INORGANIC RESULTS.....	92
TABLE 9 NONRADIOLOGICAL SEDIMENT SAMPLING RESULTS	107
TABLE 10 NONRADIOLOGICAL FISH SAMPLING RESULTS	117
DATA TABLES SUPPORTING THE RADIOLOGICAL ENVIRONMENTAL MONITORING PROGRAM	145
TABLE 11 RADIOACTIVITY IN AIR EMISSION SAMPLES	145
TABLE 12 COMPARISON OF ANNUAL AVERAGE AIR EFFLUENT RADIONUCLIDE CONCENTRATIONS TO DOE DERIVED CONCENTRATION TECHNICAL STANDARDS*	195
TABLE 13 TRITIUM IN ENVIRONMENTAL AIR	198
TABLE 14 TRITIUM IN RAINWATER	205
TABLE 15 THERMOLUMINESCENT DOSIMETER (TLD) DATA	209
TABLE 16 RADIONUCLIDES IN SOIL	211
TABLE 17 RADIONUCLIDES IN GRASSY VEGETATION	218
TABLE 18 RADIONUCLIDES IN TERRESTRIAL FOOD	226
TABLE 19 RADIONUCLIDES IN COW'S MILK	241
TABLE 20 RADIONUCLIDES IN LIQUID EFFLUENT SAMPLES.....	243
TABLE 21 COMPARISON OF ANNUAL AVERAGE LIQUID EFFLUENT RADIONUCLIDE CONCENTRATIONS TO DOE DERIVED CONCENTRATION STANDARDS	275
TABLE 22 RADIONUCLIDES IN STORMWATER BASIN WATER	281
TABLE 23 RADIONUCLIDES IN STREAM WATER	292
TABLE 24 RADIONUCLIDES IN RIVER WATER	333
TABLE 25 SUMMARY OF SAVANNAH RIVER SITE TRITIUM TRANSPORT, 1960 -2017	351
TABLE 26 RADIONUCLIDES IN SAVANNAH RIVER SEDIMENT.....	352
TABLE 27 RADIONUCLIDES IN SRS STREAM AND BASIN SEDIMENTS.....	356
TABLE 28 RADIONUCLIDES IN SRS ONSITE DRINKING WATER.....	363
TABLE 29 RADIONUCLIDES IN OFFSITE WATER TREATMENT PLANTS	366
TABLE 30 RADIONUCLIDES IN FRESHWATER FISH.....	369
TABLE 31 RADIONUCLIDES IN SALTWATER FISH.....	381
TABLE 32 RADIONUCLIDES IN SHELLFISH.....	383
TABLE 33 RADIONUCLIDES IN WILDLIFE – DEER FLESH	384

Table of Contents

TABLE 34 RADIONUCLIDES IN WILDLIFE – DEER BONE	387
TABLE 35 RADIONUCLIDES IN WILDLIFE – HOG FLESH.....	388
TABLE 36 RADIONUCLIDES IN WILDLIFE – HOG BONE	389
TABLE 37 CREEK PLANTATION COMPREHENSIVE SAMPLING – RADIONUCLIDES IN SOIL.....	390
TABLE 38 CREEK PLANTATION COMPREHENSIVE SAMPLING – RADIONUCLIDES IN VEGETATION.....	393
TABLE 39 CREEK PLANTATION COMPREHENSIVE SAMPLING – THERMOLUMINESCENT DOSIMETER (TLD) DATA.....	395
DATA TABLES SUPPORTING QUALITY ASSURANCE	397
TABLE 40 BLIND SAMPLE RESULTS FOR PH FIELD MEASUREMENTS.....	397
TABLE 41 NPDES BLIND SAMPLE RESULTS.....	398
TABLE 42 NPDES DUPLICATE SAMPLE RESULTS	403
TABLE 43 SUMMARY OF SRS STREAM WATER QUALITY DUPLICATE SAMPLE RESULTS DETECTED	409
TABLE 44 SUMMARY OF SAVANNAH RIVER WATER QUALITY DUPLICATE SAMPLE RESULTS DETECTED.....	413

Sampling Location Information

This section contains sampling location abbreviations used in the text and on the sampling location maps. It also contains a list of sampling locations known by more than one name (see next page).

Location Abbreviations	Location Name/Other Applicable Information
4M	Fourmile
4MB	Fourmile Branch (Fourmile Creek)
4MC	Fourmile Creek
BDC	Beaver Dam Creek
BG	Burial Ground
BLTW	Burke and Screven Counties Wells (Georgia)
EAV	E-Area Vaults
FM	Four Mile
FMB	Fourmile Branch (Fourmile Creek)
GSTW	Burke and Screven Counties Wells (Georgia)
HP	HP (sampling location designation only; not an actual abbreviation)
HWY	Highway
JAX	SRS Boundary Wells
KP	Kennedy Pond
L3R	Lower Three Runs
MCQBR	McQueens Branch
MHTW	Burke and Screven Counties Wells (Georgia)
MPTW	Burke and Screven Counties Wells (Georgia)
MSB	SRS Boundary Wells
NSB L&D	New Savannah Bluff Lock & Dam (Augusta Lock and Dam)
PAR	"P" and "R" Pond
PB	Pen Branch
RM	River Mile
SC	Steel Creek
SWDF	Solid Waste Disposal Facility
TB	Tims Branch
TC	Tinker Creek
TNX	Multipurpose Pilot Plant Campus
TR	Burke and Screven Counties Wells (Georgia)
U3R	Upper Three Runs
VEGP	Vogtle Electric Generating Plant (Plant Vogtle)

Sampling Location Information

Sampling Locations Known by More Than One Name
Augusta Lock and Dam; New Savannah River Lock & Dam
Beaver Dam Creek; 400-D
Fourmile Creek-2B; Fourmile Creek at Road C
Fourmile Creek-3A; Fourmile Creek at Road C
Lower Three Runs-2; Lower Three Runs at Patterson Mill Road
Lower Three Runs-3; Lower Three Runs at Highway 125
Pen Branch-3; Pen Branch at Road A-13-2
R Area downstream of R-1; 100-R
River Mile 118.8; U.S. Highway 301 Bridge Area; Highway 301, US 301, Georgia Welcome Center at Highway 301
River Mile 129.1; Lower Three Runs Mouth
River Mile 141.5; Steel Creek Boat Ramp
River Mile 150.4; Vogtle Discharge
River Mile 152.1; Beaver Dam Creek Mouth
River Mile 157.2; Upper Three Runs Mouth
River Mile 160.5; Demier Landing
Steel Creek at Road A; Steel Creek-4; Steel Creek-4 at Road A; Steel Creek at Highway 125
Tims Branch at Road C; Tims Branch-5
Tinker Creek at Kennedy Pond; Tinker Creek-1
Upper Three Runs-4; Upper Three Runs-4 at Road A; Upper Three Runs at Road A; Upper Three Runs at Hwy 125
Upper Three Runs-1A; Upper Three Runs-1A at Road 8-1
Upper Three Runs-3; Upper Three Runs-3 at Road C

Radionuclide Nomenclature

This table presents those radionuclides measured as part of the SRS Environmental Monitoring Program. The half-lives are from ICRP 107, *Nuclear Decay Data for Dosimetric Calculations* (2008).

Radionuclide	Symbol	Half-Life	Radionuclide	Symbol	Half-Life
Americium-241	Am-241	432 y	Praseodymium-144	Pr-144	17.3 m
Americium-243	Am-243	7370 y	Promethium-147	Pm-147	2.62 y
Antimony-125	Sb-125	2.76 y	Promethium-148m	Pm-148m	41.3 d
Antimony-126	Sb-126	12.4 d	Protactinium-233	Pa-233	27.0 d
Barium-133	Ba-133	10.5 y	Radium-226	Ra-226	1600 y
Cadmium-109	Cd-109	461 d	Radium-228	Ra-228	5.75 y
Carbon-14	C-14	5700 y	Rhodium-106	Rh-106	29.8 s
Cerium-139	Ce-139	138 d	Ruthenium-103	Ru-103	39.3 d
Cerium-141	Ce-141	32.5 d	Ruthenium-106	Ru-106	374 d
Cerium-144	Ce-144	285 d	Samarium-151	Sm-151	90 y
Cesium-134	Cs-134	2.06 y	Selenium-75	Se-75	120 d
Cesium-137	Cs-137	30.2 y	Selenium-79	Se-79	2.95E+05 y
Cobalt-57	Co-57	272 d	Silver-110	Ag-110m	250 d
Cobalt-60	Co-60	5.27 y	Strontium-85	Sr-85	64.8 d
Curium-244	Cm-244	18.1 y	Strontium-89	Sr-89	50.5 d
Europium-152	Eu-152	13.5 y	Strontium-90	Sr-90	28.8 y
Europium-154	Eu-154	8.59 y	Technetium-99	Tc-99	2.11E+05 y
Europium-155	Eu-155	4.76 y	Tellurium-127	Te-127	9.35 h
Fluorine-18	F-18	110 m	Tellurium-129	Te-129	69.6 m
Iodine-129	I-129	1.57E+07 y	Thallium-208	Tl-208	3.05 m
Iodine-131	I-131	8.02 d	Thorium-228	Th-228	1.91 y
Iron-55	Fe-55	2.74 y	Thorium-229	Th-229	7340 y
Krypton-85	Kr-85	10.8 y	Thorium-230	Th-230	7.54E+04 y
Lead-212	Pb-212	10.6 h	Thorium-231	Th-231	25.5 h
Manganese-54	Mn-54	312 d	Thorium-232	Th-232	1.41E+10 y
Mercury-203	Hg-203	46.6 d	Tritium	H-3	12.3 y
Neptunium-237	Np-237	2.14E+06 y	Uranium-232	U-232	68.9 y
Nickel-59	Ni-59	1.01E+05 y	Uranium-233	U-233	1.59E+05 y
Nickel-63	Ni-63	100 y	Uranium-234	U-234	2.46E+05 y
Niobium-94	Nb-94	2.03E+04 y	Uranium-235	U-235	7.04E+08 y
Niobium-95	Nb-95	35.0 d	Uranium-236	U-236	2.34E+07 y
Plutonium-236	Pu-236	2.86 y	Uranium-238	U-238	4.47E+09 y
Plutonium-238	Pu-238	87.7 y	Yttrium-88	Y-88	107 d
Plutonium-239	Pu-239	2.41E+04 y	Yttrium-90	Y-90	64.1 h
Plutonium-240	Pu-240	6560 y	Yttrium-91	Y-91	58.5 d

Radionuclide Nomenclature

Radionuclide	Symbol	Half-Life	Radionuclide	Symbol	Half-Life
Plutonium-241	Pu-241	14.4 y	Zinc-65	Zn-65	244 d
Plutonium-242	Pu-242	3.75E+05 y	Zirconium-95	Zr-95	64.0 d

Note: Definitions in Half-life Column: m = minute, h = hour, y = year

Units of Measure, Scientific Notation, and Conversion Tables

Symbol	Name	Symbol	Name
Temperature		Concentration	
°C	degrees Celsius	ppb	parts per billion
°F	degrees Fahrenheit	ppm	parts per million
Time		Rate	
d	day	cfs	cubic feet per second
h	hour	gpm	gallons per minute
y	year	Conductivity	
Length		μmho	micromho
cm	centimeter	Radioactivity	
ft	foot	Ci	curie
in	inch	cpm	counts per minute
km	kilometer	mCi	millicurie
m	meter	μCi	microcurie
mm	millimeter	pCi	picocurie
μm	micrometer	Bq	becquerel
Mass		Radiation Dose	
g	gram	mrad	millirad
kg	kilogram	mrem	millirem
mg	milligram	Sv	sievert
μg	microgram	mSv	millisievert
Area		μSv	microsievert
mi ²	square mile	R	roentgen
ft ²	square foot	mR	milliroentgen
Volume		μR	microroentgen
gal	gallon	Gy	gray
L	liter		
mL	milliliter		

Fractions and Multiples of Units					
Multiple	Decimal Equivalent		Prefix	Symbol	Report Format
10^6		1,000,000	mega-	M	E+06
10^3		1,000	kilo-	k	E+03
10^2		100	hecto-	h	E+02
10		10	deka-	da	E+01
10^{-1}		0.1	deci-	d	E-01
10^{-2}		0.01	centi-	c	E-02
10^{-3}		0.001	milli-	m	E-03
10^{-6}		0.000001	micro-	μ	E-06
10^{-9}		0.000000001	nano-	n	E-09
10^{-12}		0.000000000001	pico-	p	E-12
10^{-15}		0.000000000000001	femto-	f	E-15
10^{-18}		0.000000000000000001	atto-	a	E-18

Conversion Table (Units of Radiation Measure)		
Current System	<i>Système International</i>	Conversion
curie (Ci)	becquerel (Bq)	1 Ci = 3.7×10^{10} Bq
rad (radiation absorbed dose)	gray (Gy)	1 rad = 0.01 Gy
rem (roentgen equivalent man)	sievert (Sv)	1 rem = 0.01 Sv

Conversion Table					
Multiply	By	To Obtain	Multiply	By	To Obtain
in	2.54	cm	cm	0.394	in
ft	0.305	m	m	3.28	ft
mi	1.61	km	km	0.621	mi
lb	0.4536	kg	kg	2.205	lb
liq qt-US	0.945	L	L	1.057	liq qt-US
ft ²	0.093	m ²	m ²	10.764	ft ²
mi ²	2.59	km ²	km ²	0.386	mi ²
ft ³	0.028	m ³	m ³	35.31	ft ³
d/m	0.450	pCi	pCi	2.22	d/m
pCi	10^{-6}	μ Ci	μ Ci	10^6	pCi
pCi/L (water)	10^{-9}	μ Ci/mL (water)	μ Ci/mL (water)	10^9	pCi/L (water)
pCi/m ³ (air)	10^{-12}	μ Ci/mL (air)	μ Ci/mL (air)	10^{12}	pCi/m ³ (air)

Maps

The locations sampled for the various media types are shown on the following maps. Due to the large number of groundwater sample locations on SRS, a map is not provided as it would not be possible to discern useful information. A map is provided of the monitoring well locations in Burke and Screven counties from which groundwater samples are collected.

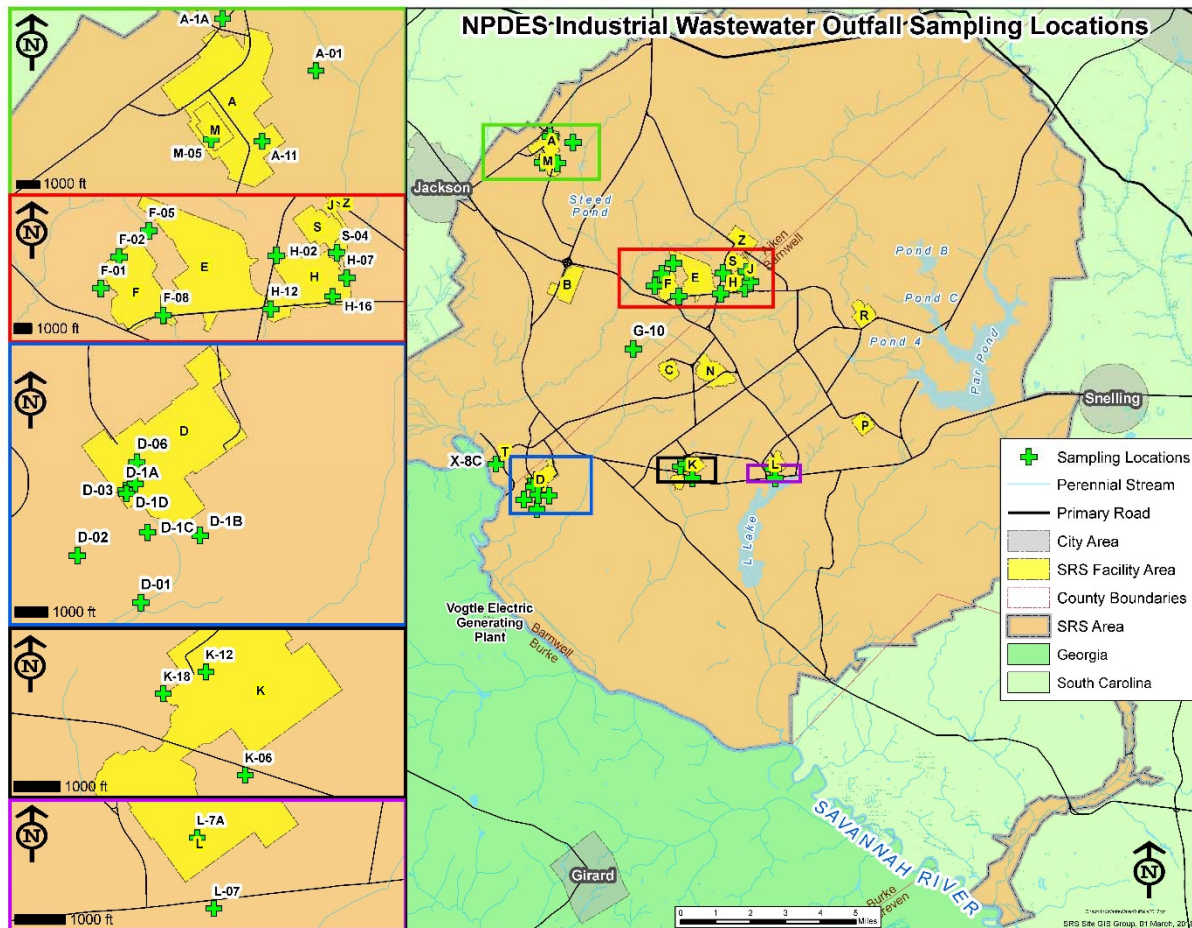


Figure 1 NPDES Industrial Wastewater Outfall Sampling Locations

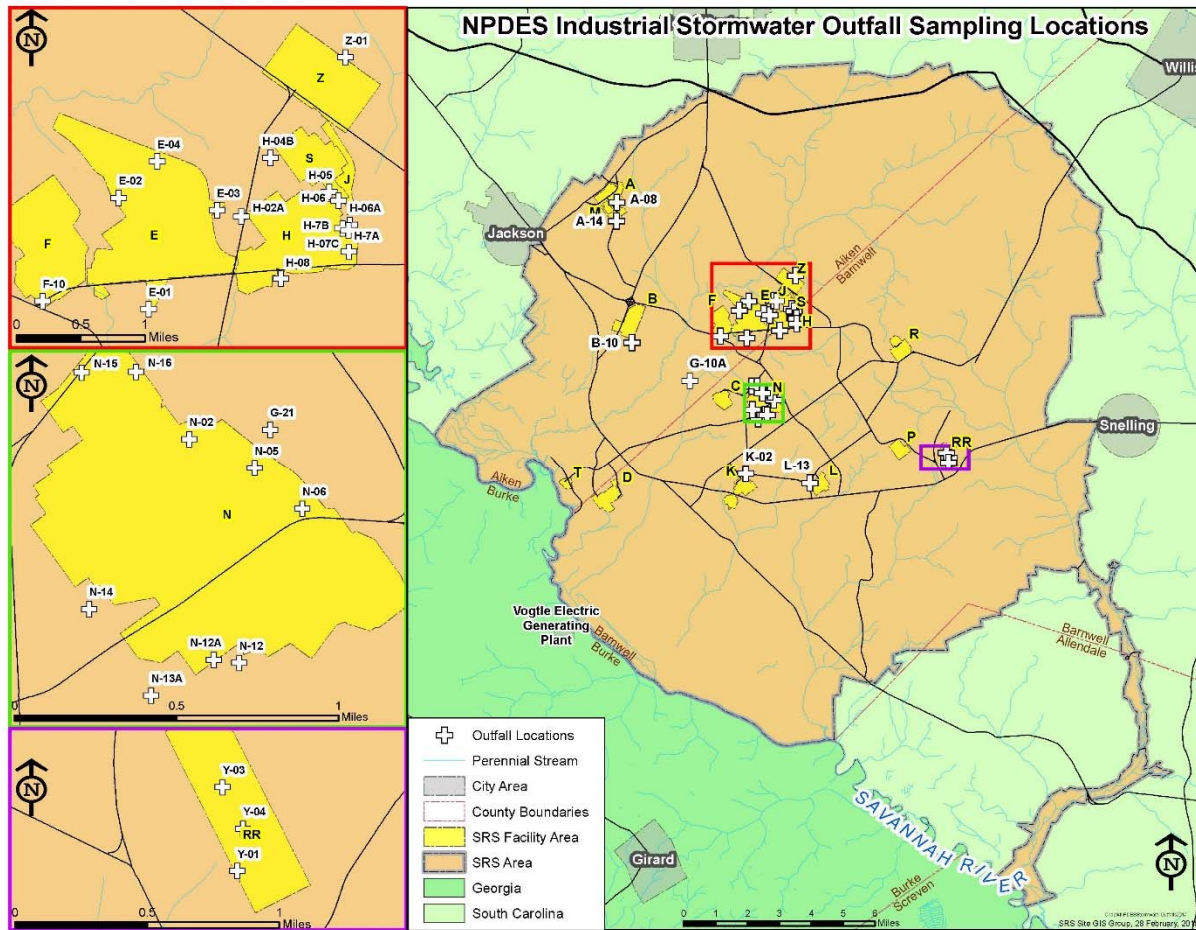


Figure 2 NPDES Industrial Stormwater Outfall Sampling Locations

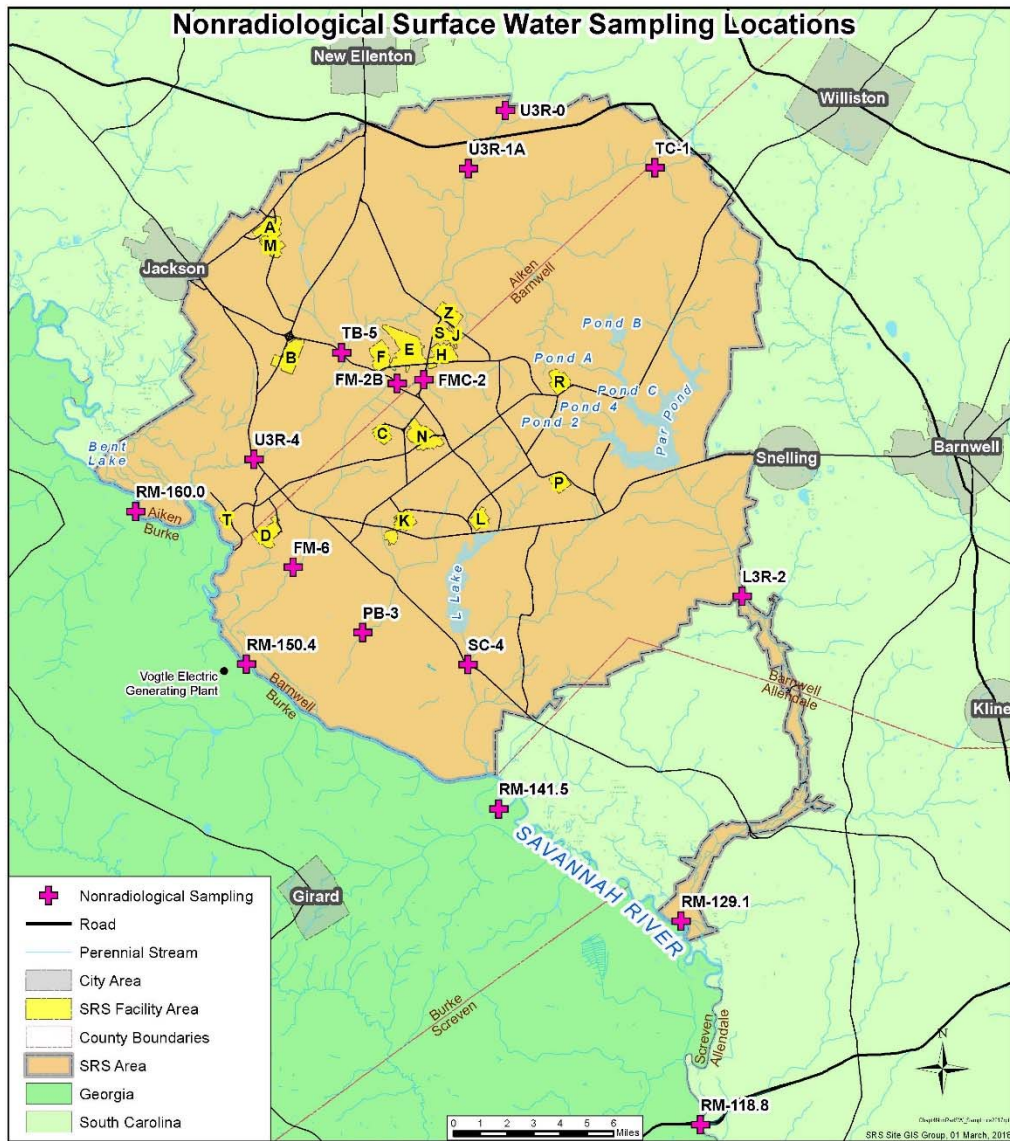
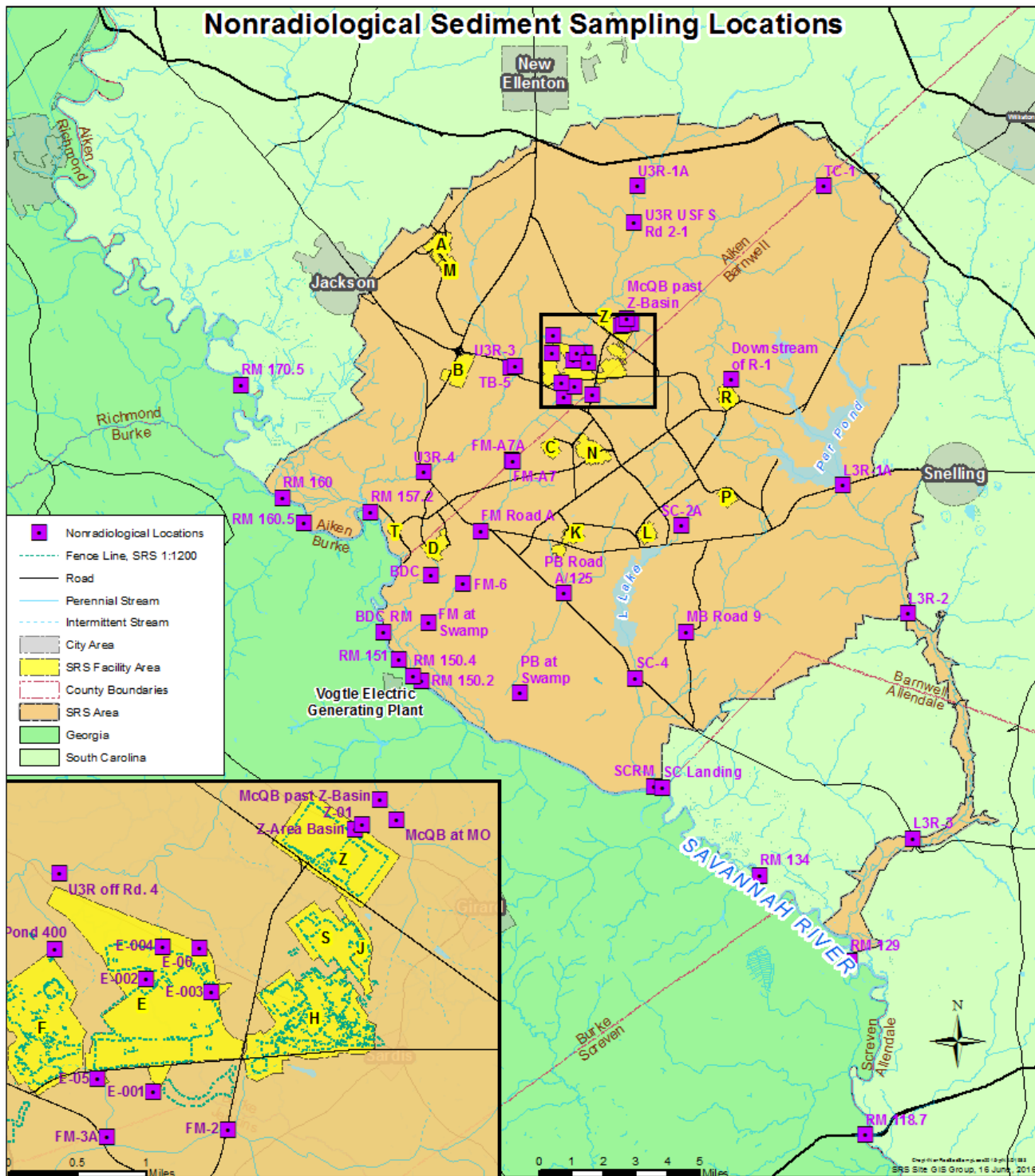


Figure 3 Nonradiological Surface Water Sampling Locations



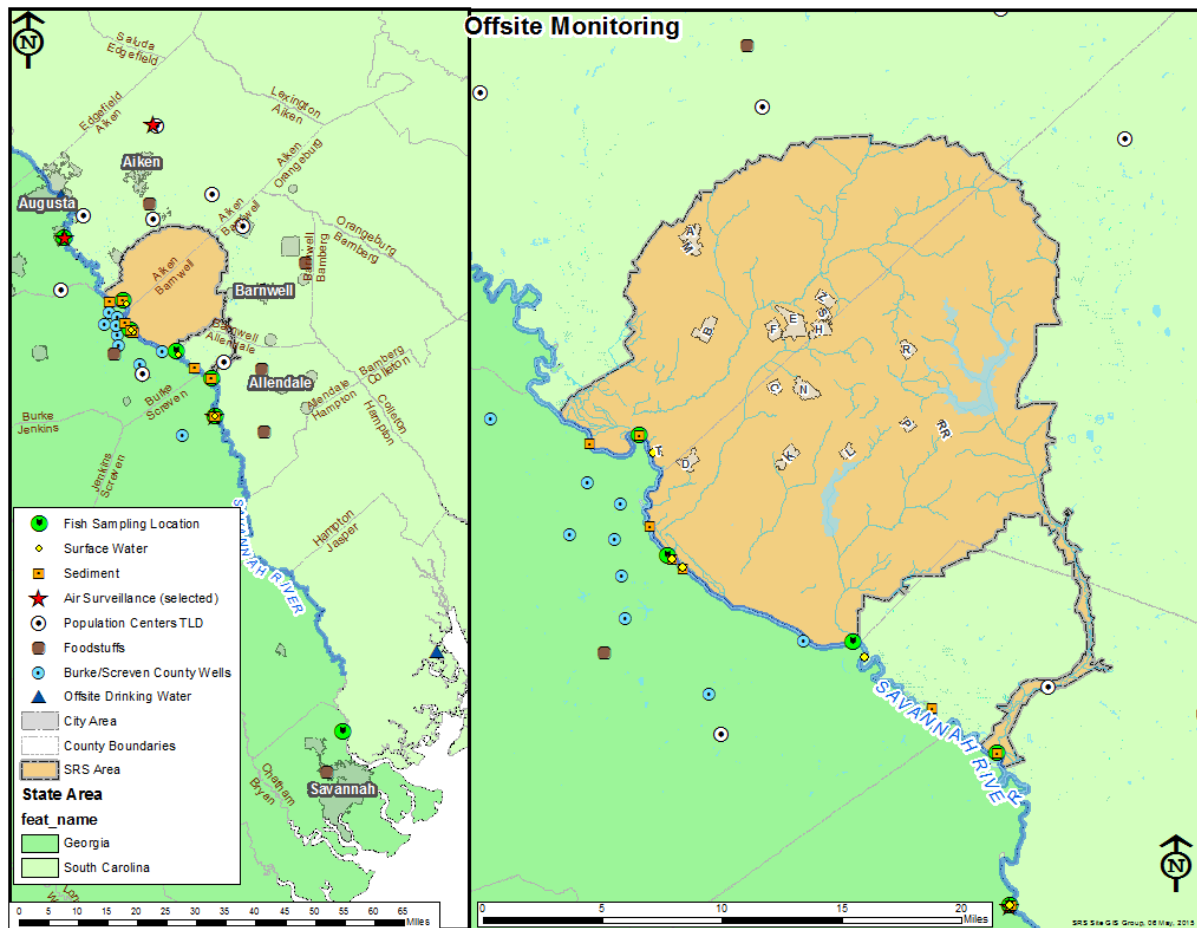


Figure 5 SRS Offsite Sampling Media Locations for Georgian and South Carolina

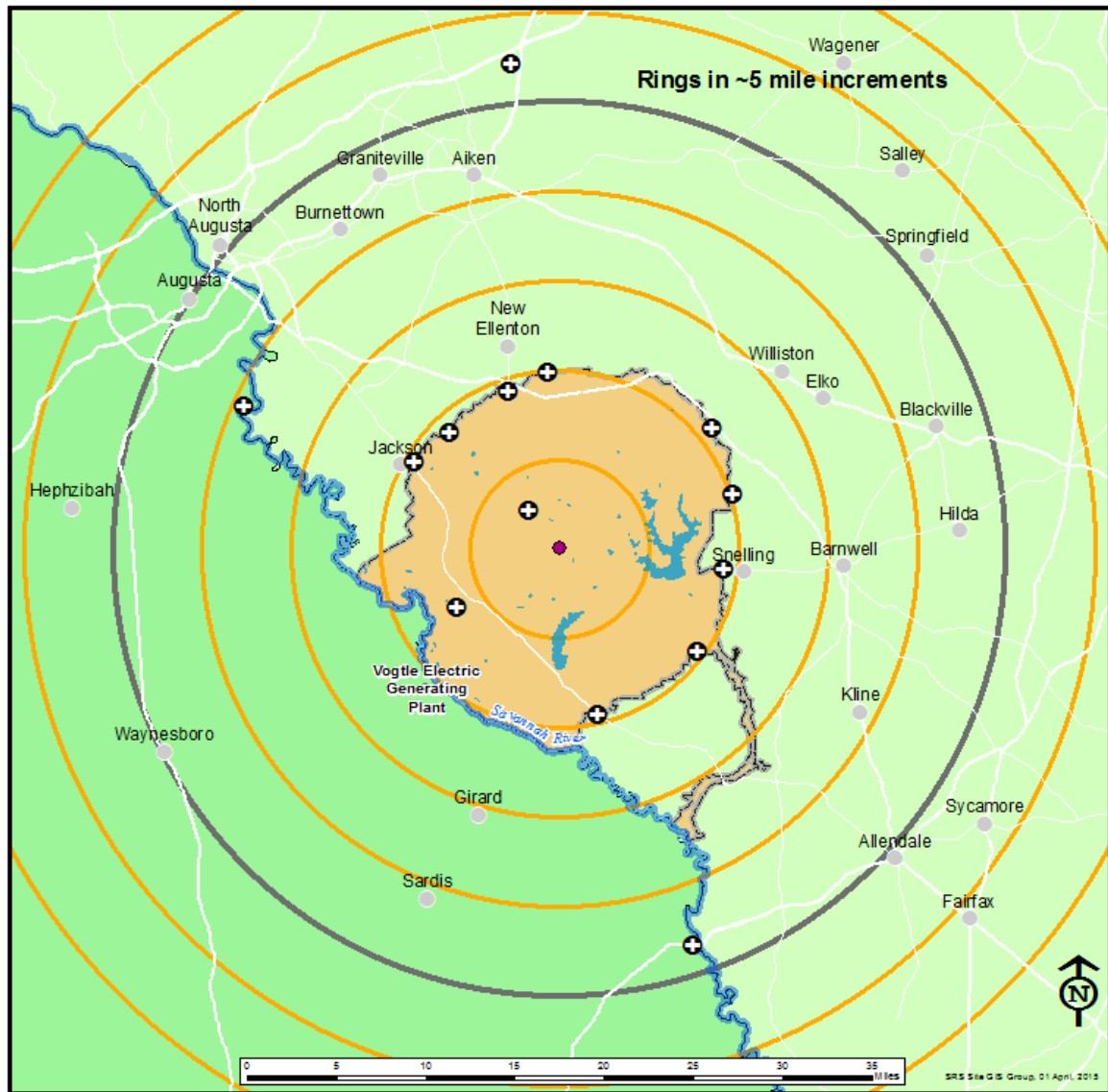


Figure 6 Air Sampling Locations Surround SRS up to 25 Miles

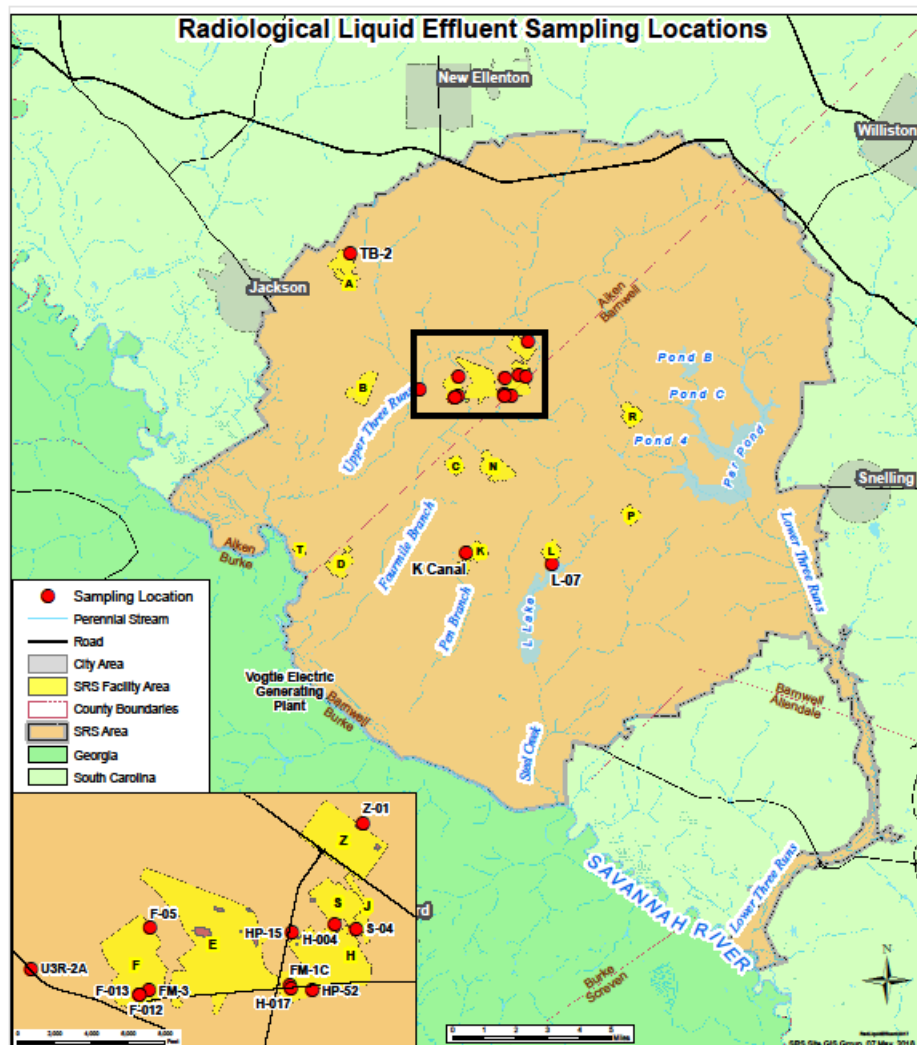


Figure 7 Radiological Liquid Effluent Sampling Locations

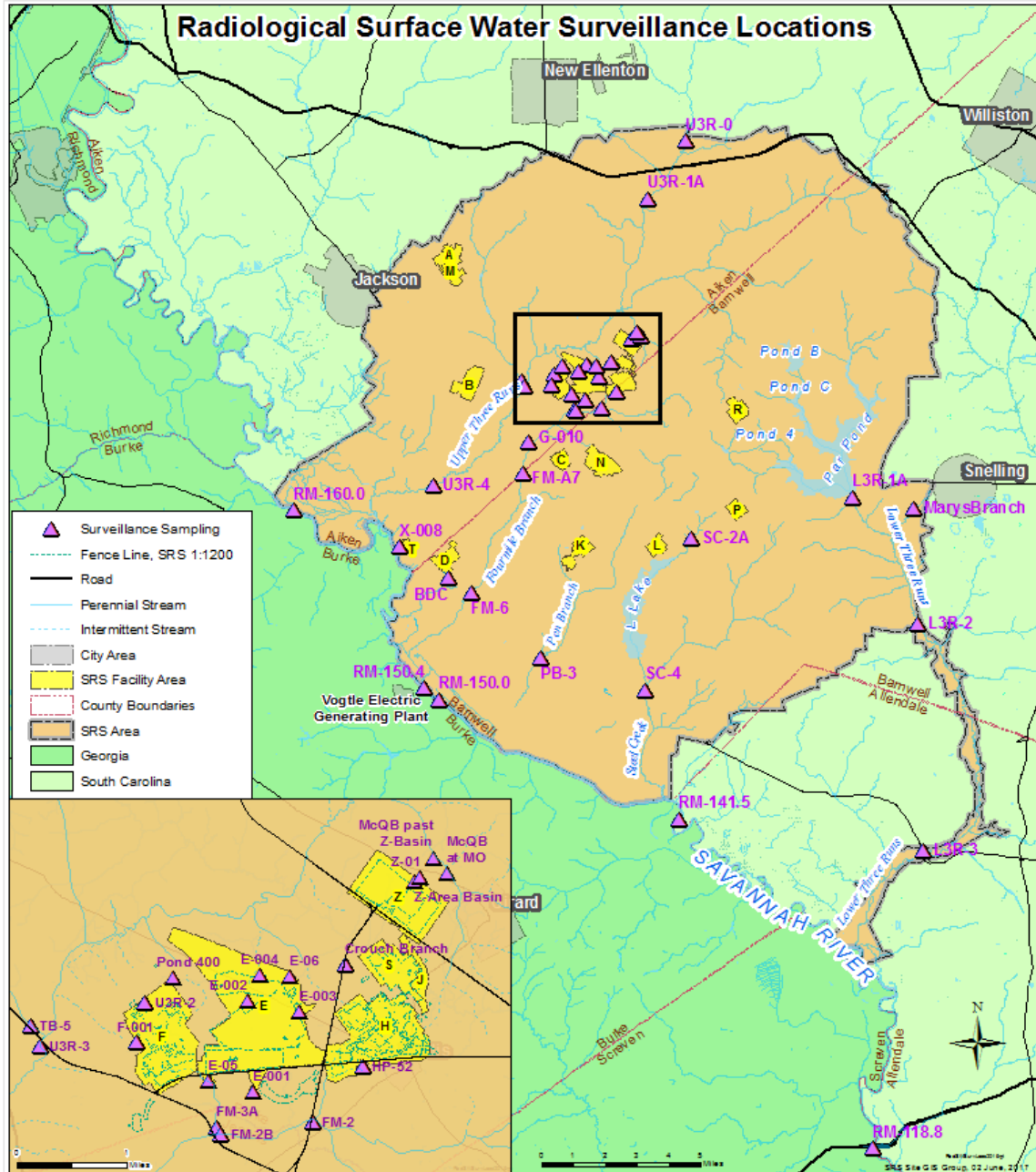


Figure 8 Radiological Surface Water Sampling Locations

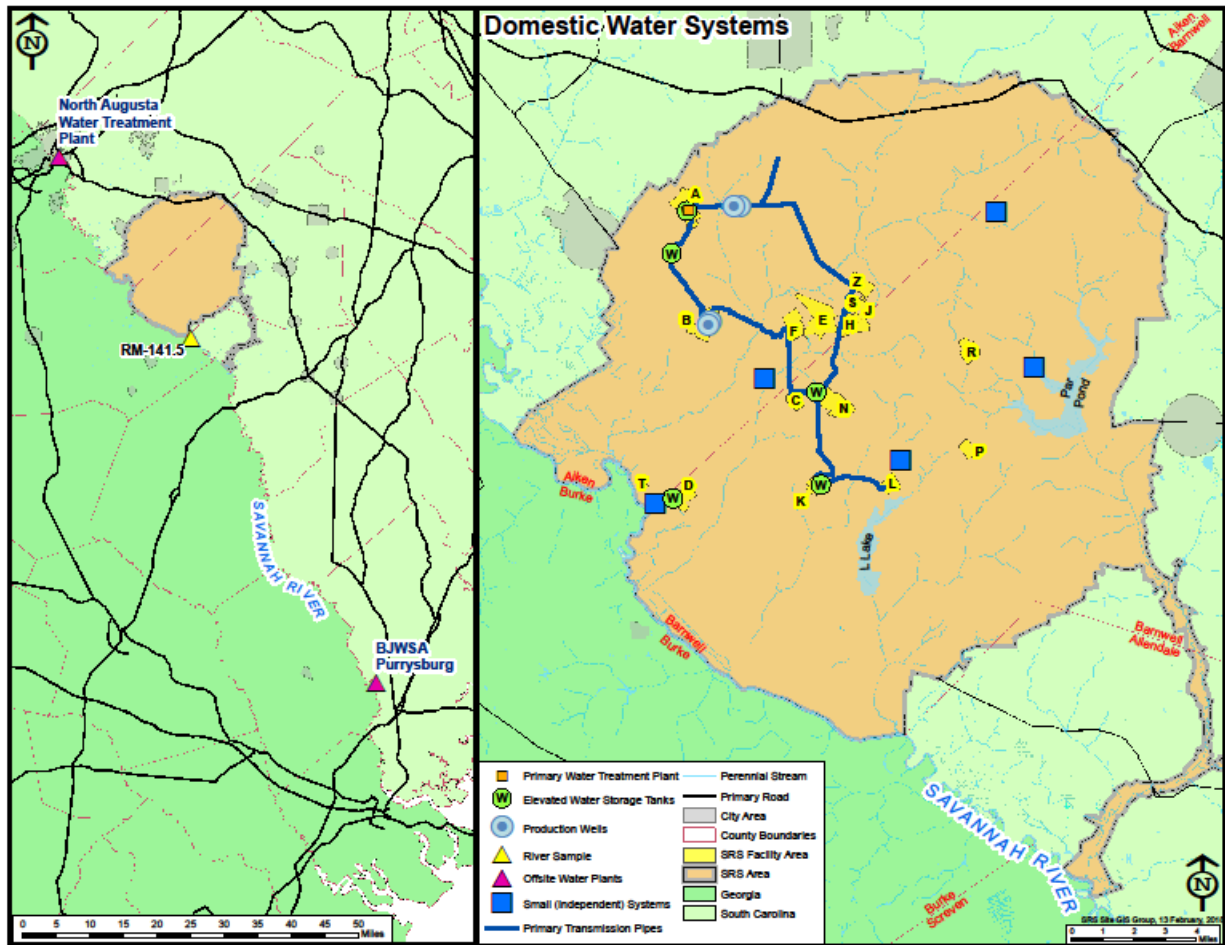


Figure 9 Drinking Water Sampling Locations

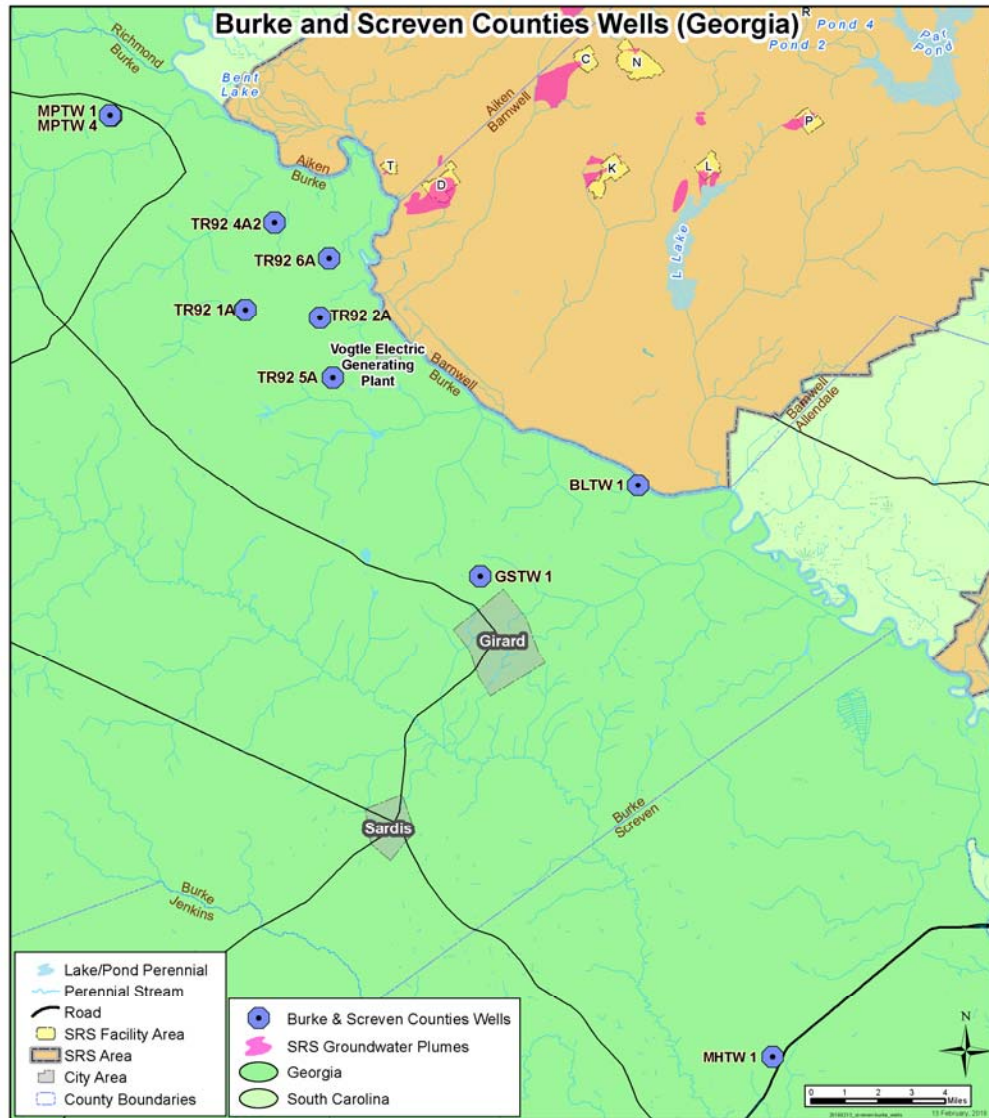


Figure 10 Location of Tritium Wells Sampled in Burke and Screven Counties, Georgia

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Sample Media Information

Tables 1 through 3 provide information related to volumes of sample media needed for various analyses and the lower detection limits for the various media and analytes.

Table 1 Sample Media Volumes and Analytical Methods

Matrix	Analytical Parameter	Representative Aliquot	Analytical Method
Surveillance/Effluent Air			
	Gamma, I-129	1400 m ³	Gamma Spectroscopy
	Gross alpha-beta	1400 m ³	Gas-Flow Proportional Counting
	Tritium	3 m ³	Liquid Scintillation Counting
	Strontium-89,90	1400 m ³	Gas-Flow Proportional Counting
	Actinides	1400 m ³	Alpha Spectroscopy
Effluent Water			
	Gamma, I-129	1 L	Gamma Spectroscopy
	Gross alpha-beta	1 L	Gas-Flow Proportional Counting
	Tritium	10 mL	Liquid Scintillation Counting
	Carbon-14	150 mL	Liquid Scintillation Counting
	Strontium-89,90	1 L	Gas-Flow Proportional Counting
	Actinides	1 L	Alpha Spectroscopy
	Technetium-99	500 mL	Liquid Scintillation Counting
Stream Water			
	Gamma	1 L	Gamma Spectroscopy
	I-129	1500 mL	Gamma Spectroscopy
	Gross alpha-beta	1 L	Gas-Flow Proportional Counting
	Tritium	10 mL	Liquid Scintillation Counting
	Strontium-89,90	1 L	Gas-Flow Proportional Counting
	Actinides	1 L	Alpha Spectroscopy
	Technetium-99	500 mL	Liquid Scintillation Counting
River Water			
	Gamma	7.0 L	Gamma Spectroscopy
	Gross alpha-beta	1000 mL	Gas-Flow Proportional Counting
	Tritium	10 mL	Liquid Scintillation Counting
	Strontium-89,90	1000 mL	Gas-Flow Proportional Counting
	Actinides	1000 mL	Alpha Spectroscopy
	Technetium-99	1000 mL	Liquid Scintillation Counting
Drinking Water			
	Gamma	1 L	Gamma Spectroscopy
	Gross alpha-beta	1 L	Gas-Flow Proportional Counting
	Tritium	10 mL	Liquid Scintillation Counting
	Strontium-89,90	1 L	Gas-Flow Proportional Counting
	Actinides	1 L	Alpha Spectroscopy
Wet/Dry Deposition (Rainwater)			
	Gamma	0.37 m ²	Gamma Spectroscopy
	Gross alpha-beta	0.093 m ² (1/4 sample)	Gas-Flow Proportional Counting

Sample Media Information

Matrix	Analytical Parameter	Representative Aliquot	Analytical Method
	Tritium	10 mL	Liquid Scintillation Counting
	Strontium-89,90	0.139 m ² (3/8 sample)	Gas-Flow Proportional Counting
	Actinides	0.031 m ² (1/12 sample)	Alpha Spectroscopy
Soil			
	Gamma	250 g	Gamma Spectroscopy
	Gross alpha-beta	0.2 g	Gas-Flow Proportional Counting
	Strontium-89,90	5 g	Gas-Flow Proportional Counting
	Actinides - Uranium	1 g	Alpha Spectroscopy
	Plutonium	10 g	Alpha Spectroscopy
	Plutonium/Neptunium	8 g	Alpha Spectroscopy
	Americium/Curium	8 g	Alpha Spectroscopy
Sediment			
	Gamma	250g	Gamma Spectroscopy
	Gross alpha-beta	0.2 g	Gas-Flow Proportional Counting
	Strontium-89,90	5 g	Gas-Flow Proportional Counting
	Actinides - Uranium	1 g	Alpha Spectroscopy
	Plutonium	10 g	Alpha Spectroscopy
	Plutonium/Neptunium	8 g	Alpha Spectroscopy
	Americium/Curium	8 g	Alpha Spectroscopy
Vegetation			
	Gamma	200 g	Gamma Spectroscopy
	Gross alpha-beta	0.5 g	Gas-Flow Proportional Counting
	Tritium	100 g	Liquid Scintillation Counting
	Neptunium-237	20 g	Alpha Spectroscopy
	Strontium-89,90	20 g	Gas-Flow Proportional Counting
	Actinides	20 g	Alpha Spectroscopy
	Technetium-99	10 g	Liquid Scintillation Counting
Fish—edible			
	Gamma	500 g (a)	Gamma Spectroscopy
	Iodine-129	500 g (a)	Gamma Spectroscopy
	Gross alpha-beta	10 g	Gas-Flow Proportional Counting
	Tritium	60 g	Liquid Scintillation Counting
	Strontium-89,90	200 g (b)	Gas-Flow Proportional Counting
	Technetium-99	25 g	Liquid Scintillation Counting
Note: a—400 g for panfish; b—100 g for panfish			
Fish—nonedible			
	Strontium-89,90	10 g	Gas-Flow Proportional Counting
Oysters/Crabs/Shrimp			
	Gamma	500 g	Gamma Spectroscopy
	Iodine-129	500 g	Gamma Spectroscopy
	Gross alpha-beta	10 g	Gas-Flow Proportional Counting
	Strontium-89,90	100 g	Gas-Flow Proportional Counting
	Technetium-99	25 g	Liquid Scintillation Counting
Deer/Hogs—muscle			
	Gamma	400 g	Gamma Spectroscopy
	Strontium-89,90	100 g	Gas-Flow Proportional Counting

Matrix	Analytical Parameter	Representative Aliquot	Analytical Method
Deer/Hogs–bone	Gross alpha-beta	15 g	Gas-Flow Proportional Counting
	Strontium-89,90	10 g	Gas-Flow Proportional Counting
Foods–watermelon	Gamma	1000 g	Gamma Spectroscopy
	Strontium-89,90	100 g	Gas-Flow Proportional Counting
	Gross alpha-beta	15 g	Gas-Flow Proportional Counting
	Tritium	100 g	Liquid Scintillation Counting
	Neptunium-237	100 g	Alpha Spectroscopy
	Technetium-99	50 g	Liquid Scintillation Counting
	Actinides	100 g	Alpha Spectroscopy
Foods–rotational crops	Gamma	750 g	Gamma Spectroscopy
	Strontium-89,90	20 g	Gas-Flow Proportional Counting
	Gross alpha-beta	3 g	Gas-Flow Proportional Counting
	Neptunium-237	20 g	Alpha Spectroscopy
	Tritium	100 g	Liquid Scintillation Counting
	Technetium-99	10 g	Liquid Scintillation Counting
	Actinides	20 g	Alpha Spectroscopy
Foods–collards	Gamma	500 g	Gamma Spectroscopy
	Strontium-89,90	20 g	Gas-Flow Proportional Counting
	Neptunium-237	20 g	Alpha Spectroscopy
	Gross alpha-beta	0.5 g	Gas-Flow Proportional Counting
	Tritium	100 g	Liquid Scintillation Counting
	Technetium-99	10 g	Liquid Scintillation Counting
	Actinides	20 g	Alpha Spectroscopy
Milk	Gamma	1 L	Gamma Spectroscopy
	Tritium	5 mL	Liquid Scintillation Counting
	Strontium-90	500 mL	Gas-Flow Proportional Counting
Beef	Gamma	400 g	Gamma Spectroscopy
	Strontium-89,90	200 g	Gas-Flow Proportional Counting
	Tritium	60 g	Liquid Scintillation Counting
	Technetium-99	25 g	Liquid Scintillation Counting
	Neptunium-237	200 g	Alpha Spectroscopy
	Actinides	200 g	Alpha Spectroscopy
	Gross alpha-beta	15 g	Gas-Flow Proportional Counting

Table 2 Representative Minimum Detectable Concentrations for Radiological Analyses

Onsite Environmental Bioassay Laboratory					
Material Type	Type of Media	Method	Analyte	CY 2017 Average MDC	Units
Gas	Environmental Air	GFPC: GROSS A/B	Gross A	2.80E-04	pCi/m ³
			Gross B	6.33E-04	
		HPGE SPEC:	Co-60	5.08E-03	
			Cs-137	5.12E-03	
			K-40	1.02E-01	
		LSC: H-3	H-3	1.41E+01	
Liquid	Effluent Water	ALPHA SPEC: Am/Cm	Am-241	2.43E-05	pCi/mL
			Cm-244	2.26E-05	
		ALPHA SPEC: Pu	Pu-238	2.69E-05	
			Pu-239	2.85E-05	
		ALPHA SPEC: Pu/Np	Np-237	3.25E-05	
			Pu-238	2.93E-05	
			Pu-239	2.96E-05	
		ALPHA SPEC: TU	U-234	2.85E-05	
			U-235	3.10E-05	
			U-238	2.60E-05	
		GFPC: GROSS A/B	Gross A	9.77E-01	pCi/L
			Gross B	1.56E+00	
		GFPC: Sr-89/90	Sr-89/90	1.80E+00	
		HPGE SPEC:	Co-60	7.15E-03	pCi/mL
			Cs-137	7.70E-03	
			K-40	1.45E-01	
		HPGE: I-129	I-129	9.34E-04	
		LSC: C-14	C-14	1.41E-02	
		LSC: H-3	H-3	4.59E-01	
		LSC: Tc-99	Tc-99	2.49E-03	
	Finished Drinking Water	GFPC: GROSS A/B	Gross A	2.86E-01	pCi/L
			Gross B	4.38E-01	
		HPGE SPEC:	Co-60	7.22E-03	pCi/mL
			Cs-137	7.54E-03	
			K-40	1.51E-01	
		LSC: H-3	H-3	1.59E-01	
	Milk	GFPC: Sr-90	Sr-90	1.24E+00	pCi/L
		HPGE SPEC:	Co-60	3.37E-03	pCi/mL
			Cs-137	3.15E-03	
			K-40	2.53E-02	
		LSC: H-3	H-3	2.58E-01	
	Potable Drinking Water	ALPHA SPEC: Am/Cm	Am-241	8.46E-06	pCi/mL
			Cm-244	7.70E-06	

Sample Media Information

Onsite Environmental Bioassay Laboratory					
Material Type	Type of Media	Method	Analyte	CY 2017 Average MDC	Units
		ALPHA SPEC: Pu	Pu-238	8.20E-06	
			Pu-239	8.15E-06	
		ALPHA SPEC: TU	U-234	9.39E-06	
			U-235	9.69E-06	
			U-238	8.37E-06	
		GFPC: GROSS A/B	Gross A	2.70E-01	pCi/L
			Gross B	4.73E-01	
		GFPC: Sr-89/90	Sr-89/90	6.26E-01	pCi/mL
		HPGE SPEC:	Co-60	7.37E-03	
			Cs-137	7.84E-03	
			K-40	1.29 -01	
		LSC: H-3	H-3	1.61E-01	
	Process Discharge Water	LSC: H-3	H-3	4.29E-01	pCi/mL
	Process Sewer Water	ALPHA SPEC: Am/Cm	Am-241	8.74E-06	pCi/mL
			Cm-244	7.30E-06	
		ALPHA SPEC: Pu/Np	Np-237	1.17E-05	
			Pu-238	1.08E-05	
			Pu-239	1.07E-05	
		ALPHA SPEC: Th	Th-228	5.26E-03	
			Th-230	1.59E-03	
			Th-232	1.60E-03	
		ALPHA SPEC: TU	U-234	1.47E-05	
			U-235	1.49E-05	
			U-238	1.28E-05	
		GFPC: GROSS A/B	Gross A	1.69E+01	pCi/L
			Gross B	2.70E+01	
		GFPC: Sr-89/90	Sr-89/90	5.55E-01	pCi/mL
		HPGE SPEC:	Co-60	3.10E-03	
			Cs-137	3.31E-03	
			K-40	4.99E-02	
		HPGE: I-129	I-129	9.69E-03	
		LSC: C-14	C-14	1.47E-02	
		LSC: H-3	H-3	4.62E-01	
		LSC: Tc-99	Tc-99	3.22E-03	
	Rainwater	LSC: H-3	H-3	4.71E-01	pCi/mL
	River Water - Radiological	ALPHA SPEC: Am/Cm	Am-241	3.00E-05	pCi/mL
			Cm-244	2.92E-05	
		ALPHA SPEC: Pu	Pu-238	3.32E-05	
			Pu-239	3.46E-05	
		ALPHA SPEC: TU	U-234	3.87E-05	
			U-235	4.47E-05	

Sample Media Information

Onsite Environmental Bioassay Laboratory					
Material Type	Type of Media	Method	Analyte	CY 2017 Average MDC	Units
			U-238	3.33E-05	
		GFPC: GROSS A/B	Gross A	2.65E-01	pCi/L
			Gross B	4.46E-01	
		GFPC: Sr-89/90	Sr-89/90	1.75E+00	
		HPGE SPEC:	Co-60	9.43E-04	pCi/mL
			Cs-137	1.01E-03	
			K-40	1.72E-02	
		LSC: H-3	H-3	1.76E-01	
		LSC: Tc-99	Tc-99	2.57E-03	
	Seepage Basin Water	ALPHA SPEC: Am/Cm	Am-241	1.52E-05	pCi/mL
			Cm-244	1.34E-05	
		ALPHA SPEC: Pu/Np	Np-237	1.96E-05	
			Pu-238	1.81E-05	
			Pu-239	1.83E-05	
		ALPHA SPEC: Th	Th-228	1.01E-04	
			Th-230	3.79E-05	
			Th-232	3.09E-05	
		ALPHA SPEC: TU	U-234	1.60E-05	
			U-235	1.64E-05	
			U-238	1.45E-05	
		GFPC: GROSS A/B	Gross A	9.05E-01	pCi/L
			Gross B	1.59E+00	
		GFPC: Sr-89/90	Sr-89/90	1.25E+00	
		HPGE SPEC:	Co-60	7.12E-03	pCi/mL
			Cs-137	7.58E-03	
			K-40	1.53E-01	
		HPGE: I-129	I-129	9.36E-04	
		LSC: C-14	C-14	1.39E-02	
		LSC: H-3	H-3	4.78E-01	
		LSC: Tc-99	Tc-99	2.61E-03	
	Storm Sewer Water	ALPHA SPEC: Am/Cm	Am-241	7.96E-06	pCi/mL
			Cm-244	7.87E-06	
		ALPHA SPEC: Pu/Np	Np-237	9.59E-06	
			Pu-238	9.15E-06	
			Pu-239	8.72E-06	
		ALPHA SPEC: TU	U-234	9.63E-06	
			U-235	1.00E-05	
			U-238	8.30E-06	
		GFPC: GROSS A/B	Gross A	8.96E-01	pCi/L
			Gross B	1.54E+00	
		GFPC: Sr-89/90	Sr-89/90	6.35E-01	
		HPGE SPEC:	Co-60	7.16E-03	pCi/mL

Sample Media Information

Onsite Environmental Bioassay Laboratory					
Material Type	Type of Media	Method	Analyte	CY 2017 Average MDC	Units
	Stream Water– Radiological		Cs-137	7.80E-03	
			K-40	1.50E-01	
			HPGE: I-129	I-129	9.63E-04
			LSC: C-14	C-14	1.63E-02
			LSC: H-3	H-3	3.43E-01
			LSC: Tc-99	Tc-99	2.59E-03
		ALPHA SPEC: Am/Cm	Am-241	1.80E-05	pCi/mL
			Cm-244	1.62E-05	
		ALPHA SPEC: Pu	Pu-238	1.89E-05	
			Pu-239	1.87E-05	
		ALPHA SPEC: Pu/Np	Np-237	1.04E-05	
			Pu-238	9.50E-06	
			Pu-239	9.48E-06	
		ALPHA SPEC: Th	Th-228	4.02E-02	
			Th-230	1.78E-04	
			Th-232	-4.65E-03	
		ALPHA SPEC: TU	U-234	2.00E-05	
			U-235	2.07E-05	
			U-238	1.75E-05	
		GFPC: GROSS A/B	Gross A	3.77E-01	pCi/L
			Gross B	7.33E-01	
		GFPC: Sr-89/90	Sr-89/90	8.30E-01	pCi/mL
		HPGE SPEC:	Co-60	7.18E-03	
			Cs-137	7.59E-03	
			K-40	1.48E-01	
		HPGE: I-129	I-129	2.54E-03	
		LSC: C-14	C-14	1.45E-02	
		LSC: H-3	H-3	4.83E-01	
		LSC: Tc-99	Tc-99	2.62E-03	
SOLID	Beef	ALPHA SPEC: Am/Cm	Am-241	3.60E-05	pCi/g
			Cm-244	3.51E-05	
		ALPHA SPEC: Pu/Np	Np-237	4.56E-05	
			Pu-238	4.38E-05	
			Pu-239	4.06E-05	
		ALPHA SPEC: TU	U-234	5.31E-05	
			U-235	5.33E-05	
			U-238	4.47E-05	
		GFPC: GROSS A/B	Gross A	1.41E-01	
			Gross B	1.92E-01	
		GFPC: Sr-89/90	Sr-89/90	2.95E-03	
		HPGE SPEC:	Co-60	1.85E-02	
			Cs-137	1.94E-02	

Sample Media Information

Onsite Environmental Bioassay Laboratory					
Material Type	Type of Media	Method	Analyte	CY 2017 Average MDC	Units
			K-40	1.35E-01	
		LSC: H-3	H-3	6.78E-02	
		LSC: Tc-99	Tc-99	7.48E-02	
	Deer Bone	GFPC: Sr-89/90	Sr-89/90	2.99E-01	pCi/g
	Deer Flesh	GFPC: GROSS A/B	Gross A	1.26E-01	pCi/g
			Gross B	1.74E-01	
		GFPC: Sr-89/90	Sr-89/90	6.26E-03	
		HPGE SPEC:	Co-60	5.40E-02	
			Cs-137	5.65E-02	
			K-40	4.24E-01	
	Freshwater Fish/Bass	GFPC: GROSS A/B	Gross A	1.89E-01	pCi/g
			Gross B	2.69E-01	
		GFPC: Sr-89/90	Sr-89/90	1.53E-01	
		HPGE SPEC:	Co-60	1.40E-02	
			Cs-137	1.21E-02	
			K-40	9.58E-02	
		HPGE: I-129	I-129	3.25E-02	
		LSC: Tc-99	Tc-99	8.33E-02	
	Freshwater Fish/Freshwater Catfish	GFPC: GROSS A/B	Gross A	1.85E-01	pCi/g
			Gross B	2.71E-01	
		GFPC: Sr-89/90	Sr-89/90	1.53E-01	
		HPGE SPEC:	Co-60	1.38E-02	
			Cs-137	1.23E-02	
			K-40	9.78E-02	
		HPGE: I-129	I-129	3.31E-02	
		LSC: Tc-99	Tc-99	8.34E-02	
	Freshwater Fish/Panfish	GFPC: GROSS A/B	Gross A	1.89E-01	pCi/g
			Gross B	2.76E-01	
		GFPC: Sr-89/90	Sr-89/90	1.54E-01	
		HPGE SPEC:	Co-60	1.61E-02	
			Cs-137	1.59E-02	
			K-40	1.17E-01	
		HPGE: I-129	I-129	3.93E-02	
		LSC: Tc-99	Tc-99	8.52E-02	
	Freshwater Sediment/Detritus	ALPHA SPEC: Am/Cm	Am-241	1.18E-03	pCi/g
			Cm-244	1.12E-03	
		ALPHA SPEC: Pu/Np	Np-237	1.60E-03	
			Pu-238	2.10E-03	
			Pu-239	1.50E-03	
		ALPHA SPEC: TU	U-234	1.14E-02	
			U-235	1.26E-02	
			U-238	1.02E-02	

Sample Media Information

Onsite Environmental Bioassay Laboratory					
Material Type	Type of Media	Method	Analyte	CY 2017 Average MDC	Units
		GFPC: GROSS A/B	Gross A	2.05E+00	
			Gross B	3.50E+00	
		GFPC: Sr-89/90	Sr-89/90	1.28E-01	
		HPGE SPEC:	Co-60	4.91E-02	
			Cs-137	5.37E-02	
			K-40	4.17E-01	
	Fruit/Watermelon	ALPHA SPEC: Am/Cm	Am-241	4.25E-04	pCi/g
			Cm-244	4.05E-04	
		ALPHA SPEC: Pu/Np	Np-237	5.32E-04	
			Pu-238	4.89E-04	
			Pu-239	4.76E-04	
		ALPHA SPEC: TU	U-234	7.91E-04	
			U-235	7.93E-04	
			U-238	7.50E-04	
		GFPC: GROSS A/B	Gross A	3.11E-01	
			Gross B	3.55E-01	
		GFPC: Sr-89/90	Sr-89/90	3.12E-02	
		HPGE SPEC:	Co-60	8.37E-03	
			Cs-137	6.35E-03	
			K-40	5.08E-02	
		LSC: H-3	H-3	5.01E-02	
		LSC: Tc-99	Tc-99	1.32E-01	
	Greens	ALPHA SPEC: Am/Cm	Am-241	3.61E-04	pCi/g
			Cm-244	3.61E-04	
		ALPHA SPEC: Pu/Np	Np-237	7.84E-04	
			Pu-238	7.51E-04	
			Pu-239	7.41E-04	
		ALPHA SPEC: TU	U-234	6.04E-04	
			U-235	6.00E-04	
			U-238	5.55E-04	
		GFPC: GROSS A/B	Gross A	1.36E+00	
			Gross B	1.62E+00	
		GFPC: Sr-89/90	Sr-89/90	3.29E-02	
		HPGE SPEC:	Co-60	1.78E-02	
			Cs-137	1.16E-02	
			K-40	8.50E-02	
		LSC: H-3	H-3	6.70E-02	
		LSC: Tc-99	Tc-99	1.79E-01	
	Hog Bone	GFPC: Sr-89/90	Sr-89/90	2.98E-01	pCi/g
	Hog Flesh	GFPC: GROSS A/B	Gross A	1.27E-01	pCi/g
			Gross B	1.73E-01	
		GFPC: Sr-89/90	Sr-89/90	6.09E-03	

Sample Media Information

Onsite Environmental Bioassay Laboratory					
Material Type	Type of Media	Method	Analyte	CY 2017 Average MDC	Units
		HPGE SPEC:	Co-60	5.69E-02	
			Cs-137	6.04E-02	
			K-40	4.54E-01	
	Marine Fish/Marine Mullet	GFPC: GROSS A/B	Gross A	1.71E-01	pCi/g
			Gross B	2.54E-01	
		GFPC: Sr-89/90	Sr-89/90	1.58E-01	
		HPGE SPEC:	Co-60	1.61E-02	
			Cs-137	1.76E-02	
			K-40	1.20E-01	
		HPGE: I-129	I-129	3.16E-02	
		LSC: Tc-99	Tc-99	9.95E-02	
	Marine Fish/Red Fish (drum)	GFPC: GROSS A/B	Gross A	1.80E-01	pCi/g
			Gross B	2.55E-01	
		GFPC: Sr-89/90	Sr-89/90	1.58E-01	
		HPGE SPEC:	Co-60	1.79E-02	
			Cs-137	1.78E-02	
			K-40	1.34E-01	
		HPGE: I-129	I-129	3.26E-02	
		LSC: Tc-99	Tc-99	1.06E-01	
	Marine Fish/Sea Trout	GFPC: GROSS A/B	Gross A	1.72E-01	pCi/g
			Gross B	2.59E-01	
		GFPC: Sr-89/90	Sr-89/90	1.51E-01	
		HPGE SPEC:	Co-60	1.45E-02	
			Cs-137	1.34E-02	
			K-40	1.10E-01	
		HPGE: I-129	I-129	2.83E-02	
		LSC: Tc-99	Tc-99	1.10E-01	
	Marine Invertebrate	GFPC: GROSS A/B	Gross A	2.01E-01	pCi/g
			Gross B	2.72E-01	
		GFPC: Sr-89/90	Sr-89/90	5.99E-03	
		HPGE SPEC:	Co-60	7.36E-03	
			Cs-137	6.88E-03	
			K-40	5.49E-02	
		HPGE: I-129	I-129	3.08E-02	
		LSC: Tc-99	Tc-99	9.40E-02	
		ALPHA SPEC: AM/CM	Am-241	8.08E-05	pCi/g
			Cm-244	8.35E-05	
		ALPHA SPEC: PU/NP	Np-237	1.09E-04	
			Pu-238	1.40E-04	
			Pu-239	1.07E-04	

Sample Media Information

Onsite Environmental Bioassay Laboratory					
Material Type	Type of Media	Method	Analyte	CY 2017 Average MDC	Units
		ALPHA SPEC: TU	U-234	8.40E-05	
			U-235	8.60E-05	
			U-238	8.73E-05	
	Terrestrial Soil/Detritus	ALPHA SPEC: Am/Cm	Am-241	1.08E-03	pCi/g
			Cm-244	1.06E-03	
		ALPHA SPEC: Pu/Np	Np-237	1.63E-03	
			Pu-238	1.62E-03	
			Pu-239	1.48E-03	
		ALPHA SPEC: TU	U-234	1.30E-02	
			U-235	1.38E-02	
			U-238	1.16E-02	
		GFPC: GROSS A/B	Gross A	1.95E+00	
			Gross B	3.08E+00	
		GFPC: Sr-89/90	Sr-89/90	2.03E-01	
		HPGE SPEC:	Co-60	5.46E-02	
			Cs-137	5.93E-02	
			K-40	4.20E-01	
	Terrestrial Vegetation	ALPHA SPEC: Am/Cm	Am-241	3.96E-04	pCi/g
			Cm-244	3.67E-04	
		ALPHA SPEC: Pu/Np	Np-237	5.69E-04	
			Pu-238	5.26E-04	
			Pu-239	5.45E-04	
		ALPHA SPEC: TU	U-234	7.29E-04	
			U-235	7.69E-04	
			U-238	6.41E-04	
		GFPC: GROSS A/B	Gross A	1.14E+00	
			Gross B	1.65E+00	
		GFPC: Sr-89/90	Sr-89/90	3.22E-02	
		HPGE SPEC:	Co-60	9.96E-02	
			Cs-137	8.88E-02	
			K-40	7.09E-01	
		LSC: H-3	H-3	5.46E-02	
		LSC: Tc-99	Tc-99	2.00E-01	

Sample Media Information

Offsite Analytical Laboratories					
Material Type	Type of Media	Method	Analyte	CY 2017 Average MDC	Units
Solids	Soil/Sediment	GFPC: GROSS A/B	Gross A	4	pCi/g
			Gross B	10	
		ALPHA SPEC: Am/Cm	Am-241	1	pCi/g
			Cm-244	1	
		ALPHA SPEC: Pu/Np	Np-237	1	pCi/g
			Pu-238	1	
			Pu-239	1	
		HPGE SPEC: (Note: Gamma Spec detection limits are based on Cs-137)	Co-60	0.1	pCi/g
			Cs-137		
			K-40		
		ALPHA SPEC: Th	Th-228	1	pCi/g
			Th-230	1	
			Th-232	1	
		ALPHA SPEC: TU	U-234	1	pCi/g
			U-235	1	
			U-238	1	
		GFPC: Sr-89/90	Sr-89/90	2	pCi/g

Table 3 Nonradiological Environmental Surveillance Practical Quantitation Limits (PQLs)

Parameter/Laboratory	2017 PQL	Units
SRNS Environmental Monitoring Field Laboratory		
pH	as recorded	SU
Total Residual Chlorine	0.05	mg/L
SRNS Environmental Bioassay Laboratory		
Total Suspended Solids (TSS)	1.0	mg/L
Aluminum (Al)	0.05	mg/L
Arsenic (As)	0.005	mg/L
Barium (Ba)	0.05	mg/L
Beryllium (Be)	0.001	mg/L
Cadmium (Cd)	0.0001	mg/L
Chromium (Cr)	0.005	mg/L
Copper (Cu)	0.005	mg/L
Iron (Fe)	0.02	mg/L
Lead (Pb)	0.002	mg/L
Manganese (Mn)	0.01	mg/L
Mercury (Hg), Total	0.02	µg/L
Nickel (Ni)	0.01	mg/L
Nitrate (NO ₃)	0.08	mg/L
Nitrite (NO ₂)	0.03	mg/L
Selenium (Se)	0.005	mg/L
Silver (Ag)	0.005	mg/L
Zinc (Zn)	0.01	mg/L
SRNS Central Sanitary Wastewater Treatment Facility Laboratory		
Biological Oxygen Demand (BOD)	2.0	mg/L
pH	as recorded	SU
Offsite Analytical Laboratories		
Ammonia-N	0.10	mg/L
Biological Oxygen Demand (BOD)	2.0	mg/L
Chemical Oxygen Demand (COD)	10.0	mg/L
Cyanide (Cn)–aqueous	0.010	mg/L
Cyanide (Cn)–solid	0.50	mg/kg
Fecal Coliform	2.000	N/A
Hardness	10.0	mg/L
Nitrate (NO ₃)	0.020	mg/L

Sample Media Information

Parameter/Laboratory	2017 PQL	Units
Nitrite (NO ₂)	0.020	mg/L
Nitrate-Nitrite-N	0.020	mg/L
Phenol	0.0050	mg/L
Sulfate	1.0	mg/L
Total Dissolved Solids (TDS)	10.0	mg/L
Total Suspended Solids (TSS)	1.0	mg/L
Total Kjeldahl Nitrogen (TKN)	0.10	mg/L
Phosphorus	0.010	mg/L
Total Organic carbon (TOC)	4.00 ^a	mg/L
% Solids	N/A	
Aluminum (Al)	40.0	mg/L
Aluminum (Al)	20.0	mg/kg (solid)
Arsenic (As)	1.000	mg/L
Arsenic (As)	0.75	mg/kg (solid)
Barium (Ba)	5.0	mg/L
Barium (Ba)	1.3	mg/kg (solid)
Boron (B)	25.0	mg/L
Cadmium (Cd)	0.10	mg/L
Cadmium (Cd)	0.25	mg/kg (solid)
Chromium (Cr)	5.0	mg/L
Chromium (Cr)	0.5	mg/kg (solid)
Copper (Cu)	1.0	mg/L
Copper (Cu)	0.5	mg/kg (solid)
Iron (Fe)	20.0	mg/L
Iron (Fe)	5.0	mg/kg (solid)
Lead (Pb)	1.0	mg/L
Lead (Pb)	0.50	mg/kg (solid)
Magnesium	250	mg/kg (solid)
Manganese (Mn)	5.00	mg/L
Manganese (Mn)	0.75	mg/kg (solid)
Mercury (Hg), Total	0.002	mg/L
Mercury (Hg), Low Level	0.50	ng/L
Mercury (Hg)	0.083	mg/kg (solid)
Molybdenum (Mo)	2.0	mg/kg (solid)
Nickel (Ni)	5.0	mg/L
Nickel (Ni)	2.0	mg/kg (solid)
Potassium (K)	250.00	mg/kg (solid)
Selenium (Se)	1.0	mg/L
Selenium (Se)	1.0	mg/kg (solid)
Silver (Ag)	1.0	mg/L
Silver (Ag)	0.50	mg/kg (solid)
Sodium (Na)	200.00	mg/L
Uranium (U)	N/A	mg/L
Uranium (U)	25.00	mg/kg (solid)
Zinc (Zn)	10.0	mg/L

Sample Media Information

Parameter/Laboratory	2017 PQL	Units
Zinc (Zn)	2.5	mg/kg (solid)
Aldrin	0.040	mg/L
Alpha-BHC	0.040	mg/L
Aroclor 1016	0.40	mg/L
Aroclor 1221	0.40	mg/L
Aroclor 1232	0.40	mg/L
Aroclor 1242	0.40	mg/L
Aroclor 1248	0.40	mg/L
Aroclor 1254	0.40	mg/L
Aroclor 1260	0.40	mg/L
Beta-BHC	0.040	mg/L
Delta-BHC	0.040	mg/L
Gamma-BHC	0.040	mg/L
Chlordane	0.40	mg/L
4,4'-DDD	0.040	mg/L
4,4'-DDE	0.040	mg/L
4,4'-DDT	0.040	mg/L
Dieldrin	0.040	mg/L
Endosulfan I	0.040	mg/L
Endosulfan II	0.040	mg/L
Endosulfan sulfate	0.040	mg/L
Endrin	0.040	mg/L
Endrin aldehyde	0.040	mg/L
Heptachlor	0.040	mg/L
Lindane	0.040	mg/L
Heptachlor epoxide	0.040	mg/L
Toxaphene	0.040	mg/L
Benzene	1.0	mg/L
Tetrachloroethylene (Tetrachloroethene)	1.0	mg/L
Trichloroethylene (Trichloroethene)	1.0	mg/L
Ethylene Glycol	50.0	mg/L
2,4-D	2.0 ^a	mg/L
2,4,5-TP (Silvex)	0.5 ^a	mg/L

Note:

^a The PQL will vary slightly depending on the dilution factor.

Data Tables Supporting the Nonradiological Environmental Monitoring Program

This section presents the raw data that Chapter 4 of the Savannah River Site 2017 Annual Environmental Report summarizes and discusses.

Table 4 National Pollution Discharge Elimination System Industrial Wastewater Flow Data

During 2017 no flow measurements were recorded due to lack of flow in the following outfalls: F-01, F-02, F-05, H-07, and K-06.

The following outfalls no longer discharge. The date at which discharge ceased is provided in parentheses after the name of the outfall: D-03 (April 2009), D-06 (June 2012), D-Area sanitary wastewater treatment plant (2013), D-1B (2016), D-01D (November 2013), S-04 (July 2007), and X-8C (November 2013).

Outfall: A-01

Collection Date	Flow Result (gallons per day)
1/3/2017	1,186,657
1/4/2017	1,717,469
1/5/2017	1,579,245
1/6/2017	1,488,789
1/9/2017	1,519,768
1/10/2017	1,278,146
1/11/2017	1,197,683
1/12/2017	1,038,917
1/13/2017	658,758
1/17/2017	641,785
1/18/2017	663,878
1/19/2017	651,820
1/20/2017	636,128
1/23/2017	1,453,582
1/24/2017	1,510,873
1/25/2017	1,747,148
1/26/2017	1,525,354
1/27/2017	1,408,086
1/30/2017	1,160,728
1/31/2017	604,739
2/1/2017	538,793
2/2/2017	526,345
2/3/2017	542,325
2/6/2017	534,873
2/7/2017	427,775
2/8/2017	854,734
2/9/2017	1,165,954
2/10/2017	826,998

Collection Date	Flow Result (gallons per day)
2/13/2017	494,573
2/14/2017	382,284
2/15/2017	577,117
2/16/2017	1,326,365
2/17/2017	1,143,372
2/21/2017	675,607
2/22/2017	594,513
2/23/2017	585,860
2/24/2017	674,051
2/27/2017	534,222
2/28/2017	481,944
3/1/2017	425,860
3/2/2017	496,310
3/3/2017	438,439
3/6/2017	495,716
3/7/2017	552,342
3/8/2017	558,823
3/9/2017	537,014
3/10/2017	535,245
3/13/2017	561,597
3/14/2017	894,798
3/15/2017	645,480
3/16/2017	555,110
3/17/2017	561,348
3/20/2017	540,656
3/21/2017	616,460
3/22/2017	857,237
3/23/2017	1,075,168

Collection Date	Flow Result (gallons per day)
3/24/2017	802,548
3/27/2017	499,285
3/28/2017	435,442
3/29/2017	442,344
3/30/2017	438,700
3/31/2017	516,197
4/3/2017	529,963
4/4/2017	1,295,397
4/5/2017	1,106,866
4/6/2017	1,204,463
4/7/2017	1,038,363
4/10/2017	536,321
4/11/2017	459,925
4/12/2017	488,715
4/13/2017	522,006
4/17/2017	529,558
4/18/2017	609,109
4/19/2017	906,079
4/20/2017	912,429
4/21/2017	683,762
4/24/2017	898,625
4/25/2017	1,541,283
4/26/2017	1,321,598
4/27/2017	1,186,297
4/28/2017	877,862
5/1/2017	986,265
5/2/2017	641,207
5/3/2017	515,456

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Collection Date	Flow Result (gallons per day)
5/4/2017	534,123
5/5/2017	1,152,196
5/8/2017	758,277
5/9/2017	549,157
5/10/2017	491,623
5/11/2017	522,701
5/12/2017	488,450
5/15/2017	604,541
5/16/2017	569,500
5/17/2017	767,964
5/18/2017	659,448
5/19/2017	546,902
5/22/2017	534,087
5/23/2017	1,313,839
5/24/2017	1,552,161
5/25/2017	1,441,770
5/26/2017	1,230,384
5/30/2017	644,533
5/31/2017	590,507
6/1/2017	588,518
6/2/2017	555,781
6/5/2017	543,673
6/6/2017	667,234
6/7/2017	692,282
6/8/2017	684,336
6/9/2017	479,963
6/12/2017	442,428
6/13/2017	473,120
6/14/2017	681,002
6/15/2017	597,489
6/16/2017	487,407
6/19/2017	504,258
6/20/2017	641,018
6/21/2017	711,941
6/22/2017	575,094
6/23/2017	509,941
6/26/2017	609,382
6/27/2017	486,091
6/28/2017	473,568
6/29/2017	483,881
6/30/2017	756,136
7/3/2017	1,411,504
7/5/2017	602,617
7/6/2017	492,838
7/7/2017	565,271
7/10/2017	794,247
7/11/2017	1,324,034

Collection Date	Flow Result (gallons per day)
7/12/2017	1,222,611
7/13/2017	1,126,787
7/14/2017	649,054
7/17/2017	638,703
7/18/2017	1,229,798
7/19/2017	890,617
7/20/2017	867,030
7/21/2017	440,233
7/24/2017	971,791
7/25/2017	708,793
7/26/2017	457,993
7/27/2017	464,438
7/28/2017	413,725
7/31/2017	584,150
8/1/2017	479,008
8/2/2017	424,941
8/3/2017	276,782
8/4/2017	144,549
8/7/2017	597,653
8/8/2017	777,795
8/9/2017	1,303,333
8/10/2017	1,429,252
8/11/2017	1,219,443
8/14/2017	1,349,719
8/15/2017	1,285,129
8/16/2017	939,862
8/17/2017	752,463
8/18/2017	577,622
8/21/2017	417,277
8/22/2017	490,390
8/23/2017	433,090
8/24/2017	416,923
8/25/2017	679,834
8/28/2017	481,017
8/29/2017	470,061
8/30/2017	470,831
8/31/2017	499,660
9/1/2017	665,002
9/5/2017	432,736
9/6/2017	553,381
9/7/2017	496,450
9/8/2017	561,954
9/12/2017	1,015,408
9/13/2017	1,681,246
9/14/2017	1,589,067
9/15/2017	1,517,965
9/18/2017	1,324,575

Collection Date	Flow Result (gallons per day)
9/19/2017	1,133,919
9/20/2017	931,385
9/21/2017	547,656
9/22/2017	672,280
9/25/2017	586,770
9/26/2017	540,854
9/27/2017	463,862
9/28/2017	549,901
9/29/2017	600,723
10/2/2017	539,131
10/3/2017	616,000
10/4/2017	503,741
10/5/2017	456,937
10/6/2017	478,435
10/9/2017	651,416
10/10/2017	604,860
10/11/2017	520,569
10/12/2017	793,283
10/13/2017	697,524
10/16/2017	554,665
10/17/2017	521,427
10/18/2017	416,756
10/19/2017	421,088
10/20/2017	507,506
10/23/2017	589,599
10/24/2017	741,801
10/25/2017	550,416
10/26/2017	483,549
10/27/2017	489,688
10/30/2017	493,569
10/31/2017	458,231
11/1/2017	444,556
11/2/2017	447,120
11/3/2017	498,164
11/6/2017	579,346
11/7/2017	620,033
11/8/2017	556,239
11/9/2017	1,092,833
11/10/2017	1,268,239
11/13/2017	882,371
11/14/2017	584,506
11/15/2017	582,407
11/16/2017	570,261
11/17/2017	569,552
11/20/2017	554,234
11/21/2017	597,739
11/22/2017	595,623

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Collection Date	Flow Result (gallons per day)
11/27/2017	569,216
11/28/2017	565,155
11/29/2017	558,749
11/30/2017	557,408
12/1/2017	559,219
12/4/2017	585,615
12/5/2017	708,202
12/6/2017	691,210

Collection Date	Flow Result (gallons per day)
12/7/2017	1,034,078
12/8/2017	1,247,494
12/11/2017	1,526,174
12/12/2017	1,223,663
12/13/2017	1,178,320
12/14/2017	1,059,483
12/15/2017	694,968
12/18/2017	374,796

Collection Date	Flow Result (gallons per day)
12/19/2017	400,422
12/20/2017	454,595
12/21/2017	1,299,176
12/22/2017	1,171,003
12/27/2017	742,914
12/28/2017	837,932
12/29/2017	547,013

Table 4 National Pollution Discharge Elimination System Industrial Wastewater Flow Data
(continued)

Outfall: A-11

Collection Date	Flow Result (gallons per minute)
1/10/2017	180
2/7/2017	173
3/21/2017	179
4/18/2017	200
5/9/2017	196
6/6/2017	198
7/19/2017	189
8/2/2017	218
9/6/2017	181
10/3/2017	192
11/7/2017	190
12/5/2017	192

Table 4 National Pollution Discharge Elimination System Industrial Wastewater Flow Data
(continued)

Outfall: A-1A

Collection Date	Flow Result (gallons per minute)	Collection Date	Flow Result (gallons per minute)	Collection Date	Flow Result (gallons per minute)
1/2/2017	0	3/15/2017	0	5/29/2017	0
1/3/2017	0	3/16/2017	0	5/30/2017	0
1/4/2017	0	3/20/2017	0	5/31/2017	0
1/5/2017	0	3/21/2017	0	6/1/2017	0
1/9/2017	0	3/22/2017	267	6/5/2017	0
1/10/2017	0	3/23/2017	267	6/6/2017	0
1/11/2017	0	3/27/2017	0	6/7/2017	0
1/12/2017	0	3/28/2017	0	6/8/2017	0
1/16/2017	0	3/29/2017	0	6/12/2017	0
1/17/2017	0	3/30/2017	0	6/13/2017	266
1/18/2017	0	4/3/2017	0	6/14/2017	267
1/19/2017	0	4/4/2017	0	6/15/2017	0
1/23/2017	0	4/5/2017	0	6/19/2017	0
1/24/2017	0	4/6/2017	0	6/20/2017	0
1/25/2017	0	4/10/2017	0	6/21/2017	0
1/26/2017	187	4/11/2017	0	6/22/2017	0
1/30/2017	0	4/12/2017	0	6/26/2017	0
1/31/2017	0	4/13/2017	0	6/27/2017	0
2/1/2017	0	4/17/2017	0	6/28/2017	0
2/2/2017	0	4/18/2017	0	6/29/2017	0
2/6/2017	0	4/19/2017	268	7/3/2017	0
2/7/2017	0	4/20/2017	268	7/4/2017	0
2/8/2017	0	4/24/2017	0	7/5/2017	0
2/9/2017	266	4/25/2017	0	7/6/2017	0
2/13/2017	0	4/26/2017	0		
2/14/2017	0	4/27/2017	0	7/10/2017	267
2/15/2017	0	5/1/2017	0	7/11/2017	267
2/16/2017	0	5/2/2017	0	7/12/2017	0
2/20/2017	0	5/3/2017	0	7/13/2017	0
2/21/2017	0	5/4/2017	0	7/17/2017	0
2/22/2017	0	5/8/2017	0	7/18/2017	0
2/23/2017	0	5/9/2017	0	7/19/2017	0
2/27/2017	0	5/10/2017	0	7/20/2017	0
2/28/2017	0	5/11/2017	0	7/24/2017	0
3/1/2017	0	5/15/2017	0	7/25/2017	0
3/2/2017	0	5/16/2017	267	7/26/2017	0
3/6/2017	0	5/17/2017	265	7/27/2017	0
3/7/2017	0	5/18/2017	0	7/31/2017	0
3/8/2017	0	5/22/2017	0	8/1/2017	0
3/9/2017	0	5/23/2017	0	8/2/2017	0
3/13/2017	0	5/24/2017	0	8/3/2017	0
3/14/2017	0	5/25/2017	0	8/7/2017	0

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Collection Date	Flow Result (gallons per minute)
8/8/2017	0
8/9/2017	0
8/10/2017	0
8/14/2017	0
8/15/2017	0
8/16/2017	268
8/17/2017	268
8/21/2017	0
8/22/2017	0
8/23/2017	0
8/24/2017	0
8/28/2017	0
8/29/2017	267
8/30/2017	0
8/31/2017	0
9/4/2017	0
9/5/2017	0
9/6/2017	0
9/7/2017	0
9/12/2017	0
9/13/2017	268
9/14/2017	269
9/15/2017	0
9/18/2017	0
9/19/2017	0
9/20/2017	0
9/21/2017	0
9/25/2017	0
9/26/2017	0
9/27/2017	0
9/28/2017	0
10/2/2017	0
10/3/2017	0
10/4/2017	0
10/5/2017	0
10/9/2017	0
10/10/2017	0
10/11/2017	268
10/12/2017	268
10/16/2017	0
10/17/2017	0
10/18/2017	0
10/19/2017	0
10/23/2017	0
10/24/2017	0
10/25/2017	0
10/26/2017	0

Collection Date	Flow Result (gallons per minute)
10/30/2017	0
10/31/2017	0
11/1/2017	0
11/2/2017	0
11/6/2017	0
11/7/2017	0
11/8/2017	268
11/9/2017	268
11/13/2017	0
11/14/2017	0
11/15/2017	0
11/16/2017	0
11/20/2017	0
11/21/2017	0
11/22/2017	0
11/23/2017	0
11/27/2017	0
11/28/2017	0
11/29/2017	0
11/30/2017	0
12/4/2017	0
12/5/2017	0
12/6/2017	268
12/7/2017	267
12/11/2017	0
12/12/2017	0
12/13/2017	0
12/14/2017	0
12/18/2017	0
12/19/2017	0
12/20/2017	0
12/21/2017	0
12/25/2017	0
12/26/2017	0
12/27/2017	0
12/28/2017	0

Table 4 National Pollution Discharge Elimination System Industrial Wastewater Flow Data
(continued)

Outfall: D-01

Collection Date	Flow Result (million gallons per day)
1/5/2017	0
2/2/2017	0
3/2/2017	0
4/6/2017	0
5/1/2017	0.36
6/12/2017	0.36
7/6/2017	0
8/17/2017	0.12
9/14/2017	0.12
10/5/2017	0
11/2/2017	0.12
12/15/2017	0.12

Outfall: D-1C

Collection Date	Flow Result (million gallons per day)
1/5/2017	0
2/2/2017	0
3/2/2017	0
4/6/2017	0
5/1/2017	0.36
6/12/2017	0.36
7/6/2017	0
8/17/2017	0.12
9/14/2017	0.12
10/5/2017	0
11/2/2017	0.12
12/15/2017	0.12

Outfall: D-02

Collection Date	Flow Result (gallons per minute)
1/5/2017	200
4/7/2017	200
9/14/2017	265
10/5/2017	0

Table 4 National Pollution Discharge Elimination System Industrial Wastewater Flow Data
(continued)

Outfall: F-08

Collection Date	Flow Result (gallons per minute)
1/17/2017	0
2/13/2017	0
3/7/2017	0
4/17/2017	0
5/10/2017	0
6/12/2017	0
7/13/2017	460
8/15/2017	642
9/19/2017	6
10/4/2017	0
11/13/2017	0
12/12/2017	15.42

Outfall: G-10

Collection Date	Flow Result (million gallons per day)
1/1/2017	0.204
1/2/2017	0.404
1/3/2017	0.539
1/4/2017	0.360
1/5/2017	0.310
1/6/2017	0.297
1/7/2017	0.328
1/8/2017	0.278
1/9/2017	0.274
1/10/2017	0.278
1/11/2017	0.269
1/12/2017	0.277
1/13/2017	0.282
1/14/2017	0.233
1/15/2017	0.168
1/16/2017	0.171
1/17/2017	0.224
1/18/2017	0.245
1/19/2017	0.242
1/20/2017	0.198
1/21/2017	0.256

Collection Date	Flow Result (million gallons per day)
1/22/2017	0.591
1/23/2017	0.474
1/24/2017	0.434
1/25/2017	0.326
1/26/2017	0.314
1/27/2017	0.270
1/28/2017	0.460
1/29/2017	0.120
1/30/2017	0.246
1/31/2017	0.245
2/1/2017	0.246
2/2/2017	0.191
2/3/2017	0.241
2/4/2017	0.195
2/5/2017	0.158
2/6/2017	0.236
2/7/2017	0.242
2/8/2017	0.248
2/9/2017	0.264
2/10/2017	0.256
2/11/2017	0.198

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Collection Date	Flow Result (million gallons per day)
2/12/2017	0.168
2/13/2017	0.230
2/14/2017	0.228
2/15/2017	0.262
2/16/2017	0.263
2/17/2017	0.262
2/18/2017	0.222
2/19/2017	0.172
2/20/2017	0.191
2/21/2017	0.235
2/22/2017	0.297
2/23/2017	0.190
2/24/2017	0.226
2/25/2017	0.155
2/26/2017	0.144
2/27/2017	0.222
2/28/2017	0.296
3/1/2017	0.237
3/2/2017	0.192
3/3/2017	0.250
3/4/2017	0.162
3/5/2017	0.133
3/6/2017	0.232
3/7/2017	0.232
3/8/2017	0.226
3/9/2017	0.227
3/10/2017	0.213
3/11/2017	0.152
3/12/2017	0.148
3/13/2017	0.230
3/14/2017	0.238
3/15/2017	0.231
3/16/2017	0.250
3/17/2017	0.215
3/18/2017	0.186
3/19/2017	0.171
3/20/2017	0.224
3/21/2017	0.250
3/22/2017	0.336
3/23/2017	0.252
3/24/2017	0.205
3/25/2017	0.150
3/26/2017	0.141
3/27/2017	0.235
3/28/2017	0.233
3/29/2017	0.243

Collection Date	Flow Result (million gallons per day)
3/30/2017	0.180
3/31/2017	0.220
4/1/2017	0.143
4/2/2017	0.139
4/3/2017	0.234
4/4/2017	0.279
4/5/2017	0.271
4/6/2017	0.295
4/7/2017	0.150
4/8/2017	0.118
4/9/2017	0.144
4/10/2017	0.232
4/11/2017	0.242
4/12/2017	0.240
4/13/2017	0.180
4/14/2017	0.154
4/15/2017	0.150
4/16/2017	0.176
4/17/2017	0.187
4/18/2017	0.268
4/19/2017	0.276
4/20/2017	0.241
4/21/2017	0.165
4/22/2017	0.138
4/23/2017	0.246
4/24/2017	0.416
4/25/2017	0.381
4/26/2017	0.333
4/27/2017	0.230
4/28/2017	0.260
4/29/2017	0.290
4/30/2017	0.171
5/1/2017	0.269
5/2/2017	INVALID*
5/3/2017	INVALID*
5/4/2017	0.290
5/5/2017	0.286
5/6/2017	0.187
5/7/2017	0.160
5/8/2017	0.249
5/9/2017	0.255
5/10/2017	0.256
5/11/2017	0.242
5/12/2017	0.178
5/13/2017	0.173
5/14/2017	0.139

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Collection Date	Flow Result (million gallons per day)
5/15/2017	0.241
5/16/2017	0.241
5/17/2017	0.245
5/18/2017	0.242
5/19/2017	0.213
5/20/2017	0.200
5/21/2017	0.186
5/22/2017	0.250
5/23/2017	0.273
5/24/2017	0.290
5/25/2017	0.299
5/26/2017	0.277
5/27/2017	0.365
5/28/2017	0.160
5/29/2017	0.185
5/30/2017	0.241
5/31/2017	0.245
6/1/2017	0.183
6/2/2017	0.289
6/3/2017	0.142
6/4/2017	0.152
6/5/2017	0.287
6/6/2017	0.298
6/7/2017	0.271
6/8/2017	0.244
6/9/2017	0.210
6/10/2017	0.157
6/11/2017	0.170
6/12/2017	0.252
6/13/2017	0.255
6/14/2017	0.280
6/15/2017	0.271
6/16/2017	0.219
6/17/2017	0.161
6/18/2017	0.170
6/19/2017	0.267
6/20/2017	0.260
6/21/2017	0.285
6/22/2017	0.282
6/23/2017	0.246
6/24/2017	0.186
6/25/2017	0.178
6/26/2017	0.246
6/27/2017	0.263
6/28/2017	0.262
6/29/2017	0.228

Collection Date	Flow Result (million gallons per day)
6/30/2017	0.324
7/1/2017	0.302
7/2/2017	0.275
7/3/2017	0.288
7/4/2017	0.190
7/5/2017	0.265
7/6/2017	0.279
7/7/2017	0.274
7/8/2017	0.216
7/9/2017	0.243
7/10/2017	0.301
7/11/2017	0.374
7/12/2017	0.325
7/13/2017	0.310
7/14/2017	0.320
7/15/2017	0.276
7/16/2017	0.248
7/17/2017	0.302
7/18/2017	0.292
7/19/2017	0.285
7/20/2017	0.288
7/21/2017	0.296
7/22/2017	0.299
7/23/2017	0.233
7/24/2017	0.273
7/25/2017	0.278
7/26/2017	0.285
7/27/2017	0.176
7/28/2017	0.279
7/29/2017	0.253
7/30/2017	0.155
7/31/2017	0.245
8/1/2017	0.251
8/2/2017	0.249
8/3/2017	0.253
8/4/2017	0.141
8/5/2017	0.127
8/6/2017	0.155
8/7/2017	0.219
8/8/2017	0.221
8/9/2017	0.338
8/10/2017	0.352
8/11/2017	0.362
8/12/2017	0.350
8/13/2017	0.357
8/14/2017	0.324

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Collection Date	Flow Result (million gallons per day)
8/15/2017	0.300
8/16/2017	0.304
8/17/2017	0.296
8/18/2017	0.203
8/19/2017	0.163
8/20/2017	0.157
8/21/2017	0.270
8/22/2017	0.280
8/23/2017	0.296
8/24/2017	0.284
8/25/2017	0.191
8/26/2017	0.165
8/27/2017	0.130
8/28/2017	0.237
8/29/2017	0.266
8/30/2017	0.266
8/31/2017	0.229
9/1/2017	0.209
9/2/2017	0.134
9/3/2017	0.124
9/4/2017	0.118
9/5/2017	0.230
9/6/2017	0.262
9/7/2017	0.212
9/8/2017	0.157
9/9/2017	0.107
9/10/2017	0.140
9/11/2017	0.495
9/12/2017	0.364
9/13/2017	0.347
9/14/2017	0.339
9/15/2017	0.333
9/16/2017	0.148
9/17/2017	0.152
9/18/2017	0.243
9/19/2017	0.255
9/20/2017	0.329
9/21/2017	0.208
9/22/2017	0.185
9/23/2017	0.128
9/24/2017	0.122
9/25/2017	0.238
9/26/2017	0.258
9/27/2017	0.234
9/28/2017	0.190
9/29/2017	0.142

Collection Date	Flow Result (million gallons per day)
9/30/2017	0.074
10/1/2017	0.050
10/2/2017	0.201
10/3/2017	0.181
10/4/2017	0.214
10/5/2017	0.215
10/6/2017	0.114
10/7/2017	0.092
10/8/2017	0.131
10/9/2017	0.204
10/10/2017	0.211
10/11/2017	0.213
10/12/2017	0.213
10/13/2017	0.139
10/14/2017	0.119
10/15/2017	0.106
10/16/2017	0.203
10/17/2017	0.175
10/18/2017	0.202
10/19/2017	0.165
10/20/2017	0.124
10/21/2017	0.073
10/22/2017	0.094
10/23/2017	0.210
10/24/2017	0.198
10/25/2017	0.191
10/26/2017	0.185
10/27/2017	0.167
10/28/2017	0.075
10/29/2017	0.079
10/30/2017	0.159
10/31/2017	0.177
11/1/2017	0.201
11/2/2017	0.207
11/3/2017	0.122
11/4/2017	0.075
11/5/2017	0.086
11/6/2017	0.183
11/7/2017	0.172
11/8/2017	0.202
11/9/2017	0.292
11/10/2017	0.129
11/11/2017	0.083
11/12/2017	0.077
11/13/2017	0.185
11/14/2017	0.205

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Collection Date	Flow Result (million gallons per day)
11/15/2017	0.186
11/16/2017	0.203
11/17/2017	0.131
11/18/2017	0.118
11/19/2017	0.105
11/20/2017	0.188
11/21/2017	0.163
11/22/2017	0.149
11/23/2017	0.116
11/24/2017	0.089
11/25/2017	0.100
11/26/2017	0.068
11/27/2017	0.199
11/28/2017	0.183
11/29/2017	0.210
11/30/2017	0.189
12/1/2017	0.174
12/2/2017	0.114
12/3/2017	0.088
12/4/2017	0.147
12/5/2017	0.157
12/6/2017	0.161
12/7/2017	0.176
12/8/2017	0.266
12/9/2017	0.225
12/10/2017	0.191
12/11/2017	0.165
12/12/2017	0.161
12/13/2017	0.167
12/14/2017	0.152
12/15/2017	0.089
12/16/2017	0.058
12/17/2017	0.072
12/18/2017	0.143
12/19/2017	0.166
12/20/2017	0.193
12/21/2017	0.238
12/22/2017	0.168
12/23/2017	0.107
12/24/2017	0.103
12/25/2017	0.062
12/26/2017	0.062
12/27/2017	0.125
12/28/2017	0.132
12/29/2017	0.082
12/30/2017	0.083

Collection Date	Flow Result (million gallons per day)
12/31/2017	0.068
2/1/2017	0.246

Table 4 National Pollution Discharge Elimination System Industrial Wastewater Flow Data
(continued)**Outfall: H-02**

Collection Date	Flow Result (gallons per day)
1/3/2017	585,900
1/4/2017	691,800
1/5/2017	529,000
1/6/2017	439,100
1/9/2017	600,567
1/10/2017	206,300
1/11/2017	137,500
1/12/2017	134,000
1/13/2017	126,000
1/17/2017	113,125
1/18/2017	126,000
1/19/2017	121,900
1/20/2017	118,017
1/23/2017	953,096
1/24/2017	810,000
1/25/2017	652,500
1/26/2017	586,000
1/27/2017	499,100
1/30/2017	223,100
1/31/2017	124,000
2/1/2017	110,000
2/2/2017	99,800
2/3/2017	119,800
2/6/2017	127,333
2/7/2017	91,100
2/8/2017	204,700
2/9/2017	418,200
2/10/2017	339,400
2/13/2017	176,233
2/14/2017	126,600
2/15/2017	114,500
2/16/2017	591,200
2/17/2017	283,500
2/21/2017	145,950
2/22/2017	147,000
2/23/2017	146,900
2/24/2017	123,600
2/27/2017	124,300
2/28/2017	122,600
3/1/2017	136,000
3/2/2017	160,100
3/3/2017	144,900

Collection Date	Flow Result (gallons per day)
3/6/2017	115,767
3/7/2017	136,400
3/8/2017	135,500
3/9/2017	121,700
3/10/2017	113,200
3/13/2017	128,133
3/14/2017	248,900
3/15/2017	169,600
3/16/2017	142,200
3/17/2017	147,200
3/20/2017	135,700
3/21/2017	127,000
3/22/2017	213,345
3/23/2017	220,800
3/24/2017	134,600
3/27/2017	154,933
3/28/2017	162,100
3/29/2017	148,500
3/30/2017	143,600
3/31/2017	174,100
4/3/2017	136,229
4/4/2017	484,904
4/5/2017	344,500
4/6/2017	581,500
4/7/2017	353,700
4/10/2017	206,568
4/11/2017	143,718
4/12/2017	121,774
4/13/2017	137,200
4/14/2017	130,200
4/17/2017	200,167
4/18/2017	151,700
4/19/2017	225,600
4/20/2017	204,800
4/21/2017	192,900
4/24/2017	424,667
4/25/2017	1,134,500
4/26/2017	688,600
4/27/2017	509,600
4/28/2017	435,900
5/1/2017	246,584
5/2/2017	175,826

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Collection Date	Flow Result (gallons per day)
5/3/2017	169,800
5/4/2017	167,616
5/5/2017	652,582
5/8/2017	350,795
5/9/2017	204,400
5/10/2017	158,400
5/11/2017	163,108
5/12/2017	144,853
5/15/2017	180,352
5/16/2017	155,100
5/17/2017	157,200
5/18/2017	169,015
5/19/2017	157,964
5/22/2017	191,833
5/23/2017	222,300
5/24/2017	462,800
5/25/2017	399,100
5/26/2017	244,988
5/30/2017	150,400
5/31/2017	141,000
6/1/2017	148,200
6/2/2017	139,600
6/5/2017	144,533
6/6/2017	774,000
6/7/2017	625,200
6/8/2017	526,600
6/9/2017	634,900
6/12/2017	NA
6/13/2017	98,700
6/14/2017	91,200
6/15/2017	90,600
6/16/2017	96,196
6/19/2017	118,691
6/20/2017	128,300
6/21/2017	580,800
6/22/2017	394,000
6/23/2017	285,700
6/26/2017	182,000
6/27/2017	139,900
6/28/2017	130,400
6/29/2017	115,200
6/30/2017	148,100
7/3/2017	316,300
7/4/2017	386,000
7/5/2017	178,100
7/6/2017	127,200
7/7/2017	124,400

Collection Date	Flow Result (gallons per day)
7/10/2017	112,933
7/11/2017	759,800
7/12/2017	528,800
7/13/2017	370,100
7/14/2017	239,500
7/17/2017	153,367
7/18/2017	138,900
7/19/2017	130,600
7/20/2017	109,500
7/21/2017	99,900
7/24/2017	532,300
7/25/2017	263,700
7/26/2017	184,200
7/27/2017	148,100
7/28/2017	152,800
7/31/2017	111,300
8/1/2017	87,300
8/2/2017	82,800
8/3/2017	84,400
8/4/2017	89,400
8/7/2017	226,566
8/8/2017	147,900
8/9/2017	632,300
8/10/2017	494,100
8/11/2017	363,900
8/14/2017	323,533
8/15/2017	177,900
8/16/2017	157,000
8/17/2017	130,900
8/18/2017	157,300
8/19/2017	150,200
8/20/2017	85,300
8/21/2017	134,800
8/22/2017	106,000
8/23/2017	94,700
8/24/2017	86,300
8/25/2017	94,100
8/28/2017	94,500
8/29/2017	85,900
8/30/2017	95,200
8/31/2017	103,500
9/1/2017	108,400
9/5/2017	110,925
9/6/2017	88,800
9/7/2017	84,900
9/8/2017	81,000
9/11/2017	48,067

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Collection Date	Flow Result (gallons per day)
9/12/2017	579,200
9/13/2017	767,314
9/14/2017	516,700
9/15/2017	501,700
9/18/2017	294,867
9/19/2017	140,300
9/20/2017	105,900
9/21/2017	94,400
9/22/2017	88,000
9/25/2017	95,133
9/26/2017	85,300
9/27/2017	84,600
9/28/2017	78,400
9/29/2017	76,200
10/2/2017	71,700
10/3/2017	76,100
10/4/2017	71,800
10/5/2017	66,000
10/6/2017	71,500
10/9/2017	112,067
10/10/2017	140,700
10/11/2017	112,200
10/12/2017	97,500
10/13/2017	88,100
10/16/2017	95,000
10/17/2017	77,486
10/18/2017	85,320
10/19/2017	73,800
10/20/2017	72,700
10/23/2017	78,800
10/24/2017	118,100
10/25/2017	88,985
10/26/2017	80,452
10/27/2017	77,217
10/30/2017	63,667
10/31/2017	52,300
11/1/2017	49,100
11/2/2017	61,600
11/3/2017	57,500
11/6/2017	68,067
11/7/2017	69,500
11/8/2017	58,200
11/9/2017	105,900
11/10/2017	425,300
11/13/2017	140,833
11/14/2017	81,200
11/15/2017	73,000

Collection Date	Flow Result (gallons per day)
11/16/2017	84,000
11/17/2017	61,400
11/20/2017	60,000
11/21/2017	60,300
11/22/2017	78,400
11/23/2017	73,500
11/24/2017	71,400
11/27/2017	53,867
11/28/2017	60,700
11/29/2017	68,300
11/30/2017	49,500
12/1/2017	65,700
12/4/2017	60,822
12/5/2017	57,012
12/6/2017	67,700
12/7/2017	93,900
12/8/2017	292,100
12/11/2017	681,267
12/12/2017	249,396
12/13/2017	113,633
12/14/2017	60,200
12/15/2017	54,200
12/18/2017	61,900
12/19/2017	60,900
12/20/2017	56,900
12/21/2017	382,700
12/22/2017	213,600
12/25/2017	171,133
12/27/2017	85,450
12/28/2017	109,800
12/29/2017	74,400

Table 4 National Pollution Discharge Elimination System Industrial Wastewater Flow Data
(continued)

Outfall: H-12

Collection Date	Flow Result (gallons per minute)
1/18/2017	37.7
2/14/2017	57.4
3/16/2017	82.1
4/18/2017	109.5
5/11/2017	138.7
6/13/2017	72.7
7/13/2017	741.0
8/16/2017	663.0
9/19/2017	59.2
10/12/2017	77.6
11/14/2017	87.1
12/12/2017	878.8

Outfall: H-16

Collection Date	Flow Result (gallons per minute)
1/5/2017	0
1/9/2017	183
1/17/2017	184
1/23/2017	181
2/6/2017	183
2/13/2017	183
2/21/2017	183
2/27/2017	183
3/6/2017	183
3/13/2017	183
3/20/2017	0
3/27/2017	0
4/3/2017	0
4/10/2017	0
4/17/2017	0
4/24/2017	0
5/1/2017	0
5/8/2017	181
5/15/2017	181
5/22/2017	182
6/5/2017	183
6/12/2017	183
6/19/2017	182
6/26/2017	182
7/3/2017	0
7/10/2017	182

Collection Date	Flow Result (gallons per minute)
7/17/2017	181
7/24/2017	0
8/1/2017	181
8/8/2017	183
8/15/2017	183
8/29/2017	0
9/5/2017	0
9/13/2017	182
9/18/2017	183
9/25/2017	182
10/2/2017	182
10/9/2017	182
10/16/2017	0
10/30/2017	0
11/6/2017	0
11/13/2017	0
11/20/2017	0
11/28/2017	174
12/4/2017	179
12/11/2017	177
12/18/2017	0
12/27/2017	0

Table 4 National Pollution Discharge Elimination System Industrial Wastewater Flow Data
(continued)**Outfall: K-12**

Collection Date	Flow Result (gallons per day)
1/1/2017	15,277
1/2/2017	6,339
1/3/2017	9,428
1/4/2017	5,229
1/5/2017	2,227
1/6/2017	5,207
1/7/2017	3,399
1/8/2017	1,831
1/9/2017	3,200
1/10/2017	1,813
1/11/2017	2,056
1/12/2017	1,311
1/13/2017	868
1/14/2017	986
1/15/2017	827
1/16/2017	935
1/17/2017	1,414
1/18/2017	1,524
1/19/2017	1,708
1/20/2017	725
1/21/2017	8,306
1/22/2017	17,781
1/23/2017	10,309
1/24/2017	2,624
1/25/2017	2,205
1/26/2017	2,919
1/27/2017	1,068
1/28/2017	932
1/29/2017	1,049
1/30/2017	1,878
1/31/2017	1,858
2/1/2017	1,691
2/2/2017	1,879
2/3/2017	783
2/4/2017	947
2/5/2017	0
2/6/2017	4,954
2/7/2017	2,084
2/8/2017	2,364
2/9/2017	1,209
2/10/2017	3,085
2/11/2017	961

Collection Date	Flow Result (gallons per day)
2/12/2017	830
2/13/2017	2,392
2/14/2017	1,310
2/15/2017	2,173
2/16/2017	1,533
2/17/2017	2,180
2/18/2017	3,677
2/19/2017	974
2/20/2017	657
2/21/2017	1,449
2/22/2017	2,749
2/23/2017	2,177
2/24/2017	53
2/25/2017	2,214
2/26/2017	2,339
2/27/2017	2,791
2/28/2017	1,838
3/1/2017	2,539
3/2/2017	2,363
3/3/2017	1,149
3/4/2017	75
3/5/2017	1,135
3/6/2017	5,667
3/7/2017	2,744
3/8/2017	2,970
3/9/2017	1,501
3/10/2017	1,302
3/11/2017	1,440
3/12/2017	1,954
3/13/2017	4,626
3/14/2017	2,864
3/15/2017	1,148
3/16/2017	2,085
3/17/2017	981
3/18/2017	985
3/19/2017	888
3/20/2017	2,038
3/21/2017	1,334
3/22/2017	1,975
3/23/2017	1,430
3/24/2017	469
3/25/2017	719

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Collection Date	Flow Result (gallons per day)
3/26/2017	958
3/27/2017	2,290
3/28/2017	1,686
3/29/2017	899
3/30/2017	1,282
3/31/2017	1,191
4/1/2017	895
4/2/2017	2,593
4/3/2017	6,763
4/4/2017	1,992
4/5/2017	7,169
4/6/2017	3,066
4/7/2017	934
4/8/2017	0
4/9/2017	1,117
4/10/2017	2,900
4/11/2017	2,829
4/12/2017	1,236
4/13/2017	1,192
4/14/2017	13
4/15/2017	2,701
4/16/2017	1,140
4/17/2017	1,306
4/18/2017	4,477
4/19/2017	1,612
4/20/2017	2,896
4/21/2017	1,159
4/22/2017	115
4/23/2017	7,655
4/24/2017	11,850
4/25/2017	2,622
4/26/2017	1,371
4/27/2017	2,651
4/28/2017	1,547
4/29/2017	5,017
4/30/2017	3,358
5/1/2017	3,488
5/2/2017	2,391
5/3/2017	1,833
5/4/2017	6,627
5/5/2017	1,375
5/6/2017	894
5/7/2017	33
5/8/2017	2,744
5/9/2017	3,956
5/10/2017	1,586
5/11/2017	2,375

Collection Date	Flow Result (gallons per day)
5/12/2017	1,879
5/13/2017	49
5/14/2017	1,509
5/15/2017	2,169
5/16/2017	5,881
5/17/2017	2,177
5/18/2017	2,097
5/19/2017	4
5/20/2017	2,793
5/21/2017	784
5/22/2017	9,510
5/23/2017	9,247
5/24/2017	1,182
5/25/2017	2,170
5/26/2017	983
5/27/2017	1,084
5/28/2017	1,096
5/29/2017	3,940
5/30/2017	4,780
5/31/2017	2,390
6/1/2017	1,346
6/2/2017	1,127
6/3/2017	1,102
6/4/2017	60
6/5/2017	3,911
6/6/2017	2,185
6/7/2017	1,989
6/8/2017	1,282
6/9/2017	0
6/10/2017	938
6/11/2017	1,086
6/12/2017	1,162
6/13/2017	2,677
6/14/2017	1,327
6/15/2017	2,446
6/16/2017	1,064
6/17/2017	12
6/18/2017	1,404
6/19/2017	1,669
6/20/2017	3,932
6/21/2017	1,837
6/22/2017	1,100
6/23/2017	1,053
6/24/2017	22
6/25/2017	990
6/26/2017	1,977
6/27/2017	1,056

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Collection Date	Flow Result (gallons per day)
6/28/2017	1,787
6/29/2017	1,303
6/30/2017	2,902
7/1/2017	1,594
7/2/2017	711
7/3/2017	5,874
7/4/2017	995
7/5/2017	1,860
7/6/2017	975
7/7/2017	873
7/8/2017	0
7/9/2017	4,367
7/10/2017	7,991
7/11/2017	2,570
7/12/2017	2,365
7/13/2017	1,634
7/14/2017	1,143
7/15/2017	1,066
7/16/2017	2,872
7/17/2017	1,380
7/18/2017	1,832
7/19/2017	2,127
7/20/2017	948
7/21/2017	1,156
7/22/2017	676
7/23/2017	1,091
7/24/2017	2,434
7/25/2017	2,054
7/26/2017	1,144
7/27/2017	1,946
7/28/2017	3
7/29/2017	1,448
7/30/2017	0
7/31/2017	2,240
8/1/2017	2,255
8/2/2017	1,743
8/3/2017	1,069
8/4/2017	399
8/5/2017	584
8/6/2017	992
8/7/2017	2,378
8/8/2017	2,359
8/9/2017	11,049
8/10/2017	2,812
8/11/2017	1,044
8/12/2017	1,024
8/13/2017	0

Collection Date	Flow Result (gallons per day)
8/14/2017	1,938
8/15/2017	1,330
8/16/2017	2,622
8/17/2017	1,674
8/18/2017	1,520
8/19/2017	1,329
8/20/2017	2,707
8/21/2017	1,676
8/22/2017	1,606
8/23/2017	2,258
8/24/2017	1,176
8/25/2017	32
8/26/2017	996
8/27/2017	1,742
8/28/2017	1,852
8/29/2017	3,205
8/30/2017	3,875
8/31/2017	1,323
9/1/2017	1,240
9/2/2017	2,740
9/3/2017	3,121
9/4/2017	1,440
9/5/2017	2,710
9/6/2017	2,804
9/7/2017	1,363
9/8/2017	2,858
9/9/2017	2
9/10/2017	1,290
9/11/2017	29,447
9/12/2017	9,841
9/13/2017	3,243
9/14/2017	1,398
9/15/2017	1,539
9/16/2017	1,327
9/17/2017	122
9/18/2017	3,350
9/19/2017	1,736
9/20/2017	2,416
9/21/2017	1,696
9/22/2017	1,115
9/23/2017	1,910
9/24/2017	921
9/25/2017	1,570
9/26/2017	1,677
9/27/2017	1,167
9/28/2017	1,593
9/29/2017	610

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Collection Date	Flow Result (gallons per day)
9/30/2017	181
10/1/2017	562
10/2/2017	2,406
10/3/2017	1,844
10/4/2017	1,948
10/5/2017	1,429
10/6/2017	892
10/7/2017	6
10/8/2017	596
10/9/2017	2,327
10/10/2017	2,565
10/11/2017	2,992
10/12/2017	1,601
10/13/2017	1,574
10/14/2017	11
10/15/2017	1,296
10/16/2017	1,737
10/17/2017	3,686
10/18/2017	2,567
10/19/2017	1,861
10/20/2017	1,185
10/21/2017	740
10/22/2017	47
10/23/2017	2,365
10/24/2017	1,399
10/25/2017	2,571
10/26/2017	1,034
10/27/2017	1,221
10/28/2017	968
10/29/2017	0
10/30/2017	2,722
10/31/2017	2,056
11/1/2017	1,554
11/2/2017	1,212
11/3/2017	1,082
11/4/2017	0
11/5/2017	1,167
11/6/2017	3,051
11/7/2017	2,265
11/8/2017	2,346
11/9/2017	1,755
11/10/2017	968
11/11/2017	851
11/12/2017	0
11/13/2017	2,496
11/14/2017	1,343
11/15/2017	2,095

Collection Date	Flow Result (gallons per day)
11/16/2017	1,185
11/17/2017	13
11/18/2017	960
11/19/2017	1,117
11/20/2017	1,582
11/21/2017	2,341
11/22/2017	1,953
11/23/2017	0
11/24/2017	192
11/25/2017	857
11/26/2017	0
11/27/2017	2,773
11/28/2017	2,156
11/29/2017	2,338
11/30/2017	1,331
12/1/2017	3,038
12/2/2017	963
12/3/2017	842
12/4/2017	2,500
12/5/2017	2,806
12/6/2017	2,769
12/7/2017	2,373
12/8/2017	16,687
12/9/2017	7,406
12/10/2017	1,048
12/11/2017	1,230
12/12/2017	2,049
12/13/2017	2,346
12/14/2017	1,234
12/15/2017	87
12/16/2017	1,075
12/17/2017	534
12/18/2017	1,657
12/19/2017	1,453
12/20/2017	2,678
12/21/2017	2,682
12/22/2017	1,263
12/23/2017	1,104
12/24/2017	884
12/25/2017	1,089
12/26/2017	3
12/27/2017	1,884
12/28/2017	504
12/29/2017	1,084
12/30/2017	0
12/31/2017	1,093

Table 4 National Pollution Discharge Elimination System Industrial Wastewater Flow Data
(continued)

Outfall: K-18

Collection Date	Flow Result (gallons per minute)
3/9/2017	373
5/17/2017	366
8/1/2017	265
10/31/2017	161

Outfall: L-07

Collection Date	Flow Result (gallons per minute)
1/9/2017	6,609.88
1/17/2017	6,060.33
1/23/2017	6,365.63
1/30/2017	5,861.88
2/6/2017	6,472.49
2/13/2017	5,922.94
2/21/2017	5,922.94
2/27/2017	6,365.63
3/6/2017	6,365.63
3/13/2017	6,365.63
3/20/2017	5,968.73
3/27/2017	6,472.49
4/3/2017	6,365.63
4/10/2017	5,861.88
4/17/2017	6,212.98
4/24/2017	6,258.78
5/8/2017	6,319.84
5/15/2017	5,861.88
5/22/2017	5,861.88
5/30/2017	5,861.88
6/5/2017	6,365.63
6/12/2017	6,365.63
6/19/2017	6,319.84
6/26/2017	4,884.90
7/3/2017	5,861.88
7/10/2017	6,258.78
7/17/2017	5,922.94
7/24/2017	5,861.88
7/31/2017	5,922.94
8/14/2017	6,365.63

Collection Date	Flow Result (gallons per minute)
8/28/2017	5,861.88
9/5/2017	6,365.63
9/12/2017	6,869.39
9/18/2017	5,861.88
9/25/2017	6,365.63
10/2/2017	6,365.63
10/9/2017	6,365.63
10/16/2017	6,365.63
10/23/2017	6,365.63
10/30/2017	6,365.63
11/6/2017	5,968.73
11/13/2017	6,258.78
11/20/2017	6,869.39
11/27/2017	6,365.63
12/4/2017	6,609.88
12/11/2017	6,365.63
12/18/2017	6,365.63
12/27/2017	6,365.63

Table 4 National Pollution Discharge Elimination System Industrial Wastewater Flow Data
(continued)

Outfall: L-7A

Collection Date	Flow Result (gallons per day)
1/1/2017	3,103
1/2/2017	5,652
1/3/2017	5,822
1/4/2017	2,896
1/5/2017	3,230
1/6/2017	6,397
1/7/2017	4,173
1/8/2017	3,022
1/9/2017	3,844
1/10/2017	3,522
1/11/2017	3,653
1/12/2017	1,428
1/13/2017	1,359
1/14/2017	4,074
1/15/2017	1,302
1/16/2017	1,338
1/17/2017	1,257
1/18/2017	4,045
1/19/2017	1,252
1/20/2017	1,367
1/21/2017	8,699
1/22/2017	16,463
1/23/2017	9,922
1/24/2017	4,661
1/25/2017	4,185
1/26/2017	1,837
1/27/2017	4,219
1/28/2017	1,269
1/29/2017	3,892
1/30/2017	1,894
1/31/2017	3,665
2/1/2017	1,346
2/2/2017	4,337
2/3/2017	1,280
2/4/2017	1,143
2/5/2017	1,281
2/6/2017	4,318
2/7/2017	5,142
2/8/2017	1,317
2/9/2017	4,729
2/10/2017	1,227
2/11/2017	1,271

Collection Date	Flow Result (gallons per day)
2/12/2017	1,375
2/13/2017	2,607
2/14/2017	1,498
2/15/2017	4,241
2/16/2017	92
2/17/2017	0
2/18/2017	2,528
2/19/2017	8
2/20/2017	0
2/21/2017	694
2/22/2017	1,896
2/23/2017	683
2/24/2017	813
2/25/2017	727
2/26/2017	2,469
2/27/2017	1,583
2/28/2017	816
3/1/2017	3,627
3/2/2017	786
3/3/2017	1,923
3/4/2017	2,115
3/5/2017	4,348
3/6/2017	2,464
3/7/2017	2,542
3/8/2017	5,661
3/9/2017	2,632
3/10/2017	2,632
3/11/2017	2,600
3/12/2017	2,662
3/13/2017	3,958
3/14/2017	824
3/15/2017	1,032
3/16/2017	6,625
3/17/2017	873
3/18/2017	927
3/19/2017	828
3/20/2017	4,079
3/21/2017	1,130
3/22/2017	4,023
3/23/2017	12
3/24/2017	2,946
3/25/2017	126

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Collection Date	Flow Result (gallons per day)
3/26/2017	1,526
3/27/2017	1,186
3/28/2017	3,907
3/29/2017	3,391
3/30/2017	3,046
3/31/2017	3,106
4/1/2017	42
4/2/2017	1,596
4/3/2017	6,944
4/4/2017	3,296
4/5/2017	5,004
4/6/2017	3,546
4/7/2017	2,831
4/8/2017	57
4/9/2017	38
4/10/2017	3,757
4/11/2017	68
4/12/2017	3,357
4/13/2017	626
4/14/2017	92
4/15/2017	50
4/16/2017	25
4/17/2017	3,160
4/18/2017	399
4/19/2017	4,032
4/20/2017	395
4/21/2017	511
4/22/2017	7,166
4/23/2017	4,669
4/24/2017	17,057
4/25/2017	10,882
4/26/2017	3,730
4/27/2017	4,050
4/28/2017	818
4/29/2017	979
4/30/2017	1,448
5/1/2017	8,951
5/2/2017	1,214
5/3/2017	5,823
5/4/2017	496
5/5/2017	1,729
5/6/2017	83
5/7/2017	242
5/8/2017	1,351
5/9/2017	3,757
5/10/2017	2,268
5/11/2017	463

Collection Date	Flow Result (gallons per day)
5/12/2017	17
5/13/2017	3,541
5/14/2017	1,930
5/15/2017	3,206
5/16/2017	2,515
5/17/2017	2,459
5/18/2017	19
5/19/2017	3,761
5/20/2017	16
5/21/2017	2,187
5/22/2017	3,060
5/23/2017	5,628
5/24/2017	3,313
5/25/2017	3,889
5/26/2017	2,510
5/27/2017	2,740
5/28/2017	57
5/29/2017	2,957
5/30/2017	3,931
5/31/2017	2,450
6/1/2017	145
6/2/2017	2,946
6/3/2017	78
6/4/2017	47
6/5/2017	4,862
6/6/2017	3,560
6/7/2017	6,292
6/8/2017	1,001
6/9/2017	3,871
6/10/2017	2,854
6/11/2017	3,034
6/12/2017	4,369
6/13/2017	3,723
6/14/2017	6,484
6/15/2017	3,171
6/16/2017	2,707
6/17/2017	38
6/18/2017	2,390
6/19/2017	3,744
6/20/2017	2,690
6/21/2017	2,163
6/22/2017	4,189
6/23/2017	10
6/24/2017	3,955
6/25/2017	2,368
6/26/2017	2,741
6/27/2017	2,611

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Collection Date	Flow Result (gallons per day)
6/28/2017	2,589
6/29/2017	3,367
6/30/2017	3,206
7/1/2017	2,392
7/2/2017	112
7/3/2017	4,210
7/4/2017	2,597
7/5/2017	2,424
7/6/2017	84
7/7/2017	2,560
7/8/2017	2,436
7/9/2017	2,329
7/10/2017	3,910
7/11/2017	2,913
7/12/2017	2,063
7/13/2017	135
7/14/2017	2,682
7/15/2017	2,514
7/16/2017	2,599
7/17/2017	2,337
7/18/2017	31
7/19/2017	2,205
7/20/2017	3
7/21/2017	2,430
7/22/2017	28
7/23/2017	0
7/24/2017	2,893
7/25/2017	17
7/26/2017	5
7/27/2017	10,623
7/28/2017	208
7/29/2017	2,994
7/30/2017	2,898
7/31/2017	3,151
8/1/2017	6,292
8/2/2017	933
8/3/2017	2,419
8/4/2017	4,730
8/5/2017	37
8/6/2017	32
8/7/2017	3,548
8/8/2017	4,331
8/9/2017	6,500
8/10/2017	4,319
8/11/2017	2,699
8/12/2017	3,059
8/13/2017	85

Collection Date	Flow Result (gallons per day)
8/14/2017	3,499
8/15/2017	3,568
8/16/2017	2,253
8/17/2017	929
8/18/2017	4,236
8/19/2017	1,973
8/20/2017	1,247
8/21/2017	3,402
8/22/2017	6,104
8/23/2017	1,837
8/24/2017	3,408
8/25/2017	397
8/26/2017	96
8/27/2017	72
8/28/2017	7,286
8/29/2017	3,442
8/30/2017	2,149
8/31/2017	5,385
9/1/2017	1,245
9/2/2017	6,147
9/3/2017	202
9/4/2017	2,261
9/5/2017	4,242
9/6/2017	3,805
9/7/2017	823
9/8/2017	3,957
9/9/2017	570
9/10/2017	1,773
9/11/2017	11,390
9/12/2017	6,102
9/13/2017	3,050
9/14/2017	88
9/15/2017	6,493
9/16/2017	37
9/17/2017	15
9/18/2017	6,057
9/19/2017	3,538
9/20/2017	2,510
9/21/2017	3,276
9/22/2017	55
9/23/2017	35
9/24/2017	19
9/25/2017	2,728
9/26/2017	966
9/27/2017	1,260
9/28/2017	6
9/29/2017	2,693

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Collection Date	Flow Result (gallons per day)
9/30/2017	4
10/1/2017	0
10/2/2017	2,274
10/3/2017	219
10/4/2017	3,080
10/5/2017	345
10/6/2017	362
10/7/2017	1,865
10/8/2017	185
10/9/2017	1,488
10/10/2017	2,885
10/11/2017	443
10/12/2017	3,387
10/13/2017	301
10/14/2017	35
10/15/2017	2,835
10/16/2017	386
10/17/2017	2,395
10/18/2017	425
10/19/2017	2,600
10/20/2017	140
10/21/2017	2
10/22/2017	650
10/23/2017	3,617
10/24/2017	652
10/25/2017	2,153
10/26/2017	5
10/27/2017	2,484
10/28/2017	26
10/29/2017	4
10/30/2017	236
10/31/2017	2,645
11/1/2017	26
11/2/2017	2,217
11/3/2017	77
11/4/2017	5
11/5/2017	0
11/6/2017	2,874
11/7/2017	467
11/8/2017	738
11/9/2017	1,837
11/10/2017	16
11/11/2017	0
11/12/2017	0
11/13/2017	2,047
11/14/2017	223
11/15/2017	2,127

Collection Date	Flow Result (gallons per day)
11/16/2017	5
11/17/2017	37
11/18/2017	27
11/19/2017	6
11/20/2017	2,796
11/21/2017	95
11/22/2017	53
11/23/2017	8
11/24/2017	2
11/25/2017	2,789
11/26/2017	5
11/27/2017	268
11/28/2017	402
11/29/2017	889
11/30/2017	1,895
12/1/2017	658
12/2/2017	24
12/3/2017	49
12/4/2017	485
12/5/2017	2,875
12/6/2017	2,890
12/7/2017	2,315
12/8/2017	4,173
12/9/2017	2,884
12/10/2017	9
12/11/2017	1,678
12/12/2017	1,124
12/13/2017	2,760
12/14/2017	1,298
12/15/2017	101
12/16/2017	4
12/17/2017	0
12/18/2017	2,801
12/19/2017	26
12/20/2017	3,372
12/21/2017	85
12/22/2017	27
12/23/2017	3,247
12/24/2017	58
12/25/2017	6
12/26/2017	6
12/27/2017	7
12/28/2017	1
12/29/2017	2,700
12/30/2017	45
12/31/2017	15

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Table 4 National Pollution Discharge Elimination System Industrial Wastewater Flow Data
(continued)

Outfall: M-05

Collection Date	Flow Result (gallons per minute)
1/2/2017	480
1/3/2017	480
1/4/2017	0
1/5/2017	440
1/9/2017	477
1/10/2017	479
1/11/2017	442
1/12/2017	480
1/16/2017	477
1/17/2017	477
1/18/2017	478
1/19/2017	478
1/23/2017	533
1/24/2017	484
1/25/2017	484
1/26/2017	483
1/30/2017	483
1/31/2017	480
2/1/2017	482
2/2/2017	482
2/6/2017	482
2/7/2017	480
2/8/2017	480
2/9/2017	482
2/13/2017	480
2/14/2017	490
2/15/2017	490
2/16/2017	490
2/20/2017	481
2/21/2017	482
2/22/2017	482
2/23/2017	478
2/27/2017	477
2/28/2017	485
3/1/2017	485
3/2/2017	485
3/6/2017	485
3/7/2017	0
3/8/2017	0
3/9/2017	490
3/13/2017	492
3/14/2017	493

Collection Date	Flow Result (gallons per minute)
3/15/2017	493
3/16/2017	493
3/20/2017	450
3/21/2017	452
3/22/2017	492
3/23/2017	492
3/27/2017	493
3/28/2017	493
3/29/2017	490
3/30/2017	492
4/3/2017	492
4/4/2017	493
4/5/2017	492
4/6/2017	492
4/10/2017	490
4/11/2017	494
4/12/2017	492
4/13/2017	492
4/17/2017	530
4/18/2017	0
4/19/2017	0
4/20/2017	452
4/24/2017	492
4/25/2017	493
4/26/2017	493
4/27/2017	490
5/1/2017	490
5/2/2017	490
5/3/2017	490
5/4/2017	490
5/8/2017	490
5/9/2017	491
5/10/2017	492
5/11/2017	491
5/15/2017	452
5/16/2017	492
5/17/2017	490
5/18/2017	490
5/22/2017	456
5/23/2017	452
5/24/2017	454
5/25/2017	452

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Collection Date	Flow Result (gallons per minute)
5/29/2017	452
5/30/2017	452
5/31/2017	452
6/1/2017	452
6/5/2017	450
6/6/2017	451
6/7/2017	495
6/8/2017	495
6/12/2017	453
6/13/2017	451
6/14/2017	446
6/15/2017	488
6/19/2017	488
6/20/2017	440
6/21/2017	440
6/22/2017	494
6/26/2017	490
6/27/2017	490
6/28/2017	488
6/29/2017	495
7/3/2017	492
7/4/2017	490
7/5/2017	494
7/6/2017	490
7/10/2017	491
7/11/2017	492
7/12/2017	490
7/13/2017	490
7/17/2017	489
7/18/2017	442
7/19/2017	443
7/20/2017	491
7/24/2017	381
7/25/2017	380
7/26/2017	380
7/27/2017	382
7/31/2017	382
8/1/2017	396
8/2/2017	396
8/3/2017	396
8/7/2017	491
8/8/2017	481
8/9/2017	0
8/10/2017	488
8/14/2017	442
8/15/2017	443
8/16/2017	444

Collection Date	Flow Result (gallons per minute)
8/17/2017	443
8/21/2017	433
8/22/2017	435
8/23/2017	475
8/24/2017	444
8/28/2017	443
8/29/2017	405
8/30/2017	406
8/31/2017	406
9/4/2017	485
9/5/2017	485
9/6/2017	485
9/7/2017	495
9/12/2017	490
9/13/2017	492
9/14/2017	490
9/15/2017	493
9/18/2017	493
9/19/2017	492
9/20/2017	492
9/21/2017	493
9/25/2017	492
9/26/2017	492
9/27/2017	494
9/28/2017	492
10/2/2017	490
10/3/2017	490
10/4/2017	493
10/5/2017	492
10/9/2017	492
10/10/2017	492
10/11/2017	492
10/12/2017	492
10/16/2017	493
10/17/2017	493
10/18/2017	492
10/19/2017	495
10/23/2017	490
10/24/2017	492
10/25/2017	493
10/26/2017	490
10/30/2017	492
10/31/2017	492
11/1/2017	491
11/2/2017	492
11/6/2017	488
11/7/2017	492

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Collection Date	Flow Result (gallons per minute)
11/8/2017	494
11/9/2017	494
11/13/2017	492
11/14/2017	494
11/15/2017	492
11/16/2017	490
11/20/2017	494
11/21/2017	500
11/22/2017	496
11/23/2017	492
11/27/2017	492
11/28/2017	490
11/29/2017	493
11/30/2017	490
12/4/2017	490
12/5/2017	490
12/6/2017	490
12/7/2017	495
12/11/2017	492
12/12/2017	492
12/13/2017	491
12/14/2017	492
12/18/2017	492
12/19/2017	495
12/20/2017	494
12/21/2017	495
12/25/2017	492
12/26/2017	495
12/27/2017	495
12/28/2017	490

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Table 5 National Pollutant Discharge Elimination System Industrial Wastewater Chemical Monitoring Data

Samples are either collected using the grab method or as a 24-hour composite.

Outfall: A-01

Collection Date	Biochemical Oxygen Demand (mg/L)	Iron (mg/L)	Oil & Grease (mg/L)	pH	Total Suspended Solids (mg/L)
1/10/2017	< 2.0	0.1670	< 5	7.7	1
2/7/2017	< 2.0	0.1280	< 5	7.4	1
3/21/2017	< 2.0	0.1310	< 5	7.5	1
4/18/2017	< 2.0	0.3400	< 5	7.4	3
5/9/2017	< 2.0	0.2740	< 5	7.4	5
6/6/2017	< 2.0	0.4580	< 5	7.2	3
7/19/2017	< 2.0	0.6040	< 5	7.4	4
8/2/2017	< 2.0	0.6400	< 5	7.5	3
9/6/2017	< 2.0	0.4450	< 5	7.4	3
10/3/2017	< 2.0	0.2410	< 5	7.4	1
11/7/2017	< 2.0	0.1980	< 5	7.4	2
12/5/2017	< 2.0	0.1260	< 5	7.5	1

Outfall: A-11

Collection Date	Biochemical Oxygen Demand (mg/L)	pH	Total Suspended Solids (mg/L)
1/10/2017	< 2.0	7.3	< 1
2/7/2017	< 2.0	6.9	< 1
3/21/2017	< 2.0	7.4	< 1
4/18/2017	< 2.0	7.7	< 1
5/9/2017	< 2.0	7.6	< 1
6/6/2017	2.1	7.5	1
7/19/2017	< 2.0	7.6	< 1
8/2/2017	< 2.0	7.6	< 1
9/6/2017	< 2.0	7.6	1
10/3/2017	< 2.0	7.7	< 1
11/7/2017	< 2.0	7.6	< 1
12/5/2017	< 2.0	7.2	1

Collection Date	Low Level Mercury (µg/L)
1/18/2017	0.00244
2/7/2017	0.00170
3/13/2017	0.00237
4/3/2017	0.00168
5/8/2017	0.00268
6/5/2017	0.00156
7/13/2017	0.00236
8/1/2017	0.00190
9/6/2017	0.00326
10/16/2017	0.00218
11/6/2017	0.00164
12/4/2017	0.00157

Table 5 National Pollutant Discharge Elimination System Industrial Wastewater Chemical Monitoring Data (continued)

Outfall: A-1A

Collection Date	Tetrachloroethylene (µg/L)	Trichloroethylene (µg/L)
1/26/2017	< 2	< 2
2/8/2017	< 2	< 2
3/22/2017	< 2	< 2
4/19/2017	< 2	< 2
5/16/2017	< 2	< 2
6/13/2017	< 2	< 2
7/10/2017	< 2	< 2
8/16/2017	< 2	< 2
9/13/2017	< 2	< 2
10/11/2017	< 2	< 2
11/8/2017	< 2	< 2
12/6/2017	< 2	< 2

Outfall: D-01

Collection Date	Aluminum (mg/L)	Manganese (mg/L)	pH
1/5/2017	NF	NF	NF
2/2/2017	NF	NF	NF
3/2/2017	NF	NF	NF
4/6/2017	NF	NF	NF
5/1/2017	0.0503	0.0583	6.0
6/12/2017	0.1090	0.0189	6.4
7/6/2017	NF	NF	NF
8/17/2017	0.1840	0.3160	6.1
9/14/2017	0.3730	0.0700	6.5
10/5/2017	NF	NF	NF
11/2/2017	0.0640	0.0260	6.1
12/15/2017	1.1300	0.0153	6.9

Note:

NF = no flow, thus no sample collected

Table 5 National Pollutant Discharge Elimination System Industrial Wastewater Chemical Monitoring Data (continued)

Outfall: D-01 (continued)

Collection Date	Toxicity (mg/L)	Unit
3/2/2017	NF	Predicted % Survival Effect
3/2/2017	NF	Predicted % Reproduction Effect
4/3/2017	11	Predicted % Survival Effect
4/3/2017	17	Predicted % Reproduction Effect
7/24/2017	4	Predicted % Survival Effect
7/24/2017	13	Predicted % Reproduction Effect
10/16/2017	0	Predicted % Survival Effect
10/16/2017	0	Predicted % Reproduction Effect

Note:

NF = no flow, thus no sample collected

Outfall: D-02

Collection Date	Copper (mg/L)	Nickel (mg/L)	Oil & Grease (mg/L)	pH	Total Suspended Solids (mg/L)	Zinc (mg/L)
1/5/2017	< 0.0100	< 0.0100	< 5	7.3	22	< 0.0100
4/7/2017	< 0.0100	< 0.0100	< 5	7.0	4	< 0.0100
7/6/2017	< 0.0100	< 0.0100	< 5	7.2	7	< 0.0100
10/5/2017	NF	NF	NF	NF	NF	NF

Note:

NF = no flow, thus no sample collected

Table 5 National Pollutant Discharge Elimination System Industrial Wastewater Chemical Monitoring Data (continued)

Outfall: D-1C

Collection Date	Oil & Grease (mg/L)	Total Suspended Solids (mg/L)
1/5/2017	NF	NF
2/2/2017	NF	NF
3/2/2017	NF	NF
4/6/2017	NF	NF
5/1/2017	< 5	2
5/11/2017	< 5	
6/12/2017	< 5	2
6/12/2017	< 5	
7/6/2017	NF	NF
8/17/2017	< 5	5
9/14/2017	< 5	3
10/5/2017	NF	NF
11/2/2017	< 5	2
12/15/2017	< 5	3

Note:

NF = no flow, thus no sample collected

Outfall: F-08

Collection Date	Lead (mg/L)	pH	Zinc (mg/L)
1/17/2017	NF	NF	NF
2/13/2017	NF	NF	NF
3/7/2017	NF	NF	NF
4/17/2017	NF	NF	NF
5/10/2017	NF	NF	NF
6/12/2017	NF	NF	NF
7/13/2017	< 0.002	7.4	0.0837
8/15/2017	< 0.002	7.6	0.0746
9/19/2017	< 0.002	7.5	0.0922
10/4/2017	NF	NF	NF
11/13/2017	NF	NF	NF
12/12/2017	< 0.0020	7.5	0.0474

Note:

NF = no flow, thus no sample collected

Table 5 National Pollutant Discharge Elimination System Industrial Wastewater Chemical Monitoring Data (continued)

Outfall: G-10

Collection Date	Ammonia-Nitrogen (mg/L)	Biochemical Oxygen Demand (mg/L)	Total Suspended Solids (mg/L)
1/3/2017	< 0.10	2.00	6.3
1/10/2017	< 0.10	< 2.00	4.1
2/7/2017	< 0.10	< 2.00	2.0
2/14/2017	< 0.10	< 2.00	2.3
3/7/2017	< 0.10	2.00	2.6
3/14/2017	< 0.10	2.48	4.9
4/4/2017	< 0.10	< 2.00	3.1
4/11/2017	< 0.10	< 2.00	2.2
5/2/2017	< 0.10	< 2.00	4.0
5/9/2017	< 0.10	< 2.00	4.5
6/6/2017	< 0.10	2.97	6.8
6/13/2017	< 0.10	< 2.00	2.3
7/4/2017	< 0.10	< 2.00	3.6
7/11/2017	< 0.10	< 2.00	2.5
8/2/2017	< 0.10	< 2.00	2.3
8/8/2017	< 0.10	2.07	1.9
9/6/2017	< 0.10	2.10	2.1
9/19/2017	< 0.10	< 2.00	2.9
10/3/2017	< 0.10	< 2.00	2.3
10/10/2017	< 0.10	< 2.00	2.6
11/7/2017	< 0.10	< 2.00	2.5
11/14/2017	< 0.10	< 2.00	3.0
12/5/2017	1.10	3.46	4.0
12/12/2017	< 0.10	2.18	4.7

Table 5 National Pollutant Discharge Elimination System Industrial Wastewater Chemical Monitoring Data (continued)

Outfall: G-10 (continued)

Collection Date	Dissolved Oxygen (mg/L)	pH
1/5/2017	8.64	7.2
1/12/2017	8.42	7.3
2/9/2017	7.70	7.1
2/16/2017	9.19	7.2
3/9/2017	7.25	7.0
3/14/2017	7.50	7.0
4/6/2017	7.62	7.1
4/11/2017	8.95	7.6
5/4/2017	6.72	7.0
5/11/2017	7.25	7.4
6/8/2017	5.84	7.0
6/15/2017	5.97	7.2
7/6/2017	8.87	7.8
7/13/2017	5.95	7.2
8/3/2017	6.90	7.1
8/10/2017	6.54	7.2
9/7/2017	7.32	8.1
9/21/2017	6.84	7.3
10/5/2017	8.12	7.2
10/12/2017	6.32	7.1
11/9/2017	7.75	7.2
11/15/2017	9.02	7.7
12/7/2017	7.86	6.9
12/14/2017	8.95	6.7

Table 5 National Pollutant Discharge Elimination System Industrial Wastewater Chemical Monitoring Data (continued)

Outfall: G-10 (continued)

Collection Date	Fecal Coliform (col/100 mL)
1/2/2017	< 2
1/9/2017	4
2/6/2017	22
2/15/2017	< 2
3/6/2017	7
3/13/2017	< 2
4/3/2007	5
4/10/2017	< 2
5/1/2017	2
5/8/2017	5
6/5/2017	350
6/13/2017	< 2
7/3/2017	< 2
7/10/2017	< 2
8/1/2017	< 2
8/7/2017	< 2
9/5/2017	< 2
9/18/2017	5
10/2/2017	5
10/9/2017	6
11/6/2017	< 2
11/14/2017	< 2
12/5/2017	< 2
12/12/2017	17

Table 5 National Pollutant Discharge Elimination System Industrial Wastewater Chemical Monitoring Data (continued)

Outfall: H-02

Collection Date	Copper (mg/L)	Lead (mg/L)	pH	Zinc (mg/L)
1/18/2017	0.0055	< 0.0020	6.8	< 0.0100
2/14/2017	0.0055	< 0.0020	7.4	< 0.0100
3/16/2017	< 0.0050	< 0.0020	7.2	< 0.0100
4/18/2017	0.0073	0.0035	7.1	< 0.0100
5/11/2017	0.0053	< 0.0020	7.4	< 0.0100
6/13/2017	0.0051	< 0.0020	7.0	< 0.0100
7/13/2017	0.0052	< 0.0020	7.3	< 0.0100
8/16/2017	< 0.0050	< 0.0020	7.3	< 0.0100
9/19/2017	0.0061	< 0.0020	7.6	< 0.0100
10/12/2017	0.0069	< 0.0020	7.4	< 0.0100
11/14/2017	< 0.0050	< 0.0020	7.1	< 0.0100
12/12/2017	< 0.0050	< 0.0020	7.6	< 0.0100

Outfall: H-12

Collection Date	Copper (mg/L)	pH	Zinc (mg/L)
1/18/2017	0.0128	6.6	0.0284
2/14/2017	0.0104	7.2	0.1120
3/16/2017	0.0186	7.4	0.0228
4/18/2017	0.0095	7.4	0.0333
5/11/2017	0.0104	7.5	0.0357
6/13/2017	0.0169	7.3	0.0559
7/13/2017	0.0076	7.1	0.0971
8/16/2017	0.0066	7.2	0.0728
9/19/2017	0.0208	7.5	0.0437
10/12/2017	0.0210	7.5	0.0248
11/14/2017	0.0155	6.5	0.0235
12/12/2017	0.0102	7.6	0.1060

Table 5 National Pollutant Discharge Elimination System Industrial Wastewater Chemical Monitoring Data (continued)

Outfall: H-16

Collection Date	Biochemical Oxygen Demand (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Lead (mg/L)	Mercury (mg/L)
1/9/2017	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.0000200
1/17/2017	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.0000200
1/23/2017	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.0000200
2/6/2017	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.0000200
2/13/2017	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.0000200
2/21/2017	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.0000200
2/27/2017	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.0000200
3/6/2017	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.0000200
3/13/2017	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.0000200
3/20/2017	NF	NF	NF	NF	NF	NF
3/27/2017	NF	NF	NF	NF	NF	NF
4/3/2017	NF	NF	NF	NF	NF	NF
4/10/2017	NF	NF	NF	NF	NF	NF
4/17/2017	NF	NF	NF	NF	NF	NF
4/24/2017	NF	NF	NF	NF	NF	NF
5/1/2017	NF	NF	NF	NF	NF	NF
5/8/2017	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.0000200
5/15/2017	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.0000200
5/22/2017	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.0000200
6/5/2017	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.0000200
6/12/2017	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.0000200
6/19/2017	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.0000200
6/26/2017	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	0.0000331
7/3/2017	NF	NF	NF	NF	NF	NF
7/10/2017	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.0000200
7/17/2017	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.0000200
7/24/2017	NF	NF	NF	NF	NF	NF
8/1/2017	< 2.0	0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.0000200
8/8/2017	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.0000200
8/15/2017	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.0000200
8/29/2017	NF	NF	NF	NF	NF	NF
9/5/2017	NF	NF	NF	NF	NF	NF
9/13/2017	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.0000200
9/18/2017	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	0.0000325
9/25/2017	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.0000200
10/2/2017	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.0000200
10/9/2017	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.0000200
10/16/2017	NF	NF	NF	NF	NF	NF
10/30/2017	NF	NF	NF	NF	NF	NF
11/6/2017	NF	NF	NF	NF	NF	NF
11/13/2017	NF	NF	NF	NF	NF	NF

Table 5 National Pollutant Discharge Elimination System Industrial Wastewater Chemical Monitoring Data (continued)

Outfall: H-16 (continued)

Collection Date	Biochemical Oxygen Demand (mg/L)	Cadmium (mg/L)	Chromium (mg/L)	Copper (mg/L)	Lead (mg/L)	Mercury (mg/L)
11/20/2017	NF	NF	NF	NF	NF	NF
11/28/2017	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	< 0.0000200
12/4/2017	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	0.0000409
12/11/2017	< 2.0	< 0.0001	< 0.0050	< 0.0050	< 0.0020	0.0000295
12/18/2017	NF	NF	NF	NF	NF	NF
12/27/2017	NF	NF	NF	NF	NF	NF

Collection Date	Nickel (mg/L)	pH	Silver (mg/L)	Total Suspended Solids (mg/L)	Zinc (mg/L)
1/9/2017	< 0.0100	8.0	< 0.0050	< 1	< 0.0100
1/17/2017	< 0.0100	7.8	< 0.0050	< 1	0.0113
1/23/2017	< 0.0100	7.4	< 0.0050	< 1	< 0.0100
2/6/2017	< 0.0100	7.5	< 0.0050	< 1	< 0.0100
2/13/2017	< 0.0100	7.7	< 0.0050	1	< 0.0100
2/21/2017	< 0.0100	7.7	< 0.0050	< 1	< 0.0100
2/27/2017	< 0.0100	7.5	< 0.0050	< 1	< 0.0100
3/6/2017	< 0.0100	7.5	< 0.0050	< 1	< 0.0100
3/13/2017	< 0.0100	7.6	< 0.0050	< 1	< 0.0100
3/20/2017	NF	NF	NF	NF	NF
3/27/2017	NF	NF	NF	NF	NF
4/3/2017	NF	NF	NF	NF	NF
4/10/2017	NF	NF	NF	NF	NF
4/17/2017	NF	NF	NF	NF	NF
4/24/2017	NF	NF	NF	NF	NF
5/1/2017	NF	NF	NF	NF	NF
5/8/2017	< 0.0100	7.6	< 0.0050	< 1	< 0.0100
5/15/2017	< 0.0100	7.6	< 0.0050	< 1	< 0.0100
5/22/2017	< 0.0100	7.8	< 0.0050	< 1	< 0.0100
6/5/2017	< 0.0100	7.8	< 0.0050	1	< 0.0100
6/12/2017	< 0.0100	7.5	< 0.0050	< 1	< 0.0100
6/19/2017	< 0.0100	7.6	< 0.0050	< 1	< 0.0100
6/26/2017	< 0.0100	7.5	< 0.0050	< 1	< 0.0100
7/3/2017	NF	NF	NF	NF	NF
7/10/2017	< 0.0100	7.6	< 0.0050	< 1	< 0.0100
7/17/2017	< 0.0100	7.5	< 0.0050	< 1	< 0.0100
7/24/2017	NF	NF	NF	NF	NF
8/1/2017	< 0.0100	7.5	< 0.0050	< 1	< 0.0100
8/8/2017	< 0.0100	7.4	< 0.0050	1	< 0.0100
8/15/2017	< 0.0100	7.6	< 0.0050	< 1	< 0.0100

Table 5 National Pollutant Discharge Elimination System Industrial Wastewater Chemical Monitoring Data (continued)

Outfall: H-16 (continued)

Collection Date	Nickel (mg/L)	pH	Silver (mg/L)	Total Suspended Solids (mg/L)	Zinc (mg/L)
8/29/2017	NF	NF	NF	NF	NF
9/5/2017	NF	NF	NF	NF	NF
9/13/2017	< 0.0100	7.7	< 0.0050	< 1	< 0.0100
9/18/2017	< 0.0100	7.3	< 0.0050	< 1	< 0.0100
9/25/2017	< 0.0100	7.8	< 0.0050	1	< 0.0100
10/2/2017	< 0.0100	7.9	< 0.0050	< 1	< 0.0100
10/9/2017	< 0.0100	7.8	< 0.0050	< 1	< 0.0100
10/16/2017	NF	NF	NF	NF	NF
10/30/2017	NF	NF	NF	NF	NF
11/6/2017	NF	NF	NF	NF	NF
11/13/2017	NF	NF	NF	NF	NF
11/20/2017	NF	NF	NF	NF	NF
11/28/2017	< 0.0100	7.4	< 0.0050	< 1	< 0.0100
12/4/2017	< 0.0100	7.6	< 0.0050	< 1	< 0.0100
12/11/2017	< 0.0100	7.7	< 0.0050	< 1	< 0.0100
12/18/2017	NF	NF	NF	NF	NF
12/27/2017	NF	NF	NF	NF	NF

Outfall: K-12

Collection Date	Biochemical Oxygen Demand (mg/L)	Total Suspended Solids (mg/L)
1/10/2017	< 2.00	1.3
2/7/2017	2.11	1.2
3/7/2017	2.00	2.4
4/4/2017	2.84	< 1.0
5/2/2017	< 2.00	4.8
6/6/2017	< 2.00	< 1.0
7/4/2017	< 2.00	1.0
8/2/2017	< 2.00	1.3
9/6/2017	< 2.00	< 1.0
10/10/2017	< 2.00	2.6
11/7/2017	2.15	< 1.0
12/5/2017	< 2.00	< 1.0

Collection Date	Dissolved Oxygen (mg/L)	pH
1/12/2017	6.09	7.8
2/21/2017	5.52	7.9
3/15/2017	5.49	7.7
4/13/2017	4.37	7.6
5/15/2017	5.73	7.9
6/8/2017	4.20	7.7
7/11/2017	3.06	7.4
8/14/2017	4.95	7.4
9/27/2017	3.89	7.7
10/24/2017	4.14	7.5
11/28/2017	5.38	7.2
12/19/2017	8.06	7.5

Table 5 National Pollutant Discharge Elimination System Industrial Wastewater Chemical Monitoring Data (continued)

Outfall: K-12 (continued)

Collection Date	Fecal Coliform (Col/100mL)
1/9/2017	< 2
2/15/2017	33
3/6/2017	39
4/3/2017	79
5/1/2017	< 2
6/5/2017	< 2
7/3/2017	17
8/1/2017	< 2
9/5/2017	70
10/9/2017	240
10/17/2017	5
11/14/2017	< 2
12/5/2017	< 2

Outfall: K-18

Collection Date	pH	Total Suspended Solids (mg/L)
3/9/2017	7.0	2.0
5/17/2017	7.4	1.0
8/1/2017	6.6	2.0
10/31/2017	7.1	2.0

Outfall: L-07

Collection Date	pH	Total Suspended Solids (mg/L)
3/9/2017	7.0	3.0
5/17/2017	7.0	1.0
8/1/2017	6.8	2.0
10/31/2017	7.1	1.0

Table 5 National Pollutant Discharge Elimination System Industrial Wastewater Chemical Monitoring Data (continued)

Outfall: L-7A

Collection Date	Biochemical Oxygen Demand (mg/L)
1/10/2017	2.0
2/7/2017	< 2.0
3/7/2017	5.6
4/4/2017	2.9
5/2/2017	6.7
6/6/2017	< 2.0
7/4/2017	< 2.0
8/2/2017	< 2.0
9/6/2017	< 2.0
10/10/2017	< 2.0
11/7/2017	< 2.0
12/5/2017	< 2.0

Collection Date	Dissolved Oxygen (mg/L)	pH
1/12/2017	6.50	7.9
2/21/2017	6.47	7.9
3/15/2017	6.77	7.5
4/13/2017	7.51	7.8
5/15/2017	4.76	7.2
6/8/2017	6.85	7.1
7/11/2017	6.34	7.4
8/14/2017	5.39	7.3
9/27/2017	6.99	7.7
10/24/2017	7.23	7.5
11/28/2017	8.94	7.8
12/19/2017	4.78	7.1

Table 5 National Pollutant Discharge Elimination System Industrial Wastewater Chemical Monitoring Data (continued)

Outfall: L-7A

Collection Date	Fecal Coliform (Col/100mL)
1/9/2017	< 2
2/15/2017	< 2
3/6/2017	< 2
4/3/2017	< 2
5/1/2017	< 2
6/5/2017	13
7/3/2017	< 2
8/1/2017	< 2
9/5/2017	< 2
10/9/2017	1600
10/17/2017	< 2
11/14/2017	< 2
12/5/2017	< 2

Collection Date	Total Suspended Solids (mg/L)
1/10/2017	2.6
2/7/2017	4.4
3/7/2017	7.3
4/4/2017	3.9
5/2/2017	7.7
6/6/2017	3.7
7/4/2017	5.7
8/2/2017	4.6
9/6/2017	7.8
10/10/2017	4.3
11/7/2017	4.8
12/7/2017	6.5

Table 5 National Pollutant Discharge Elimination System Industrial Wastewater Chemical Monitoring Data (continued)

Outfall: M-05

Collection Date	Tetrachloroethylene (µg/L)	Trichloroethylene (µg/L)
1/18/2017	< 2	< 2
2/7/2017	< 2	< 2
3/20/2017	< 2	< 2
4/24/2017	< 2	< 2
5/9/2017	< 2	< 2
6/6/2017	< 2	< 2
7/10/2017	< 2	< 2
8/2/2017	< 2	< 2
9/6/2017	< 2	< 2
10/18/2017	< 2	< 2
11/8/2017	< 2	< 2
12/6/2017	< 2	< 2

National Pollutant Discharge Elimination System (NPDES) Industrial Stormwater Monitoring

Sampling is performed to collect benchmark samples, impaired water samples, and effluent samples. Also visual inspections are performed as part of the industrial stormwater monitoring efforts. The results of the sampling and inspections are presented in Tables 6 and 7. In 2017 no effluent sampling from industrial stormwater locations were collected. Effective January 1, 2017 impaired water sampling was discontinued. SRS processes do not contribute and are not expected to contribute to the E. coli impaired streams on site.

Table 6 NPDES Industrial Stormwater Benchmark Monitoring Data

Outfalls G-10A and Z-01 are no discharge outfalls from basins. In the unlikely event of a discharge, sampling is performed. In 2017 there were no discharges from either G-10A or Z-01 outfalls.

The locations are grouped based on a designation of being substantially identical. The individual tables below are based on those groupings.

Boxes shaded in black were not sampled.

Outfalls: E-01 and E-02

Analyte	Benchmark Value	Outfall Sampled	E-02	E-02	E-02	E-02	Average
		Quarter	1Q17	1Q17	2Q17	3Q17	
		Sample Date	1/1/17	2/15/17	6/21/17	12/21/17	
		Units	Result	Result	Result	Result	
Ammonia	2.14	mg/L		0	0	0	0
Chemical Oxygen Demand (COD)	120	mg/L		23	20	25	23
Cyanide	0.022	mg/L		0.014	0	0	0.005
Silver (Ag)	0.0007	mg/L	0		0	0	0
Arsenic (As)	0.15	mg/L	0		0.01	0	0.002
Cadmium (Cd)	0.0005	mg/L	0		0.0009	0	0.0003
Mercury (Hg)	0.0014	mg/L		0	0.0001	0	0.00003
Lead (Pb)	0.014	mg/L	0.0001		0.0001	0.0003	0.0001
Selenium (Se)	0.005	mg/L	0		0	0	0
Total Suspended Solids (TSS)	100	mg/L		7	4	6	6

Table 6 NPDES Industrial Stormwater Benchmark Monitoring Data (continued)

Outfalls: E-03 and E-04

Analyte	Benchmark Value	Outfall Sampled	E-04	E-04	E-04	E-04	Average
		Quarter	1Q17	2Q17	3Q17	4Q17	
		Sample Date	2/15/17	5/23/17	12/7/17	12/21/17	
		Units	Result	Result	Result	Result	
Ammonia	2.14	mg/L	0	0	0	0	0
COD	120	mg/L	15	16	0	0	8
Cyanide	0.022	mg/L	0	0	0	0	0
Ag	0.0007	mg/L	0	0	0	0	0
As	0.15	mg/L	0	0	0	0	0
Cd	0.0005	mg/L	0	0.0003	0.0003	0	0.0001
Hg	0.0014	mg/L	0	0	0.0001	0	0.00003
Pb	0.014	mg/L	0.0001	0.001	0.001	0.001	0.001
Se	0.005	mg/L	0	0	0	0	0
TSS	100	mg/L	81	24	18	69	48

Outfall: G-21

Analyte	Benchmark Value	Quarter	1Q17	2Q17	3Q17	4Q17	Average
		Sample Date	2/15/17	6/21/17	Not Sampled	Not Sampled	
		Units	Result	Result	Result	Result	
TSS	100	mg/L	79	60	Major repair at basin, no sampling	Major repair at basin, no sampling	70

Table 6 NPDES Industrial Stormwater Benchmark Monitoring Data (continued)

Outfall: H-04B

Analyte	Benchmark Value	Quarter	1Q17	2Q17	3Q17	4Q17	Average
		Sample Date	2/15/17	6/21/17	11/9/17	12/21/17	
		Units	Result	Result	Result	Result	
Ammonia	2.14	mg/L	0	0	0	0	0
COD	120	mg/L	14	19	18	16	17
Cyanide	0.022	mg/L	0	0	0	0	0
Ag	0.0007	mg/L	0	0	0	0	0
As	0.15	mg/L	0	0.01	0	0	0.001
Cd	0.0005	mg/L	0	0.0006	0.0003	0.0003	0.0003
Hg	0.0014	mg/L	0	0.0001	0	0	0.00003
Pb	0.014	mg/L	0.0001	0.018	0.005	0.009	0.008
Se	0.005	mg/L	0	0	0	0	0
TSS	100	mg/L	12	5	2	52	18

Outfalls: H-05, H-06, and H-07C

Analyte	Benchmark Value	Outfall Sampled	H-05	H-05	H-05	Average
		Quarter	1Q17	2Q17	3Q17	
		Sample Date	2/9/17	11/9/17	12/20/17	
		Units	Result	Result	Result	
Ammonia	2.14	mg/L	0	0	0	0
COD	120	mg/L	24	29	24	26
Cyanide	0.022	mg/L	0	0	0	0
Ag	0.0007	mg/L	0	0	0	0
As	0.15	mg/L	0	0	0	0
Cd	0.0005	mg/L	0	0.0003	0.0003	0.0002
Hg	0.0014	mg/L	0	0	0	0
Pb	0.014	mg/L	0.0001	0.003	0.002	0.002
Se	0.005	mg/L	0	0	0	0
TSS	100	mg/L	13	86	17	39

Table 6 NPDES Industrial Stormwater Benchmark Monitoring Data (continued)

Outfalls: H-06A, H-07A, and H-08

Analyte	Benchmark Value	Outfall Sampled	H-07A	H-07A	H-07A	Average
		Quarter	1Q17	2Q17	3Q17	
		Sample Date	2/9/17	11/9/17	12/20/17	
		Units	Result	Result	Result	
Ammonia	2.14	mg/L	0	0	0	0
COD	120	mg/L	11	18	17	15
Cyanide	0.022	mg/L	0	0	0	0
Ag	0.0007	mg/L	0	0	0	0
As	0.15	mg/L	0	0	0	0
Cd	0.0005	mg/L	0.0003	0.0003	0.0003	0.0003
Hg	0.0014	mg/L	0	0	0	0
Pb	0.014	mg/L	0.0005	0.001	0.004	0.002
Se	0.005	mg/L	0.003	0	0	0.001
TSS	100	mg/L	4	6	20	10

Outfall: N-02

Outfall N-02 was designated as visual only effective 3/21/2017. This outfall was sampled during the first quarter only.

Analyte	Benchmark Value	Quarter	1Q17	1Q17	Average
		Sample Date	1/1/17	2/15/17	
		Units	Result	Result	
Nitrate-Nitrite as N	0.68	mg/L		0.23	0.23
Zn	0.04	mg/L	0.02		0.02

Table 6 NPDES Industrial Stormwater Benchmark Monitoring Data (continued)

Outfalls: H-02A, N-06 and N-12

Outfall N-12 was designated as visual only effective 3/21/2017. This outfall was sampled during the first quarter only. Oyster shells were installed the first week of September 2017 as a treatment to reduce copper in the stream.

Analyte	Benchmark Value	Outfall Sampled	N-12	N-06	N-06	N-06	N-06	Average
		Quarter	1Q17	2Q17	3Q17	3Q17	4Q17	
		Sample Date	2/15/17	5/22/17	12/8/17	12/21/17	12/21/17	
		Units	Result	Result	Result	Result	Result	
Nitrate-Nitrite as N	0.68	mg/L	0.43	0.36		0.36		0.38
Zn	0.04	mg/L	0.08	0.10	0.07		0.03	0.07

Outfall: N-12A

Oyster shells were installed the middle of August 2017 as a treatment to reduce copper in the stream.

Analyte	Benchmark Value	Quarter	1Q17	1Q17	2Q17	3Q17	4Q17	Average
		Sample Date	1/1/17	2/15/17	5/22/17	8/8/17	12/20/17	
		Units	Result	Result	Result	Result	Result	
COD	120	mg/L		20	33	37	24	29
Cu	0.0038	mg/L	0.003		0.003	0.003	0.0093	0.0046
Pb	0.014	mg/L	0.0001		0.001	0.0004	0.001	0.0004
Zn	0.04	mg/L	0.01		0.02	0.02	0.02	0.02
TSS	100	mg/L		16	9	6	10	10

Table 7 NPDES Industrial Stormwater Visual Monitoring Data

Outfalls with identical effluents are grouped together. One outfall in each group is designated each January to represent the group and is sampled quarterly each year. All others are sampled individually. A color change as one moves vertically down the chart indicates a different identical grouping of effluents (i.e. A-08(L-13) and L-13 are one group. A-14 is another group, followed by a third group made up of B-10.)

Outfall	1Q 2017	2Q 2017	3Q2017	4Q2017
A-08 (L-13)	1/21/2017	4/3/2017	8/5/2017	10/8/2017
L-13	N/A	N/A	N/A	N/A
A-14	1/21/2017	4/3/2017	8/5/2017	10/8/2017
B-10	1/21/2017	4/3/2017	8/5/2017	10/8/2017
E-01	N/A	N/A	N/A	N/A
E-02	1/21/2017	4/23/2017	7/11/2017	12/8/2017
E-03	N/A	N/A	N/A	N/A
E-04	2/7/2017	4/3/2017	8/30/2017	10/23/2017
G-10A ¹	No discharge	No discharge	No discharge	No discharge
G-21	1/21/2017	4/24/2017	8/5/2017	Sampling could not occur due to major repair at the associated basin
H-04B	1/6/2017	4/23/2017	7/10/2017	11/9/2017
H-05	2/15/2017	4/24/2017	7/9/2017	11/9/2017
H-06	N/A	N/A	N/A	N/A
H-07C	N/A	N/A	N/A	N/A
H-06A	N/A	N/A	N/A	N/A
H-07A	1/21/2017	4/3/2017	7/16/2017	11/9/2017
H-08	N/A	N/A	N/A	N/A
H-07B ¹	No discharge	No discharge	No discharge	No discharge
K-02	1/2/2017	4/3/2017	7/10/2017	12/8/2017
F-10	N/A	N/A	N/A	N/A
N-05	N/A	N/A	N/A	N/A
N-14	N/A	N/A	N/A	N/A
N-15	N/A	N/A	N/A	N/A
N-16	1/1/2017	4/3/2017	7/11/2017	12/8/2017
H-02A	N/A	N/A	N/A	N/A
N-06	N/A	4/3/2017	7/10/2017	12/8/2017
N-12 ²	1/1/2017	N/A	N/A	N/A
N-12A	1/1/2017	4/3/2017	7/9/2017	11/9/2017
N-13A	1/21/2017	4/3/2017	7/16/2017	10/23/2017
N-02 ²	1/1/2017	N/A	N/A	N/A
Y-01	1/21/2017	4/24/2017	8/5/2017	10/8/2017
Y-03	N/A	N/A	N/A	N/A
Y-04	N/A	N/A	N/A	N/A
Z-01 ¹	No discharge	No discharge	No discharge	No discharge

Notes:

¹ Outfalls G-10A, H-07B and Z-01 are no discharge outfalls from basins. In the unlikely event of a discharge, sampling is performed.

² Outfalls N-02 and N-12 were reclassified and regrouped effective March 21, 2017. These are grouped with Y-01, Y-03, and Y-04.

River and Stream Water Quality Surveillance

SRS samples 10 SRS stream and five Savannah River locations for various physical and chemical properties to identify any degradation that could be attributed to the water discharges regulated by Site NPDES permits and materials that may be released inadvertently from sources other than routine release points. Table 9 presents the analyzed surface water inorganic parameters. Samples are also collected for pesticides, herbicides, and PCBs at all locations four times per year (once per quarter). The list of analytes is the following: aldrin, alpha-BHC, beta-BHC, delta-BHC, and gamma-BHC (Lindane), chlordane, Aroclor 1016, Aroclor 1221, Aroclor 1232, Aroclor 1242, Aroclor 1248, Aroclor 1254, Aroclor 1260, 4,4'-DDD, 4,4'-DDE, 4,4'-DDT, dieldrin, endosulfan I, endosulfan II, endosulfan sulfate, endrin, endrin aldehyde, heptachlor, heptachlor epoxide, toxaphene, 2,4-D, and 2,4,5-TP (Silvex). All pesticide, herbicide, and PCB analytical results at all locations for calendar year 2017 were below the detection limits. Thus, no table is provided for the pesticides, herbicides, and PCBs.

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Table 8 SRS Stream and Savannah River Surface Water Inorganic Results

Location: FMC-2B

Parameter	Unit	1/2017	2/2017	3/2017	4/2017	5/2017	6/2017	7/2017	8/2017	9/2017	10/2017	11/2017	12/2017
Dissolved Oxygen	mg/L	10.98	8.71	9.34	6.98	5.85	4.86	5.80	4.60	5.74	3.95	10.50	9.90
pH	SU	7.50	6.98	6.78	6.51	7.93	6.80	7.54	6.79	7.31	6.27	6.78	7.37
Temperature	°C	8.6	10.4	9.6	15.2	16.4	23.0	23.3	24.3	20.5	23.0	10.6	5.6
Aluminum	µg/L	44.5	< 40.0	< 40.0	< 40.0	130.0	177.0	224.0	123.0	102.0	< 40.0	133.0	164.0
Beryllium	µg/L	0.114	< 0.100	0.221	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100
Cadmium	µg/L	< 0.500	< 0.500	0.867	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	0.550	< 0.500	< 0.500
Chromium	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Copper	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	3.64	< 2.00	< 2.00	< 2.00	< 2.00
Hardness (total)	mg/L	10	< 2	14	< 2	10	28	12	20	14	24	12	12
Iron	µg/L	417	672	1,060	1,030	1,290	10,800	3,290	4,530	1,770	2,890	993	792
Lead	µg/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Manganese	µg/L	13.8	21.4	37.2	33.0	65.7	1,160.0	139.0	404.0	67.9	399.0	33.2	21.8
Mercury	µg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Nickel	µg/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Nitrate-Nitrogen	mg/L	0.1280	0.1140	0.0962	0.1040	0.2420	0.1830	0.0715	0.2480	0.1680	0.1730	0.2150	0.1360
Nitrite-Nitrogen	mg/L	0.0029	< 0.0027	0.0036	< 0.0027	0.0104	0.0033	< 0.0027	< 0.0027	0.0054	< 0.0027	0.0031	0.0033
Thallium	µg/L	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	15.3	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0
Total Organic Carbon	mg/L	4.6	5.2	5.3	6.4	5.7	11.0	9.3	7.8	6.8	8.1	4.5	5.0
Phosphorus	mg/L	0.076	0.014	0.031	0.094	0.077	0.140	0.089	0.098	0.047	0.033	0.067	0.330
Total Suspended Solids	mg/L	2	1	4	6	5	34	5	12	4	4	2	1
Zinc	µg/L	9.35	9.33	14.10	13.80	14.50	8.09	8.70	36.10	11.20	2.31	6.68	9.50

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Table 8 SRS Stream and Savannah River Surface Water Inorganic Results (continued)

Location: FMC-6

Parameter	Unit	1/2017	2/2017	3/2017	4/2017	5/2017	6/2017	7/2017	8/2017	9/2017	10/2017	11/2017	12/2017
Dissolved Oxygen	mg/L	11.78	9.96	10.55	8.74	7.84	7.32	7.40	7.62	8.07	7.08	9.61	10.70
pH	SU	7.12	7.12	6.27	6.82	8.11	7.23	7.64	7.50	6.83	6.70	7.68	7.79
Temperature	°C	6.4	13.7	10.2	17.7	18.3	23.2	24.5	25.6	22.7	25.3	12.9	9.0
Aluminum	µg/L	117.0	< 40.0	< 40.0	57.4	110.0	133.0	340.0	156.0	141.0	61.5	153.0	81.7
Beryllium	µg/L	1.790	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	0.243	< 0.100	< 0.100	< 0.100	0.100
Cadmium	µg/L	6.050	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	0.500
Chromium	µg/L	4.37	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	2.00
Copper	µg/L	2.82	< 2.00	< 2.00	< 2.00	< 2.00	2.01	2.16	< 2.00	< 2.00	< 2.00	< 2.00	2.00
Hardness (total)	mg/L	11	11	< 2	< 2	10	10	12	12	12	12	14	12
Iron	µg/L	807	1,030	1,080	1,300	1,000	879	1,990	1,080	847	823	772	662
Lead	µg/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	10.0
Manganese	µg/L	41.2	40.9	45.6	52.6	40.0	43.5	165.0	37.0	38.2	42.2	39.9	34.7
Mercury	µg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	0.0200
Nickel	µg/L	5.17	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	3.00
Nitrate-Nitrogen	mg/L	0.5730	0.6090	0.7260	0.5880	0.7790	0.6340	0.3760	0.6180	0.6240	0.8100	0.7920	0.9100
Nitrite-Nitrogen	mg/L	0.0036	< 0.0027	0.0031	< 0.0027	0.0098	0.0052	0.0050	0.0034	0.0045	< 0.0027	0.0040	0.0061
Thallium	µg/L	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	15.0
Total Organic Carbon	mg/L	4.4	4.6	4.4	5.1	4.2	4.5	9.2	4.8	4.7	6.5	3.5	3.8
Phosphorus	mg/L	0.110	0.110	0.088	0.170	0.210	0.170	0.170	0.120	0.120	0.110	0.120	0.089
Total Suspended Solids	mg/L	5	3	4	8	5	6	35	6	2	7	6	1
Zinc	µg/L	13.80	5.18	5.84	9.87	9.78	8.80	11.50	14.00	16.90	8.72	9.63	7.16

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Table 8 SRS Stream and Savannah River Surface Water Inorganic Results (continued)

Location: FMC-2

Parameter	Unit	1/2017	2/2017	3/2017	4/2017	5/2017	6/2017	7/2017	8/2017	9/2017	10/2017	11/2017	12/2017
Dissolved Oxygen	mg/L	8.82	7.65	7.93	5.21	3.01	2.86	2.90	1.56	2.68	1.49	7.39	8.51
pH	SU	7.58	6.32	7.16	5.74	8.26	6.80	7.37	6.68	7.20	5.93	7.29	7.68
Temperature	°C	15.6	11.7	9.6	15.8	17.3	24.0	24.1	25.8	22.2	24.8	12.3	8.7
Aluminum	µg/L	102.0	< 40.0	< 40.0	142.0	170.0	129.0	168.0	179.0	174.0	< 40.0	188.0	198.0
Beryllium	µg/L	0.108	< 0.100	1.620	< 0.100	1.060	< 0.100	1.320	4.620	< 0.100	< 0.100	< 0.100	< 0.100
Cadmium	µg/L	< 0.500	< 0.500	5.790	< 0.500	3.690	< 0.500	4.760	14.900	< 0.500	< 0.500	< 0.500	< 0.500
Chromium	µg/L	< 2.00	< 2.00	3.52	< 2.00	< 2.00	< 2.00	< 2.00	7.52	< 2.00	< 2.00	< 2.00	< 2.00
Copper	µg/L	6.42	< 2.00	< 2.00	< 2.00	< 2.00	2.90	< 2.00	7.91	< 2.00	< 2.00	14.70	2.86
Hardness (total)	mg/L	< 2	< 2	< 2	< 2	10	20	12	12	10	< 2	12	< 2
Iron	µg/L	542	964	1,840	3,010	4,620	12,400	6,240	5,670	2,090	6,020	765	766
Lead	µg/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Manganese	µg/L	21.0	45.6	54.0	118.0	249.0	662.0	341.0	266.0	196.0	430.0	39.4	21.0
Mercury	µg/L	0.0211	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	0.0430	< 0.0200	0.0366	< 0.0200
Nickel	µg/L	< 3.00	< 3.00	4.53	< 3.00	3.14	< 3.00	< 3.00	15.20	< 3.00	< 3.00	< 3.00	< 3.00
Nitrate-Nitrogen	mg/L	0.6650	0.0167	< 0.0083	< 0.0083	0.0592	0.0500	0.0350	0.1260	0.1840	0.0166	0.8350	0.2710
Nitrite-Nitrogen	mg/L	0.0064	< 0.0027	0.0030	< 0.0027	0.0090	< 0.0027	0.0030	0.0032	0.0030	< 0.0027	0.0075	0.0067
Thallium	µg/L	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0
Total Organic Carbon	mg/L	4.9	5.7	5.8	9.0	11.0	15.0	10.0	8.6	8.4	10.0	5.4	4.8
Phosphorus	mg/L	0.099	0.012	0.018	0.090	0.150	0.130	0.130	0.036	0.080	0.080	0.120	0.110
Total Suspended Solids	mg/L	2	4	5	12	16	49	30	20	7	17	4	3
Zinc	µg/L	27.60	3.79	10.10	6.72	15.20	12.20	15.20	39.10	17.60	3.40	32.60	27.60

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Table 8 SRS Stream and Savannah River Surface Water Inorganic Results (continued)

Location: L3R-2

Parameter	Unit	1/2017	2/2017	3/2017	4/2017	5/2017	6/2017	7/2017	8/2017	9/2017	10/2017	11/2017	12/2017
Dissolved Oxygen	mg/L	10.94	9.85	9.95	8.55	7.34	6.88	7.50	7.29	7.66	6.72	8.86	9.94
pH	SU	7.27	6.87	6.55	6.95	7.95	7.10	7.50	7.33	6.69	6.79	7.39	7.62
Temperature	°C	8.3	13.2	11.4	21.8	20.1	24.2	24.0	28.3	24.8	25.0	13.3	11.0
Aluminum	µg/L	< 40.0	< 40.0	< 40.0	53.1	153.0	141.0	233.0	167.0	53.2	< 40.0	47.9	86.5
Beryllium	µg/L	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	0.201	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100
Cadmium	µg/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	0.591	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
Chromium	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Copper	µg/L	3.12	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Hardness (total)	mg/L	25	25	27	27	32	34	24	34	36	44	46	34
Iron	µg/L	324	473	613	511	598	511	662	530	367	446	334	272
Lead	µg/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Manganese	µg/L	38.7	57.3	98.0	75.1	75.3	55.0	76.7	53.3	38.5	50.7	39.7	25.9
Mercury	µg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	0.0343	< 0.0200	< 0.0200	< 0.0200
Nickel	µg/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Nitrate-Nitrogen	mg/L	0.0680	0.0235	0.0412	0.0484	0.1990	0.1290	0.1820	0.5300	0.1150	0.1070	0.0481	0.0826
Nitrite-Nitrogen	mg/L	0.0034	< 0.0027	< 0.0027	< 0.0027	0.0086	0.0027	0.0030	< 0.0027	0.0073	< 0.0027	< 0.0027	0.0033
Thallium	µg/L	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0
Total Organic Carbon	mg/L	4.4	4.1	6.3	4.6	3.9	4.0	8.8	3.4	3.6	4.4	3.5	4.7
Phosphorus	mg/L	0.120	0.034	0.030	0.120	0.210	0.230	0.043	0.100	0.065	0.086	0.042	0.021
Total Suspended Solids	mg/L	1	2	5	8	12	10	22	8	3	7	1	3
Zinc	µg/L	4.36	3.52	5.92	18.90	14.30	4.69	9.53	24.30	15.60	5.15	3.49	6.93

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Table 8 SRS Stream and Savannah River Surface Water Inorganic Results (continued)

Location: PB-3

Parameter	Unit	1/2017	2/2017	3/2017	4/2017	5/2017	6/2017	7/2017	8/2017	9/2017	10/2017	11/2017	12/2017
Dissolved Oxygen	mg/L	11.75	10.31	10.83	9.22	8.14	7.33	7.52	7.96	8.33	7.32	9.67	10.32
pH	SU	7.45	6.93	6.99	6.73	8.18	7.10	7.53	7.10	7.24	6.72	7.60	7.22
Temperature	°C	7.2	12.4	10.3	19.1	18.6	23.0	23.3	25.1	23.3	25.0	13.1	9.3
Aluminum	µg/L	183.0	139.0	248.0	117.0	180.0	187.0	799.0	667.0	73.2	< 40.0	120.0	166.0
Beryllium	µg/L	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	0.129	0.137	< 0.100	< 0.100	< 0.100	< 0.100
Cadmium	µg/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	0.621
Chromium	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Copper	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Hardness (total)	mg/L	10	21	16	19	26	24	16	24	26	26	26	22
Iron	µg/L	592	868	1,110	1,020	898	842	2,650	1,520	582	722	644	537
Lead	µg/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Manganese	µg/L	56.7	51.0	87.6	56.3	41.9	41.4	198.0	115.0	36.3	35.6	26.8	42.7
Mercury	µg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Nickel	µg/L	< 3.00	< 3.00	< 3.00	< 3.00	3.57	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Nitrate-Nitrogen	mg/L	0.1350	0.1010	0.0795	0.1270	0.2290	0.1950	0.1790	0.2750	0.2560	0.1820	0.1490	0.1930
Nitrite-Nitrogen	mg/L	0.0036	< 0.0027	0.0044	0.0034	0.0088	< 0.0027	0.0037	0.0036	0.0038	< 0.0027	0.0033	0.0043
Thallium	µg/L	< 15.0	< 15.0	< 15.0	15.3	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0
Total Organic Carbon	mg/L	8.8	6.4	7.3	6.6	4.4	4.0	12.0	8.4	4.7	5.1	4.1	5.5
Phosphorus	mg/L	0.093	0.026	0.064	0.058	0.110	0.090	0.110	0.085	0.110	0.120	0.130	0.017
Total Suspended Solids	mg/L	3	5	13	9	6	8	67	25	3	8	5	3
Zinc	µg/L	3.06	4.55	4.24	5.14	15.20	4.89	10.80	15.60	6.09	4.15	9.53	7.54

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Table 8 SRS Stream and Savannah River Surface Water Inorganic Results (continued)

Location: SC-4

Parameter	Unit	1/2017	2/2017	3/2017	4/2017	5/2017	6/2017	7/2017	8/2017	9/2017	10/2017	11/2017	12/2017
Dissolved Oxygen	mg/L	10.85	9.87	10.27	8.67	7.65	6.89	7.60	7.60	8.03	7.04	9.15	9.50
pH	SU	7.44	7.01	6.57	6.88	7.90	7.00	7.60	6.22	6.90	6.67	7.59	7.61
Temperature	°C	11.6	14.3	10.7	21.3	21.2	24.1	24.0	28.5	24.9	25.5	14.0	13.1
Aluminum	µg/L	< 40.0	< 40.0	170.0	53.9	138.0	275.0	293.0	154.0	60.7	84.2	< 40.0	61.1
Beryllium	µg/L	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100
Cadmium	µg/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
Chromium	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Copper	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	2.12	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Hardness (total)	mg/L	12	18	14	19	20	20	16	20	22	22	24	20
Iron	µg/L	275	392	874	617	486	491	655	301	253	355	294	372
Lead	µg/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Manganese	µg/L	24.7	27.0	105.0	57.3	36.0	42.2	63.6	21.1	24.1	26.6	24.9	27.3
Mercury	µg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Nickel	µg/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Nitrate-Nitrogen	mg/L	0.0416	0.0330	0.0484	0.0759	0.2770	0.1360	0.1500	0.3570	0.1130	0.0912	0.0514	0.0492
Nitrite-Nitrogen	mg/L	0.0039	< 0.0027	0.0042	< 0.0027	0.0106	0.0027	0.0033	< 0.0027	0.0038	< 0.0027	< 0.0027	0.0029
Thallium	µg/L	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0
Total Organic Carbon	mg/L	4.2	3.8	6.7	5.0	4.1	4.5	9.0	4.3	3.8	5.6	3.7	3.6
Phosphorus	mg/L	0.043	0.016	0.092	0.090	0.097	0.028	0.090	0.028	0.050	0.081	0.062	0.067
Total Suspended Solids	mg/L	2	5	13	6	13	11	19	8	2	5	3	2
Zinc	µg/L	< 2.00	< 2.00	3.15	4.12	19.20	11.50	5.05	10.30	12.70	< 2.00	6.28	4.08

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Table 8 SRS Stream and Savannah River Surface Water Inorganic Results (continued)

Location: TB-5

Parameter	Unit	1/2017	2/2017	3/2017	4/2017	5/2017	6/2017	7/2017	8/2017	9/2017	10/2017	11/2017	12/2017
Dissolved Oxygen	mg/L	10.97	9.33	9.57	8.65	7.68	6.95	7.40	8.40	8.10	6.87	9.60	10.65
pH	SU	7.60	7.11	7.44	6.93	8.00	7.10	7.56	7.23	7.37	6.27	7.25	7.40
Temperature	°C	9.1	12.2	10.1	16.8	16.3	21.0	22.5	23.2	20.7	23.0	12.1	7.9
Aluminum	µg/L	91.7	< 40.0	528.0	52.1	118.0	111.0	279.0	229.0	138.0	150.0	76.7	376.0
Beryllium	µg/L	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100
Cadmium	µg/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
Chromium	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Copper	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	2.39	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Hardness (total)	mg/L	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	< 2	20	< 2	< 2
Iron	µg/L	1,190	1,790	2,010	2,210	2,360	3,610	2,930	3,750	3,110	2,930	2,000	1,850
Lead	µg/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Manganese	µg/L	65.0	60.2	54.7	64.9	68.8	117.0	121.0	124.0	83.2	79.2	87.4	91.4
Mercury	µg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Nickel	µg/L	< 3.00	< 3.00	< 3.00	3.57	3.20	5.11	< 3.00	7.77	< 3.00	4.77	< 3.00	< 3.00
Nitrate-Nitrogen	mg/L	0.1430	0.0595	0.0421	0.0539	0.1240	0.1020	0.0581	0.1540	0.1310	0.1420	0.0637	0.0933
Nitrite-Nitrogen	mg/L	0.0049	< 0.0027	0.0027	< 0.0027	0.0092	< 0.0027	< 0.0027	0.0029	0.0037	< 0.0027	< 0.0027	0.0028
Thallium	µg/L	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0
Total Organic Carbon	mg/L	4.0	4.7	4.7	5.5	5.3	4.9	8.0	8.0	6.3	6.7	3.3	3.8
Phosphorus	mg/L	0.100	0.066	0.071	0.120	0.190	0.120	0.068	0.180	0.110	0.180	0.063	0.095
Total Suspended Solids	mg/L	5	4	9	8	9	11	22	12	9	9	8	14
Zinc	µg/L	4.62	2.52	20.20	6.60	8.87	6.80	5.17	25.20	4.54	4.94	< 2.00	7.65

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Table 8 SRS Stream and Savannah River Surface Water Inorganic Results (continued)

Location: TC-1

Parameter	Unit	1/2017	2/2017	3/2017	4/2017	5/2017	6/2017	7/2017	8/2017	9/2017	10/2017	11/2017	12/2017
Dissolved Oxygen	mg/L	11.98	10.41	10.15	8.98	7.70	6.82	7.60	7.65	7.89	6.80	9.66	10.86
pH	SU	7.07	6.68	6.49	6.83	8.08	7.10	7.18	7.69	7.27	6.26	7.12	7.44
Temperature	°C	4.9	9.8	10.0	16.4	17.1	23.0	23.0	24.8	21.0	24.2	11.0	7.6
Aluminum	µg/L	< 40.0	< 40.0	521.0	< 40.0	101.0	135.0	256.0	234.0	101.0	259.0	< 40.0	111.0
Beryllium	µg/L	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100
Cadmium	µg/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
Chromium	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Copper	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Hardness (total)	mg/L	< 2	< 2	< 2	< 2	10	12	12	14	12	12	12	10
Iron	µg/L	259	392	434	431	508	838	982	778	419	476	224	229
Lead	µg/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Manganese	µg/L	7.9	15.9	21.3	20.8	16.2	44.6	52.6	31.7	15.0	20.5	11.7	8.1
Mercury	µg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Nickel	µg/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Nitrate-Nitrogen	mg/L	0.1060	0.0846	0.0667	0.0751	0.2040	0.2130	0.0947	0.1420	0.1090	0.1200	0.0599	0.0598
Nitrite-Nitrogen	mg/L	0.0049	< 0.0027	0.0030	< 0.0027	0.0106	< 0.0027	0.0037	0.0050	0.0045	< 0.0027	< 0.0027	0.0028
Thallium	µg/L	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0
Total Organic Carbon	mg/L	4.6	3.8	4.9	4.2	4.9	4.1	9.7	5.1	5.4	5.6	3.9	4.3
Phosphorus	mg/L	0.098	0.035	0.045	0.190	0.110	0.230	0.110	0.120	0.097	0.130	0.130	0.076
Total Suspended Solids	mg/L	2	5	8	8	7	15	14	10	2	8	3	1
Zinc	µg/L	2.37	6.33	3.79	3.51	3.39	10.30	7.62	13.10	12.50	3.28	2.96	6.12

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Table 8 SRS Stream and Savannah River Surface Water Inorganic Results (continued)

Location: U3R-1A (Jan. thru April) then **U3R-0** (May thru Dec.).

Relocated U3R-1A to U3R-0 due to planned bridgework which had the potential to impact results.

Parameter	Unit	1/2017	2/2017	3/2017	4/2017	5/2017	6/2017	7/2017	8/2017	9/2017	10/2017	11/2017	12/2017
Dissolved Oxygen	mg/L	10.26	9.48	9.45	8.50	7.70	7.23	7.90	7.97	8.20	7.23	9.04	10.86
pH	SU	7.14	6.77	7.41	6.10	8.00	7.23	7.71	7.11	7.30	6.35	7.26	7.84
Temperature	°C	9.3	11.6	11.7	16.4	17.1	19.0	21.3	22.8	21.4	22.2	13.7	12.2
Aluminum	µg/L	75.6	< 40.0	189.0	< 40.0	194.0	275.0	587.0	188.0	47.0	63.4	47.2	155.0
Beryllium	µg/L	0.173	< 0.100	< 0.100	< 0.100	0.118	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100
Cadmium	µg/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
Chromium	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Copper	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Hardness (total)	mg/L	< 2	< 2	< 2	< 2	< 2	< 2	12	< 2	< 2	< 2	< 2	< 2
Iron	µg/L	252	347	361	401	601	603	814	491	373	438	312	254
Lead	µg/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Manganese	µg/L	11.70	8.46	8.66	9.49	7.33	7.46	12.00	6.73	7.31	< 1.00	9.69	9.10
Mercury	µg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Nickel	µg/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Nitrate-Nitrogen	mg/L	0.3240	0.3090	0.3110	0.3010	0.4790	0.3950	0.3880	0.5200	0.4270	0.4530	0.4050	0.4730
Nitrite-Nitrogen	mg/L	0.0058	< 0.0027	< 0.0027	< 0.0027	0.0111	< 0.0027	0.0030	0.0035	0.0040	< 0.0027	< 0.0027	0.0028
Thallium	µg/L	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0
Total Organic Carbon	mg/L	2.8	2.0	2.5	2.2	2.5	2.5	5.6	2.3	2.0	3.1	1.9	2.0
Phosphorus	mg/L	0.049	0.015	0.021	0.060	0.031	0.022	0.091	0.100	0.082	0.095	0.063	< 0.005
Total Suspended Solids	mg/L	1	2	5	4	15	20	18	9	3	6	3	1
Zinc	µg/L	2.56	< 2.00	4.59	4.00	4.74	20.50	6.55	18.70	5.80	28.90	5.30	6.45

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Table 8 SRS Stream and Savannah River Surface Water Inorganic Results (continued)

Location: U3R-4

Parameter	Unit	1/2017	2/2017	3/2017	4/2017	5/2017	6/2017	7/2017	8/2017	9/2017	10/2017	11/2017	12/2017
Dissolved Oxygen	mg/L	11.50	9.56	10.10	8.74	7.76	7.30	7.27	7.61	8.10	6.92	9.16	10.37
pH	SU	7.80	6.97	7.01	6.88	7.96	7.00	7.41	7.38	6.94	6.73	7.78	7.73
Temperature	°C	7.4	13.1	10.3	17.8	18.7	23.0	23.1	24.5	22.3	25.8	14.1	8.8
Aluminum	µg/L	168.0	44.9	220.0	95.0	190.0	248.0	679.0	329.0	180.0	535.0	329.0	273.0
Beryllium	µg/L	0.112	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	0.128	< 0.100	< 0.100	< 0.100	< 0.100	0.118
Cadmium	µg/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
Chromium	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Copper	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Hardness (total)	mg/L	< 2	< 2	< 2	< 2	< 2	< 2	10	10	< 2	< 2	< 2	10
Iron	µg/L	398	617	832	654	595	586	981	810	553	596	613	389
Lead	µg/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Manganese	µg/L	28.0	17.9	33.6	21.6	16.0	18.2	52.8	22.2	17.6	16.0	27.6	43.7
Mercury	µg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Nickel	µg/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Nitrate-Nitrogen	mg/L	0.1470	0.1460	0.1590	0.1540	0.2420	0.2150	0.1880	0.6260	0.2180	0.1410	0.1860	0.1730
Nitrite-Nitrogen	mg/L	0.0064	< 0.0027	0.0041	< 0.0027	0.0097	< 0.0027	0.0041	0.0053	0.0043	< 0.0027	0.0035	0.0050
Thallium	µg/L	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0
Total Organic Carbon	mg/L	6.8	4.6	4.4	3.7	3.8	2.8	11.0	5.8	4.0	6.1	4.1	7.8
Phosphorus	mg/L	0.052	0.025	0.080	0.082	0.130	0.130	0.150	0.100	0.100	0.100	0.052	0.022
Total Suspended Solids	mg/L	2	2	14	6	7	15	25	9	7	8	13	2
Zinc	µg/L	6.00	3.56	5.93	5.62	9.72	6.86	13.00	16.80	13.10	10.30	10.80	10.50

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Table 8 SRS Stream and Savannah River Surface Water Inorganic Results (continued)

Location: RM-118.8

Parameter	Unit	1/2017	2/2017	3/2017	4/2017	5/2017	6/2017	7/2017	8/2017	9/2017	10/2017	11/2017	12/2017
Dissolved Oxygen	mg/L	10.66	9.37	9.52	8.85	8.38	7.31	7.49	6.96	6.22	7.22	7.75	9.11
pH	SU	6.69	6.42	6.55	7.38	6.80	7.02	7.65	7.62	7.23	6.70	7.40	7.00
Temperature	°C	8.7	14.2	13.2	16.9	20.0	26.5	28.0	27.4	26.1	26.0	16.0	10.3
Aluminum	µg/L	369.0	272.0	67.1	711.0	193.0	455.0	310.0	359.0	215.0	155.0	177.0	197.0
Beryllium	µg/L	< 0.100	1.160	< 0.100	0.781	< 0.100	0.113	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100
Cadmium	µg/L	< 0.500	4.330	< 0.500	2.860	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
Chromium	µg/L	< 2.00	3.18	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Copper	µg/L	2.26	< 2.00	< 2.00	3.38	3.05	< 2.00	< 2.00	< 2.00	< 2.00	2.44	< 2.00	< 2.00
Hardness (total)	mg/L	17	17	23	17	10	20	20	20	20	20	20	20
Iron	µg/L	983	875	579	1,510	621	586	567	607	744	467	481	667
Lead	µg/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Manganese	µg/L	136.0	79.4	77.2	185.0	72.4	77.2	89.9	70.0	73.3	80.7	88.6	73.3
Mercury	µg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Nickel	µg/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Nitrate-Nitrogen	mg/L	0.2520	0.2420	0.1990	0.2330	0.2600	0.2510	0.3150	0.2830	0.2770	0.7860	0.3470	0.3920
Nitrite-Nitrogen	mg/L	0.0043	0.0076	0.0083	0.0070	0.0139	0.0031	0.0054	0.0075	0.0070	0.0033	0.0095	0.0114
Thallium	µg/L	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0
Total Organic Carbon	mg/L	5.6	3.8	3.4	8.7	5.0	3.2	3.6	4.3	4.6	3.9	3.1	5.7
Phosphorus	mg/L	0.100	0.110	0.086	0.130	0.140	0.140	0.120	0.380	0.150	0.150	0.100	0.130
Total Suspended Solids	mg/L	13	6	11	25	11	16	17	11	8	12	7	7
Zinc	µg/L	7.28	8.28	3.83	10.60	15.90	5.82	18.80	3.31	7.81	10.80	3.93	6.36

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Table 8 SRS Stream and Savannah River Surface Water Inorganic Results (continued)

Location: RM-129.1

Parameter	Unit	1/2017	2/2017	3/2017	4/2017	5/2017	6/2017	7/2017	8/2017	9/2017	10/2017	11/2017	12/2017
Dissolved Oxygen	mg/L	11.60	9.36	9.74	8.87	8.47	7.41	7.34	7.03	6.24	7.42	7.70	not recorded
pH	SU	6.52	6.51	6.30	7.35	5.70	6.31	7.75	7.68	6.63	6.50	6.90	not recorded
Temperature	°C	4.2	13.4	13.2	15.2	19.0	26.1	28.0	27.2	23.7	26.0	13.0	not recorded
Aluminum	µg/L	98.1	259.0	217.0	736.0	605.0	365.0	221.0	365.0	258.0	134.0	54.2	144.0
Beryllium	µg/L	< 0.100	< 0.100	< 0.100	0.172	< 0.100	0.763	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100
Cadmium	µg/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	2.280	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500
Chromium	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Copper	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	3.48	< 2.00	< 2.00
Hardness (total)	mg/L	23	14	20	31	30	20	22	20	20	20	40	26
Iron	µg/L	793	986	845	1,430	976	510	525	621	698	430	451	454
Lead	µg/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Manganese	µg/L	22.5	66.7	99.6	163.0	84.1	72.4	80.1	70.6	103.0	72.1	26.4	13.7
Mercury	µg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Nickel	µg/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Nitrate-Nitrogen	mg/L	0.1030	0.1830	0.1710	0.1800	0.2650	0.2180	0.2610	0.2750	0.2430	0.7210	0.0871	0.0790
Nitrite-Nitrogen	mg/L	0.0030	0.0078	0.0082	0.0069	0.0136	0.0034	0.0054	0.0080	0.0073	< 0.0027	0.0036	0.0048
Thallium	µg/L	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0
Total Organic Carbon	mg/L	7.9	4.9	3.2	6.6	5.8	3.1	4.2	4.1	4.5	3.9	5.4	10.0
Phosphorus	mg/L	0.033	0.083	0.079	0.082	0.091	0.130	0.110	0.120	0.150	0.160	0.025	0.024
Total Suspended Solids	mg/L	3	10	9	34	21	13	15	8	12	9	1	2
Zinc	µg/L	8.49	2.96	6.33	7.91	6.34	9.87	7.95	< 2.00	5.76	4.03	4.30	3.92

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Table 8 SRS Stream and Savannah River Surface Water Inorganic Results (continued)

Location: RM-141.5

Parameter	Unit	1/2017	2/2017	3/2017	4/2017	5/2017	6/2017	7/2017	8/2017	9/2017	10/2017	11/2017	12/2017
Dissolved Oxygen	mg/L	11.11	9.46	9.57	8.85	8.60	7.20	7.28	6.89	6.25	7.17	7.73	9.17
pH	SU	6.65	6.41	6.28	7.15	6.10	6.94	7.88	7.74	6.54	6.90	6.90	6.30
Temperature	°C	8.2	13.5	13.1	16.5	19.0	26.3	27.3	26.6	25.4	25.0	15.3	10.4
Aluminum	µg/L	353.0	110.0	< 40.0	540.0	158.0	221.0	138.0	319.0	206.0	120.0	101.0	163.0
Beryllium	µg/L	< 0.100	< 0.100	< 0.100	1.230	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	0.488	< 0.100	< 0.100
Cadmium	µg/L	< 0.500	< 0.500	< 0.500	4.230	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	1.970	< 0.500	< 0.500
Chromium	µg/L	< 2.00	< 2.00	< 2.00	2.19	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Copper	µg/L	< 2.00	< 2.00	< 2.00	3.23	2.52	< 2.00	< 2.00	2.13	< 2.00	2.97	< 2.00	< 2.00
Hardness (total)	mg/L	< 2	19	21	17	16	14	20	18	20	18	22	20
Iron	µg/L	971	689	494	1,360	564	415	435	671	794	421	316	612
Lead	µg/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Manganese	µg/L	117.0	60.6	60.6	161.0	71.4	62.3	67.7	69.0	110.0	69.4	67.4	61.4
Mercury	µg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Nickel	µg/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Nitrate-Nitrogen	mg/L	0.3550	1.1100	0.1790	0.2260	0.2560	0.2440	0.2510	0.2700	0.2350	0.1850	0.2730	0.3530
Nitrite-Nitrogen	mg/L	0.0046	0.0075	0.0088	0.0097	0.0132	0.0044	0.0061	0.0103	0.0071	0.0052	0.0081	0.0126
Thallium	µg/L	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0
Total Organic Carbon	mg/L	6.4	3.8	3.5	7.5	4.2	3.3	3.2	4.4	4.6	4.7	3.2	5.0
Phosphorus	mg/L	0.110	0.110	0.074	0.140	0.087	0.140	0.120	0.140	0.140	0.160	0.110	0.100
Total Suspended Solids	mg/L	12	4	7	22	8	11	10	8	8	10	5	4
Zinc	µg/L	6.65	3.92	4.05	11.40	9.75	4.51	5.52	6.12	6.66	8.75	11.10	4.69

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Table 8 SRS Stream and Savannah River Surface Water Inorganic Results (continued)

Location: RM-150.4

Parameter	Unit	1/2017	2/2017	3/2017	4/2017	5/2017	6/2017	7/2017	8/2017	9/2017	10/2017	11/2017	12/2017
Dissolved Oxygen	mg/L	11.28	9.75	11.88	9.21	8.82	7.44	7.38	7.09	6.50	7.36	7.88	9.20
pH	SU	7.10	6.32	6.30	6.82	6.20	6.55	7.70	7.62	6.96	7.40	7.20	6.70
Temperature	°C	8.3	13.6	10.2	16.2	18.0	25.5	27.3	26.3	24.7	25.0	15.0	10.5
Aluminum	µg/L	450.0	100.0	< 40.0	620.0	127.0	177.0	155.0	302.0	139.0	133.0	82.0	124.0
Beryllium	µg/L	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	0.786	< 0.100	< 0.100	< 0.100
Cadmium	µg/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	2.530	< 0.500	< 0.500	< 0.500
Chromium	µg/L	< 2.00	2.40	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Copper	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	4.18	< 2.00	< 2.00	2.18	< 2.00	< 2.00	< 2.00	< 2.00
Hardness (total)	mg/L	17	18	18	15	16	20	16	20	20	20	20	20
Iron	µg/L	956	576	522	1,210	438	327	383	544	512	379	274	383
Lead	µg/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Manganese	µg/L	126.0	72.0	63.4	161.0	61.0	50.4	62.0	58.8	66.1	67.1	64.6	58.2
Mercury	µg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Nickel	µg/L	< 3.00	23.90	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00
Nitrate-Nitrogen	mg/L	0.2890	0.2070	0.1780	0.2110	0.3340	0.2360	0.2180	0.2350	0.2390	0.2860	0.2360	0.3390
Nitrite-Nitrogen	mg/L	0.0035	0.0071	0.0087	0.0097	0.0137	0.0043	0.0063	0.0108	0.0077	< 0.0027	0.0088	0.0146
Thallium	µg/L	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0
Total Organic Carbon	mg/L	6.1	3.4	3.6	7.0	1.7	3.2	3.3	4.5	4.0	4.2	3.1	4.7
Phosphorus	mg/L	0.100	0.110	0.078	0.140	0.088	0.130	0.110	0.140	0.150	0.180	0.100	0.100
Total Suspended Solids	mg/L	11	5	7	21	6	7	9	6	5	8	4	3
Zinc	µg/L	3.69	2.17	4.97	8.07	15.10	3.30	3.42	8.53	8.23	< 2.00	2.68	3.68

Data Tables Supporting the Nonradiological Environmental Monitoring Program

Table 8 SRS Stream and Savannah River Surface Water Inorganic Results (continued)

Location: RM-160

Parameter	Unit	1/2017	2/2017	3/2017	4/2017	5/2017	6/2017	7/2017	8/2017	9/2017	10/2017	11/2017	12/2017
Dissolved Oxygen	mg/L	10.23	9.84	9.77	9.47	9.11	7.79	7.36	7.23	6.59	7.60	8.00	9.32
pH	SU	7.60	6.34	6.23	6.03	7.00	6.73	7.92	5.27	7.53	7.90	7.50	7.00
Temperature	°C	9.4	13.8	12.7	16.1	18.3	25.8	26.5	26.2	24.7	25.0	15.0	11.0
Aluminum	µg/L	402.0	< 40.0	< 40.0	609.0	106.0	148.0	116.0	236.0	74.6	78.8	57.0	101.0
Beryllium	µg/L	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	< 0.100	0.272	< 0.100	< 0.100
Cadmium	µg/L	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	< 0.500	1.270	< 0.500	< 0.500
Chromium	µg/L	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00	< 2.00
Copper	µg/L	< 2.00	< 2.00	< 2.00	3.33	7.24	< 2.00	< 2.00	4.61	< 2.00	4.86	< 2.00	< 2.00
Hardness (total)	mg/L	12	18	20	19	12	12	18	20	20	18	20	20
Iron	µg/L	795	466	469	1,060	357	308	324	458	761	310	281	308
Lead	µg/L	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0	< 10.0
Manganese	µg/L	100.0	73.1	76.4	139.0	57.6	54.8	61.5	60.2	65.0	64.6	57.6	53.9
Mercury	µg/L	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200	< 0.0200
Nickel	µg/L	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	< 3.00	3.37	< 3.00	< 3.00
Nitrate-Nitrogen	mg/L	0.2350	0.1980	0.1590	0.2060	0.1920	0.1930	0.2110	0.2810	0.2000	0.6240	0.2370	0.3370
Nitrite-Nitrogen	mg/L	0.0036	0.0072	0.0088	0.0103	0.0151	0.0048	0.0078	0.0065	0.0081	< 0.0027	0.0091	0.0135
Thallium	µg/L	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0	< 15.0
Total Organic Carbon	mg/L	5.5	3.4	3.8	8.3	4.2	3.5	3.5	4.8	4.2	4.8	3.2	4.2
Phosphorus	mg/L	0.140	0.110	0.086	0.140	0.110	0.210	0.130	0.150	0.140	0.180	0.110	0.110
Total Suspended Solids	mg/L	9	4	7	15	6	6	7	4	6	9	3	3
Zinc	µg/L	3.47	11.70	4.92	14.70	23.10	9.95	4.02	15.70	8.28	16.90	2.71	4.72

Table 9 Nonradiological Sediment Sampling Results

Analyte: Mercury

Location	Collection Date	Result (mg/kg)	Detection Limit (mg/kg)
BDC_RM_SED	3/22/2017	< 0.12	0.009
BDC_SED	3/20/2017	< 0.14	0.01
E-004_SED	3/20/2017	< 0.13	0.01
E-05_SED	3/20/2017	< 0.096	0.0073
E-06_SED	3/20/2017	< 0.11	0.0083
FM-6_SED	6/27/2017	< 0.11	0.026
FMC-ROAD-A	10/25/2017	< 0.012	0.004
L3R-1A_SED	6/27/2017	0.27	0.0050
L3R-2_SED	10/25/2017	0.0085	0.0037
MCQBR_DS_Z_BASIN	11/13/2017	< 0.12	0.029
MCQBR_MON_OWENS	3/20/2017	< 0.29	0.022
PB-ROAD-A	10/25/2017	< 0.12	0.028
RM-118.7_SED	3/22/2017	< 0.14	0.011
RM-129_L3RM-SED	3/22/2017	< 0.12	0.0093
RM-150.2_SED	3/22/2017	< 0.1	0.0079
RM-150.4(VOGTLE DISCHARGE)	8/2/2017	< 0.13	0.031
RM-157.2_SED	3/22/2017	< 0.18	0.014
RM-160.0_SED	8/2/2017	< 0.1	0.025
RM-170.5_SED	6/27/2017	< 0.11	0.026
SC LANDING (RM-141)	3/22/2017	< 0.12	0.0092
SC-4_SED	6/27/2017	0.088	0.0083
SC-RM	3/22/2017	< 0.14	0.011
TB-5_SED	3/20/2017	< 0.1	0.0078
TC-1_SED	8/14/2017	< 0.12	0.03
U3R-0_SED	8/14/2017	< 0.36	0.087
U3R-3_SED	3/20/2017	< 0.11	0.0082
U3R-4_SED	8/14/2017	< 0.13	0.031
U3R-USFS-RD2-1	3/20/2017	< 0.19	0.014

Note:

Values highlighted in yellow are laboratory qualified as an estimated value.

Table 9 Nonradiological Sediment Sampling Results (continued)

Analytes: Aluminum and Arsenic

Location	Collection Date	Aluminum (mg/kg)	Detection Limit (mg/kg)	Arsenic (mg/kg)	Detection Limit (mg/kg)
BDC_RM_SED	3/22/2017	8900	11	< 1.1	0.38
BDC_SED	3/20/2017	13000	19	3.1	0.31
E-004_SED	3/20/2017	25000	8.7	7.8	0.29
E-05_SED	3/20/2017	45000	41	5.8	0.28
E-06_SED	3/20/2017	20000	8.1	2.9	0.27
FM-6_SED	6/27/2017	590	7.8	< 0.78	0.26
FMC-ROAD-A	10/25/2017	1350	6.5	0.65	0.48
L3R-1A_SED	6/27/2017	462	9.5	< 4.2	0.70
L3R-2_SED	10/25/2017	472	6.2	0.65	0.46
MCQBR_DS_Z_BASIN	11/13/2017	3100	9.2	0.94	0.31
MCQBR_MON_OWENS	3/20/2017	15000	50	4.5	0.83
PB-ROAD-A	10/25/2017	2000	10	< 1	0.35
RM-118.7_SED	3/22/2017	16000	13	2	0.42
RM-129_L3RM-SED	3/22/2017	12000	10	< 1	0.34
RM-150.2_SED	3/22/2017	6600	9.1	1.5	0.3
RM-150.4(VOGTLE DISCHARGE)	8/2/2017	21000	10	1.6	0.34
RM-157.2_SED	3/22/2017	9600	14	< 1.4	0.46
RM-160.0_SED	8/2/2017	5500	9.2	4.4	0.31
RM-170.5_SED	6/27/2017	6400	10	1.7	0.35
SC LANDING (RM-141)	3/22/2017	10000	11	< 1.1	0.38
SC-4_SED	6/27/2017	2750	15.3	1.2	1.12
SC-RM	3/22/2017	11000	14	1.5	0.48
TB-5_SED	3/20/2017	900	9.4	< 0.94	0.31
TC-1_SED	8/14/2017	1400	8.2	0.84	0.27
U3R-0_SED	8/14/2017	8000	28	< 2.8	0.94
U3R-3_SED	3/20/2017	1800	9.1	< 0.91	0.3
U3R-4_SED	8/14/2017	5000	12	1.4	0.39
U3R-USFS-RD2-1	3/20/2017	6600	18	2.2	0.61

Note:

Values highlighted in yellow are laboratory qualified as an estimated value.

Table 9 Nonradiological Sediment Sampling Results (continued)

Analytes: Barium and Cadmium

Location	Collection Date	Barium (mg/kg)	Detection Limit (mg/kg)	Cadmium (mg/kg)	Detection Limit (mg/kg)
BDC_RM_SED	3/22/2017	100	0.49	< 0.38	0.095
BDC_SED	3/20/2017	76	0.81	0.34	0.079
E-004_SED	3/20/2017	32	0.38	< 0.29	0.073
E-05_SED	3/20/2017	22	0.36	< 0.28	0.07
E-06_SED	3/20/2017	12	0.35	< 0.27	0.068
FM-6_SED	6/27/2017	6.2	0.34	< 0.26	0.065
FMC-ROAD-A	10/25/2017	17.80	0.096	0.099	0.096
L3R-1A_SED	6/27/2017	3.51	0.140	< 0.699	0.140
L3R-2_SED	10/25/2017	7.38	0.091	< 0.457	0.091
MCQBR_DS_Z_BASIN	11/13/2017	23	0.4	< 0.31	0.077
MCQBR_MON_OWENS	3/20/2017	120	2.1	< 0.83	0.21
PB-ROAD-A	10/25/2017	15	0.45	< 0.35	0.088
RM-118.7_SED	3/22/2017	120	0.55	< 0.42	0.11
RM-129_L3RM-SED	3/22/2017	98	0.45	< 0.34	0.086
RM-150.2_SED	3/22/2017	54	0.4	< 0.3	0.077
RM-150.4(VOGTLE DISCHARGE)	8/2/2017	120	0.45	< 0.34	0.087
RM-157.2_SED	3/22/2017	87	0.6	< 0.46	0.12
RM-160.0_SED	8/2/2017	55	0.4	< 0.31	0.077
RM-170.5_SED	6/27/2017	47	0.45	< 0.35	0.088
SC LANDING (RM-141)	3/22/2017	76	0.49	< 0.38	0.095
SC-4_SED	6/27/2017	35.9	0.225	< 1.120	0.225
SC-RM	3/22/2017	91	0.62	< 0.48	0.12
TB-5_SED	3/20/2017	8.1	0.41	< 0.31	0.079
TC-1_SED	8/14/2017	24	0.35	< 0.27	0.069
U3R-0_SED	8/14/2017	87	1.2	< 0.94	0.24
U3R-3_SED	3/20/2017	22	0.39	< 0.3	0.076
U3R-4_SED	8/14/2017	42	0.51	< 0.39	0.099
U3R-USFS-RD2-1	3/20/2017	59	0.79	< 0.61	0.15

Note:

Values highlighted in yellow are laboratory qualified as an estimated value.

Table 9 Nonradiological Sediment Sampling Results (continued)

Analytes: Chromium and Copper

Location	Collection Date	Chromium (mg/kg)	Detection Limit (mg/kg)	Copper (mg/kg)	Detection Limit (mg/kg)
BDC_RM_SED	3/22/2017	13	0.19	6.6	0.34
BDC_SED	3/20/2017	12	0.16	15	0.28
E-004_SED	3/20/2017	36	0.15	11	0.26
E-05_SED	3/20/2017	56	0.14	8.6	1.2
E-06_SED	3/20/2017	23	0.14	6.7	0.24
FM-6_SED	6/27/2017	1.4	0.13	< 0.52	0.23
FMC-ROAD-A	10/25/2017	5.76	0.144	0.978	0.287
L3R-1A_SED	6/27/2017	2.04	0.210	< 1.40	0.420
L3R-2_SED	10/25/2017	1.24	0.137	0.494	0.274
MCQBR_DS_Z_BASIN	11/13/2017	4.3	0.15	1.4	0.28
MCQBR_MON_OWENS	3/20/2017	22	0.41	15	0.74
PB-ROAD-A	10/25/2017	3.1	0.17	1.5	0.31
RM-118.7_SED	3/22/2017	20	0.21	11	0.38
RM-129_L3RM-SED	3/22/2017	17	0.17	8.8	0.31
RM-150.2_SED	3/22/2017	9.5	0.15	4	0.27
RM-150.4(VOGTLE DISCHARGE)	8/2/2017	23	0.17	13	0.31
RM-157.2_SED	3/22/2017	13	0.23	7	0.41
RM-160.0_SED	8/2/2017	7.9	0.15	3.5	0.28
RM-170.5_SED	6/27/2017	8.8	0.17	4.7	0.31
SC LANDING (RM-141)	3/22/2017	14	0.19	7	0.34
SC-4_SED	6/27/2017	7.3	0.337	1.880	0.674
SC-RM	3/22/2017	17	0.24	8.6	0.43
TB-5_SED	3/20/2017	1.7	0.16	< 0.62	0.28
TC-1_SED	8/14/2017	3	0.14	1.6	0.25
U3R-0_SED	8/14/2017	13	0.47	8	0.85
U3R-3_SED	3/20/2017	3.7	0.15	0.97	0.27
U3R-4_SED	8/14/2017	6.9	0.2	3	0.35
U3R-USFS-RD2-1	3/20/2017	10	0.3	6.3	0.55

Note:

Values highlighted in yellow are laboratory qualified as an estimated value.

Table 9 Nonradiological Sediment Sampling Results (continued)

Analytes: Cyanide and Iron

Location	Collection Date	Cyanide (mg/kg)	Detection Limit (mg/kg)	Iron (mg/kg)	Detection Limit (mg/kg)
BDC_RM_SED	3/22/2017	< 0.78	0.097	11000	3.4
BDC_SED	3/20/2017	< 0.91	0.11	15000	5.7
E-004_SED	3/20/2017	< 0.9	0.11	24000	2.6
E-05_SED	3/20/2017	< 0.58	0.072	26000	2.5
E-06_SED	3/20/2017	< 0.71	0.088	25000	2.5
FM-6_SED	6/27/2017	< 0.68	0.084	700	2.4
FMC-ROAD-A	10/25/2017	< 0.189	0.063	1400	7.66
L3R-1A_SED	6/27/2017			3490	11.2
L3R-2_SED	10/25/2017	< 0.240	0.080	1700	7.31
MCQBR_DS_Z_BASIN	11/13/2017	< 0.79	0.098	2300	2.8
MCQBR_MON_OWENS	3/20/2017	< 1.8	0.23	23000	15
PB-ROAD-A	10/25/2017	< 0.77	0.095	2200	3.2
RM-118.7_SED	3/22/2017	< 0.92	0.11	15000	3.8
RM-129_L3RM-SED	3/22/2017	< 0.83	0.1	13000	3.1
RM-150.2_SED	3/22/2017	< 0.69	0.086	8500	2.8
RM-150.4(VOGTLE DISCHARGE)	8/2/2017	< 0.84	0.1	16000	3.1
RM-157.2_SED	3/22/2017	< 1.2	0.14	9300	4.2
RM-160.0_SED	8/2/2017	< 0.68	0.084	8700	2.8
RM-170.5_SED	6/27/2017	< 0.7	0.086	8300	3.2
SC LANDING (RM-141)	3/22/2017	< 0.77	0.096	12000	3.4
SC-4_SED	6/27/2017	0.184	0.123	4800	18
SC-RM	3/22/2017	< 0.97	0.12	15000	4.4
TB-5_SED	3/20/2017	< 0.67	0.083	1200	2.8
TC-1_SED	8/14/2017	< 0.8	0.099	1100	2.5
U3R-0_SED	8/14/2017	< 2.5	0.31	4700	8.6
U3R-3_SED	3/20/2017	< 0.7	0.087	1600	2.7
U3R-4_SED	8/14/2017	< 0.9	0.11	1900	3.6
U3R-USFS-RD2-1	3/20/2017	< 1.3	0.16	8800	11

Note:

Values highlighted in yellow are laboratory qualified as an estimated value.

Table 9 Nonradiological Sediment Sampling Results (continued)

Analytes: Lead and Magnesium

Location	Collection Date	Lead (mg/kg)	Detection Limit (mg/kg)	Magnesium (mg/kg)	Detection Limit (mg/kg)
BDC_RM_SED	3/22/2017	6.5	0.34	1200	47
BDC_SED	3/20/2017	5.7	0.28	< 630	78
E-004_SED	3/20/2017	13	0.26	610	36
E-05_SED	3/20/2017	13	1.2	440	35
E-06_SED	3/20/2017	17	0.24	< 270	34
FM-6_SED	6/27/2017	1.6	0.23	< 260	32
FMC-ROAD-A	10/25/2017	4.73	0.316	46.7	8.14
L3R-1A_SED	6/27/2017	0.85	0.461	25.4	11.9
L3R-2_SED	10/25/2017	2.24	0.302	47.1	7.77
MCQBR_DS_Z_BASIN	11/13/2017	2.4	0.28	< 310	38
MCQBR_MON_OWENS	3/20/2017	13	0.74	< 1700	210
PB-ROAD-A	10/25/2017	1.9	0.31	< 350	44
RM-118.7_SED	3/22/2017	9.3	0.38	1600	53
RM-129_L3RM-SED	3/22/2017	7.9	0.31	1300	43
RM-150.2_SED	3/22/2017	4.5	0.27	780	38
RM-150.4(VOGTLE DISCHARGE)	8/2/2017	9.1	0.31	2400	43
RM-157.2_SED	3/22/2017	7.8	0.41	1100	57
RM-160.0_SED	8/2/2017	4.8	0.28	680	38
RM-170.5_SED	6/27/2017	4.1	0.31	930	43
SC LANDING (RM-141)	3/22/2017	6.4	0.34	1400	47
SC-4_SED	6/27/2017	4.4	0.741	92.8	19.1
SC-RM	3/22/2017	8.2	0.43	1500	60
TB-5_SED	3/20/2017	2	0.28	< 310	39
TC-1_SED	8/14/2017	3.1	0.25	< 270	34
U3R-0_SED	8/14/2017	19	0.85	< 940	120
U3R-3_SED	3/20/2017	2.8	0.27	< 300	38
U3R-4_SED	8/14/2017	8.4	0.35	< 390	49
U3R-USFS-RD2-1	3/20/2017	10	0.55	870	76

Note:

Values highlighted in yellow are laboratory qualified as an estimated value.

Table 9 Nonradiological Sediment Sampling Results (continued)

Analytes: Manganese and Nickel

Location	Collection Date	Manganese (mg/kg)	Detection Limit (mg/kg)	Nickel (mg/kg)	Detection Limit (mg/kg)
BDC_RM_SED	3/22/2017	980	0.45	5.2	0.79
BDC_SED	3/20/2017	220	0.37	17	0.66
E-004_SED	3/20/2017	100	0.34	4.7	0.61
E-05_SED	3/20/2017	20	0.33	9.8	0.58
E-06_SED	3/20/2017	73	0.32	< 2.2	0.57
FM-6_SED	6/27/2017	53	0.31	< 2.1	0.55
FMC-ROAD-A	10/25/2017	137	0.19	1.45	0.14
L3R-1A_SED	6/27/2017	28.2	0.28	0.75	0.21
L3R-2_SED	10/25/2017	155	0.18	0.65	0.14
MCQBR_DS_Z_BASIN	11/13/2017	61	0.36	< 2.4	0.64
MCQBR_MON_OWENS	3/20/2017	350	0.98	8.1	1.7
PB-ROAD-A	10/25/2017	170	0.41	< 2.8	0.73
RM-118.7_SED	3/22/2017	1100	0.5	7.1	0.89
RM-129_L3RM-SED	3/22/2017	1000	0.41	5.8	0.72
RM-150.2_SED	3/22/2017	200	0.36	3.4	0.64
RM-150.4(VOGTLE DISCHARGE)	8/2/2017	440	0.41	10	0.72
RM-157.2_SED	3/22/2017	360	0.54	7.5	0.96
RM-160.0_SED	8/2/2017	580	0.36	3.5	0.64
RM-170.5_SED	6/27/2017	440	0.41	3.3	0.73
SC LANDING (RM-141)	3/22/2017	550	0.45	4.9	0.79
SC-4_SED	6/27/2017	267	0.45	1.87	0.34
SC-RM	3/22/2017	680	0.57	5.2	1
TB-5_SED	3/20/2017	42	0.37	4.6	0.66
TC-1_SED	8/14/2017	37	0.32	< 2.2	0.57
U3R-0_SED	8/14/2017	18	1.1	< 7.5	2
U3R-3_SED	3/20/2017	13	0.36	< 2.4	0.63
U3R-4_SED	8/14/2017	39	0.46	5.6	0.82
U3R-USFS-RD2-1	3/20/2017	57	0.72	< 4.9	1.3

Table 9 Nonradiological Sediment Sampling Results (continued)

Analytes: Selenium and Silver

Location	Collection Date	Selenium (mg/kg)	Detection Limit (mg/kg)	Silver (mg/kg)	Detection Limit (mg/kg)
BDC_RM_SED	3/22/2017	< 1.5	0.61	< 0.75	0.19
BDC_SED	3/20/2017	1.5	0.51	< 0.63	0.16
E-004_SED	3/20/2017	2.5	0.47	< 0.58	0.15
E-05_SED	3/20/2017	< 5.5	2.2	< 0.55	0.14
E-06_SED	3/20/2017	1.4	0.44	< 0.54	0.14
FM-6_SED	6/27/2017	< 1	0.42	< 0.52	0.13
FMC-ROAD-A	10/25/2017	1.5	0.48	< 0.48	0.096
L3R-1A_SED	6/27/2017	< 4.2	0.70	< 0.70	0.14
L3R-2_SED	10/25/2017	< 2.7	0.46	< 0.46	0.091
MCQBR_DS_Z_BASIN	11/13/2017	< 1.2	0.5	< 0.61	0.15
MCQBR_MON_OWENS	3/20/2017	< 3.3	1.3	< 1.7	0.41
PB-ROAD-A	10/25/2017	< 1.4	0.57	< 0.7	0.17
RM-118.7_SED	3/22/2017	< 1.7	0.68	< 0.84	0.21
RM-129_L3RM-SED	3/22/2017	1.5	0.56	< 0.69	0.17
RM-150.2_SED	3/22/2017	< 1.2	0.49	< 0.61	0.15
RM-150.4(VOGTLE DISCHARGE)	8/2/2017	< 1.4	0.56	< 0.69	0.17
RM-157.2_SED	3/22/2017	< 1.8	0.74	< 0.92	0.23
RM-160.0_SED	8/2/2017	< 1.2	0.5	< 0.61	0.15
RM-170.5_SED	6/27/2017	< 1.4	0.56	< 0.69	0.17
SC LANDING (RM-141)	3/22/2017	< 1.5	0.61	< 0.75	0.19
SC-4_SED	6/27/2017	< 6.7	1.12	< 1.12	0.225
SC-RM	3/22/2017	< 1.9	0.78	< 0.96	0.24
TB-5_SED	3/20/2017	< 1.2	0.51	< 0.62	0.16
TC-1_SED	8/14/2017	< 1.1	0.44	< 0.55	0.14
U3R-0_SED	8/14/2017	< 3.8	1.5	< 1.9	0.47
U3R-3_SED	3/20/2017	< 1.2	0.49	< 0.6	0.15
U3R-4_SED	8/14/2017	< 1.6	0.63	< 0.78	0.2
U3R-USFS-RD2-1	3/20/2017	< 2.4	0.99	< 1.2	0.3

Note:

Values highlighted in yellow are laboratory qualified as an estimated value.

Table 9 Nonradiological Sediment Sampling Results (continued)

Analytes: Uranium and Zinc

Location	Collection Date	Uranium (mg/kg)	Detection Limit (mg/kg)	Zinc (mg/kg)	Detection Limit (mg/kg)
BDC_RM_SED	3/22/2017	40	4.7	28	0.94
BDC_SED	3/20/2017	40	3.9	52	0.78
E-004_SED	3/20/2017	54	3.6	38	0.73
E-05_SED	3/20/2017	52	3.5	14	0.69
E-06_SED	3/20/2017	51	3.4	6.8	0.68
FM-6_SED	6/27/2017	< 26	3.2	< 2.6	0.65
FMC-ROAD-A	10/25/2017	< 4.8	0.96	8.55	0.38
L3R-1A_SED	6/27/2017	< 7.0	1.4	7.08	0.56
L3R-2_SED	10/25/2017	< 4.6	0.91	5.59	0.37
MCQBR_DS_Z_BASIN	11/13/2017	40	3.8	7.7	0.76
MCQBR_MON_OWENS	3/20/2017	83	10	66	2.1
PB-ROAD-A	10/25/2017	< 35	4.4	6.7	0.87
RM-118.7_SED	3/22/2017	51	5.3	47	1.1
RM-129_L3RM-SED	3/22/2017	42	4.3	33	0.86
RM-150.2_SED	3/22/2017	33	3.8	20	0.76
RM-150.4(VOGTLE DISCHARGE)	8/2/2017	< 34	4.3	46	0.86
RM-157.2_SED	3/22/2017	46	5.7	38	1.1
RM-160.0_SED	8/2/2017	< 31	3.8	18	0.77
RM-170.5_SED	6/27/2017	< 35	4.3	27	0.87
SC LANDING (RM-141)	3/22/2017	< 38	4.7	29	0.94
SC-4_SED	6/27/2017	< 11.2	2.25	12.1	0.90
SC-RM	3/22/2017	51	6	33	1.2
TB-5_SED	3/20/2017	< 31	3.9	< 3.1	0.78
TC-1_SED	8/14/2017	< 27	3.4	8.9	0.68
U3R-0_SED	8/14/2017	< 94	12	17	2.4
U3R-3_SED	3/20/2017	< 30	3.8	5.8	0.75
U3R-4_SED	8/14/2017	< 39	4.9	22	0.98
U3R-USFS-RD2-1	3/20/2017	< 61	7.6	20	1.5

Table 9 Nonradiological Sediment Sampling Results (continued)

Analytes: Percent Solids

Percent Solids was not analyzed for the following locations: FMC-ROAD-A, L3R-1A_SED, L3R-2_SED, and SC-4_SED.

Location	Collection Date	Percent Solids (%)
BDC_RM_SED	3/22/2017	64
BDC_SED	3/20/2017	55
E-004_SED	3/20/2017	55.7
E-05_SED	3/20/2017	85.8
E-06_SED	3/20/2017	70.5
FM-6_SED	6/27/2017	73.9
MCQBR_DS_Z_BASIN	11/13/2017	63.4
MCQBR_MON_OWENS	3/20/2017	27.2
PB-ROAD-A	10/25/2017	65
RM-118.7_SED	3/22/2017	54.4
RM-129_L3RM-SED	3/22/2017	59.9
RM-150.2_SED	3/22/2017	72
RM-150.4(VOGTLE DISCHARGE)	8/2/2017	59.5
RM-157.2_SED	3/22/2017	43.2
RM-160.0_SED	8/2/2017	73.4
RM-170.5_SED	6/27/2017	71.8
SC LANDING (RM-141)	3/22/2017	64.6
SC-RM	3/22/2017	51.7
TB-5_SED	3/20/2017	75
TC-1_SED	8/14/2017	62.7
U3R-0_SED	8/14/2017	20.3
U3R-3_SED	3/20/2017	71
U3R-4_SED	8/14/2017	55.7
U3R-USFS-RD2-1	3/20/2017	38.5

Table 10 Nonradiological Fish Sampling Results

Location: Fourmile Creek River Mouth

Fish Type	Collection Date	Antimony (µg/g)	Detection Limit (µg/g)	Arsenic (µg/g)	Detection Limit (µg/g)	Cadmium (µg/g)	Detection Limit (µg/g)
Bass	3/22/2017	< 1.26	1.26	< 0.841	0.841	< 0.0841	0.0841
Bass	3/22/2017	< 1.37	1.37	< 0.913	0.913	< 0.0913	0.0913
Bass	3/22/2017	< 1.06	1.06	< 0.706	0.706	0.46	0.0706
Bass	3/29/2017	< 1.33	1.33	< 0.886	0.886	< 0.0886	0.0886
Bass	3/29/2017	< 1.3	1.3	< 0.865	0.865	< 0.083	0.083
Bass	3/29/2017	< 1.24	1.24	< 0.83	0.83	< 0.0662	0.0662
Bass	3/29/2017	< 0.993	0.993	< 0.662	0.662	< 0.0865	0.0865
Catfish	3/22/2017	< 1.39	1.39	< 0.647	0.647	< 0.0929	0.0929
Catfish	3/22/2017	< 0.952	0.952	< 0.895	0.895	< 0.0634	0.0634
Catfish	3/22/2017	< 0.971	0.971	< 0.902	0.902	< 0.0647	0.0647
Catfish	3/22/2017	< 1.34	1.34	< 0.749	0.749	< 0.0895	0.0895
Catfish	3/22/2017	< 1.35	1.35	< 0.822	0.822	< 0.0902	0.0902
Catfish	3/22/2017	< 1.12	1.12	< 0.929	0.929	< 0.0749	0.0749
Catfish	3/22/2017	< 1.23	1.23	< 0.634	0.634	< 0.0822	0.0822
Panfish	3/22/2017	< 1.14	1.34	< 0.895	0.895	< 0.0895	0.0895
Panfish	3/22/2017	< 1.34	1.49	< 0.995	0.995	< 0.0995	0.0995
Panfish	3/22/2017	< 1.49	1.07	< 0.712	0.712	< 0.0712	0.0712
Panfish	3/22/2017	< 1.07	0.994	< 0.663	0.663	< 0.0663	0.0663
Panfish	3/22/2017	< 0.994	1.1	< 0.731	0.731	< 0.0731	0.0731
Panfish	3/22/2017	< 1.1	1.41	< 0.941	0.941	< 0.0941	0.0941
Panfish	3/22/2017	< 1.41	1.18	< 0.789	0.789	< 0.0789	0.0789

Note:

Values highlighted in yellow are laboratory qualified as an estimated value.

Table 10 Nonradiological Fish Sampling Results (continued)

Location: Fourmile Creek River Mouth (continued)

Fish Type	Collection Date	Chromium (µg/g)	Detection Limit (µg/g)	Copper (µg/g)	Detection Limit (µg/g)	Lead (µg/g)	Detection Limit (µg/g)
Bass	3/22/2017	0.132	0.0841	0.338	0.168	< 0.841	0.841
Bass	3/22/2017	0.108	0.0913	0.207	0.183	< 0.913	0.913
Bass	3/22/2017	0.201	0.0706	0.263	0.141	< 0.706	0.706
Bass	3/29/2017	< 0.0886	0.0886	0.193	0.177	< 0.886	0.886
Bass	3/29/2017	< 0.0865	0.0865	< 0.173	0.173	< 0.865	0.865
Bass	3/29/2017	< 0.083	0.083	< 0.166	0.166	< 0.83	0.83
Bass	3/29/2017	< 0.0662	0.0662	< 0.132	0.132	< 0.662	0.662
Catfish	3/22/2017	0.102	0.0929	0.359	0.186	< 0.822	0.822
Catfish	3/22/2017	0.0878	0.0634	0.338	0.127	< 0.929	0.929
Catfish	3/22/2017	0.096	0.0647	0.256	0.129	< 0.634	0.634
Catfish	3/22/2017	0.102	0.0895	0.342	0.179	< 0.647	0.647
Catfish	3/22/2017	0.119	0.0902	0.195	0.18	< 0.895	0.895
Catfish	3/22/2017	0.0947	0.0749	0.198	0.15	< 0.902	0.902
Catfish	3/22/2017	< 0.0822	0.0822	0.17	0.164	< 0.749	0.749
Panfish	3/22/2017	< 0.0895	0.0895	< 0.199	0.152	< 0.895	0.895
Panfish	3/22/2017	< 0.0995	0.0995	0.149	0.113	< 0.995	0.995
Panfish	3/22/2017	< 0.0712	0.0712	0.234	0.129	< 0.712	0.712
Panfish	3/22/2017	< 0.0663	0.0663	0.153	0.212	< 0.663	0.663
Panfish	3/22/2017	< 0.0731	0.0731	< 0.188	0.129	< 0.731	0.731
Panfish	3/22/2017	< 0.0941	0.0941	< 0.158	0.129	< 0.941	0.941
Panfish	3/22/2017	< 0.0789	0.0789	0.259	0.109	< 0.789	0.789

Note:

Values highlighted in yellow are laboratory qualified as an estimated value.

Table 10 Nonradiological Fish Sampling Results (continued)

Location: Fourmile Creek River Mouth (continued)

Fish Type	Collection Date	Manganese (µg/g)	Detection Limit (µg/g)	Mercury (µg/g)	Detection Limit (µg/g)	Nickel (µg/g)	Detection Limit (µg/g)
Bass	3/22/2017	< 0.0841	0.0841	0.682	0.02	< 0.168	0.168
Bass	3/22/2017	< 0.0913	0.0913	0.357	0.02	< 0.183	0.183
Bass	3/22/2017	0.104	0.0706	0.255	0.02	< 0.141	0.141
Bass	3/29/2017	0.0694	0.0662	0.677	0.02	< 0.177	0.177
Bass	3/29/2017	0.105	0.0886	0.464	0.02	< 0.173	0.173
Bass	3/29/2017	< 0.0865	0.0865	0.343	0.02	< 0.166	0.166
Bass	3/29/2017	0.12	0.083	0.268	0.02	< 0.132	0.132
Catfish	3/22/2017	0.216	0.0929	0.0541	0.02	< 0.186	0.186
Catfish	3/22/2017	0.174	0.0634	0.113	0.02	< 0.127	0.127
Catfish	3/22/2017	0.188	0.0647	0.109	0.02	< 0.129	0.129
Catfish	3/22/2017	0.199	0.0895	0.217	0.02	< 0.179	0.179
Catfish	3/22/2017	0.186	0.0902	0.14	0.02	< 0.18	0.18
Catfish	3/22/2017	0.177	0.0749	0.129	0.02	0.173	0.15
Catfish	3/22/2017	0.152	0.0822	0.127	0.02	< 0.164	0.164
Panfish	3/22/2017	0.252	0.0895	0.17	0.02	< 0.179	0.179
Panfish	3/22/2017	< 0.0995	0.0995	0.277	0.02	< 0.199	0.199
Panfish	3/22/2017	< 0.0712	0.0712	0.291	0.02	< 0.142	0.142
Panfish	3/22/2017	< 0.0663	0.0663	0.168	0.02	< 0.133	0.133
Panfish	3/22/2017	0.145	0.0731	0.18	0.02	< 0.146	0.146
Panfish	3/22/2017	< 0.0941	0.0941	0.118	0.02	< 0.188	0.188
Panfish	3/22/2017	0.205	0.0789	0.0816	0.02	< 0.158	0.158

Note:

Values highlighted in yellow are laboratory qualified as an estimated value.

Table 10 Nonradiological Fish Sampling Results (continued)

Location: Fourmile Creek River Mouth (continued)

Fish Type	Collection Date	Zinc (µg/g)	Detection Limit (µg/g)
Bass	3/22/2017	3.41	0.168
Bass	3/22/2017	3.95	0.183
Bass	3/22/2017	3.15	0.141
Bass	3/29/2017	4.41	0.177
Bass	3/29/2017	3.19	0.173
Bass	3/29/2017	3.81	0.166
Bass	3/29/2017	2.95	0.132
Catfish	3/22/2017	4.68	0.186
Catfish	3/22/2017	4.31	0.127
Catfish	3/22/2017	3.83	0.129
Catfish	3/22/2017	4.14	0.179
Catfish	3/22/2017	4.01	0.18
Catfish	3/22/2017	3.9	0.15
Catfish	3/22/2017	4.65	0.164
Panfish	3/22/2017	7.59	0.179
Panfish	3/22/2017	4.39	0.199
Panfish	3/22/2017	4.3	0.142
Panfish	3/22/2017	4.88	0.133
Panfish	3/22/2017	4.49	0.146
Panfish	3/22/2017	4.98	0.188
Panfish	3/22/2017	4.25	0.158

Table 10 Nonradiological Fish Sampling Results (continued)

Location: Highway 301 Bridge

Fish Type	Collection Date	Antimony (µg/g)	Detection Limit (µg/g)	Arsenic (µg/g)	Detection Limit (µg/g)	Cadmium (µg/g)	Detection Limit (µg/g)
Bass	6/14/2017	< 1.13	1.13	< 0.75	0.75	< 0.075	0.075
Bass	6/14/2017	< 1.03	1.03	< 0.684	0.684	< 0.0684	0.0684
Bass	6/14/2017	< 0.953	0.953	< 0.635	0.635	0.0679	0.0635
Bass	6/14/2017	< 1.06	1.06	< 0.705	0.705	< 0.0705	0.0705
Bass	6/14/2017	< 0.866	0.866	< 0.578	0.578	< 0.0578	0.0578
Bass	6/14/2017	< 1.32	1.32	< 0.879	0.879	< 0.0879	0.0879
Bass	6/14/2017	< 1.11	1.11	< 0.743	0.743	< 0.0743	0.0743
Catfish	6/14/2017	< 0.869	0.869	< 0.579	0.579	< 0.0579	0.0579
Catfish	6/14/2017	< 1.39	1.39	< 0.927	0.927	< 0.0927	0.0927
Catfish	6/14/2017	< 1.16	1.16	< 0.771	0.771	< 0.0771	0.0771
Catfish	6/14/2017	< 1.27	1.27	< 0.846	0.846	< 0.0846	0.0846
Catfish	6/14/2017	< 1.34	1.34	< 0.891	0.891	< 0.0891	0.0891
Catfish	6/14/2017	< 1.39	1.39	< 0.927	0.927	< 0.0927	0.0927
Catfish	6/14/2017	< 1.11	1.11	< 0.741	0.741	< 0.0741	0.0741
Panfish	6/14/2017	< 1.32	1.32	< 0.877	0.877	< 0.0877	0.0877
Panfish	6/14/2017	< 1.05	1.05	< 0.702	0.702	< 0.0702	0.0702
Panfish	6/14/2017	< 1.22	1.22	< 0.814	0.814	< 0.0814	0.0814
Panfish	6/14/2017	< 1.04	1.04	< 0.691	0.691	< 0.0691	0.0691
Panfish	6/14/2017	< 1.18	1.18	< 0.786	0.786	< 0.0786	0.0786
Panfish	6/14/2017	< 1.45	1.45	< 0.966	0.966	< 0.0966	0.0966
Panfish	6/14/2017	< 1.11	1.11	< 0.741	0.741	< 0.0741	0.0741

Note:

Values highlighted in yellow are laboratory qualified as an estimated value.

Table 10 Nonradiological Fish Sampling Results (continued)

Location: Highway 301 Bridge (continued)

Fish Type	Collection Date	Chromium (µg/g)	Detection Limit (µg/g)	Copper (µg/g)	Detection Limit (µg/g)	Lead (µg/g)	Detection Limit (µg/g)
Bass	6/14/2017	< 0.075	0.075	0.152	0.15	< 0.75	0.75
Bass	6/14/2017	< 0.0684	0.0684	< 0.137	0.137	< 0.684	0.684
Bass	6/14/2017	< 0.0635	0.0635	0.173	0.127	< 0.635	0.635
Bass	6/14/2017	< 0.0705	0.0705	0.144	0.141	< 0.705	0.705
Bass	6/14/2017	< 0.0578	0.0578	< 0.116	0.116	< 0.578	0.578
Bass	6/14/2017	< 0.0879	0.0879	0.177	0.176	< 0.879	0.879
Bass	6/14/2017	< 0.0743	0.0743	0.158	0.149	< 0.743	0.743
Catfish	6/14/2017	< 0.0579	0.0579	0.421	0.116	< 0.579	0.579
Catfish	6/14/2017	< 0.0927	0.0927	0.225	0.185	< 0.927	0.927
Catfish	6/14/2017	< 0.0771	0.0771	0.268	0.154	< 0.771	0.771
Catfish	6/14/2017	< 0.0846	0.0846	0.29	0.169	< 0.846	0.846
Catfish	6/14/2017	< 0.0891	0.0891	0.372	0.178	< 0.891	0.891
Catfish	6/14/2017	< 0.0927	0.0927	0.377	0.185	< 0.927	0.927
Catfish	6/14/2017	0.311	0.0877	0.789	0.148	< 0.741	0.741
Panfish	6/14/2017	< 0.0877	0.0702	< 0.175	0.175	< 0.877	0.877
Panfish	6/14/2017	< 0.0702	0.0814	< 0.14	0.14	< 0.702	0.702
Panfish	6/14/2017	< 0.0814	0.0691	< 0.163	0.163	< 0.814	0.814
Panfish	6/14/2017	< 0.0691	0.0786	< 0.138	0.138	< 0.691	0.691
Panfish	6/14/2017	< 0.0786	0.0966	< 0.157	0.157	< 0.786	0.786
Panfish	6/14/2017	< 0.0966	0.0741	< 0.193	0.193	< 0.966	0.966
Panfish	6/14/2017	< 0.0741	0.0877	< 0.148	0.148	< 0.741	0.741

Note:

Values highlighted in yellow are laboratory qualified as an estimated value.

Table 10 Nonradiological Fish Sampling Results (continued)

Location: Highway 301 Bridge (continued)

Fish Type	Collection Date	Manganese (µg/g)	Detection Limit (µg/g)	Mercury (µg/g)	Detection Limit (µg/g)	Nickel (µg/g)	Detection Limit (µg/g)
Bass	6/14/2017	< 0.075	0.075	0.944	0.02	< 0.15	0.15
Bass	6/14/2017	< 0.0684	0.0684	1.04	0.02	< 0.137	0.137
Bass	6/14/2017	< 0.0635	0.0635	0.894	0.02	< 0.127	0.127
Bass	6/14/2017	< 0.0705	0.0705	0.489	0.02	< 0.141	0.141
Bass	6/14/2017	< 0.0578	0.0578	0.666	0.02	< 0.116	0.116
Bass	6/14/2017	< 0.0879	0.0879	0.563	0.02	< 0.176	0.176
Bass	6/14/2017	< 0.0743	0.0743	0.886	0.02	< 0.149	0.149
Catfish	6/14/2017	0.133	0.0579	0.281	0.02	< 0.116	0.116
Catfish	6/14/2017	0.117	0.0927	0.12	0.02	< 0.185	0.185
Catfish	6/14/2017	0.144	0.0771	0.126	0.02	< 0.154	0.154
Catfish	6/14/2017	0.156	0.0846	0.225	0.02	< 0.169	0.169
Catfish	6/14/2017	0.133	0.0891	0.119	0.02	< 0.178	0.178
Catfish	6/14/2017	0.121	0.0927	0.309	0.02	< 0.185	0.185
Catfish	6/14/2017	0.131	0.0741	0.357	0.02	< 0.148	0.148
Panfish	6/14/2017	< 0.0877	0.0877	0.376	0.02	< 0.175	0.175
Panfish	6/14/2017	0.412	0.0702	0.386	0.02	< 0.14	0.14
Panfish	6/14/2017	< 0.0814	0.0814	0.435	0.02	< 0.163	0.163
Panfish	6/14/2017	< 0.0691	0.0691	0.328	0.02	< 0.138	0.138
Panfish	6/14/2017	0.0869	0.0786	0.315	0.02	< 0.157	0.157
Panfish	6/14/2017	< 0.0966	0.0966	0.283	0.02	< 0.193	0.193
Panfish	6/14/2017	0.0795	0.0741	0.296	0.02	< 0.148	0.148

Note:

Values highlighted in yellow are laboratory qualified as an estimated value.

Table 10 Nonradiological Fish Sampling Results (continued)

Location: Highway 301 Bridge (continued)

Fish Type	Collection Date	Zinc (µg/g)	Detection Limit (µg/g)
Bass	6/14/2017	3.89	0.150
Bass	6/14/2017	3.65	0.137
Bass	6/14/2017	3.46	0.127
Bass	6/14/2017	3.33	0.141
Bass	6/14/2017	2.90	0.116
Bass	6/14/2017	3.88	0.176
Bass	6/14/2017	4.85	0.149
Catfish	6/14/2017	8.37	0.116
Catfish	6/14/2017	5.72	0.185
Catfish	6/14/2017	6.00	0.154
Catfish	6/14/2017	7.09	0.169
Catfish	6/14/2017	5.80	0.178
Catfish	6/14/2017	6.53	0.185
Catfish	6/14/2017	12.70	0.148
Panfish	6/14/2017	5.69	0.175
Panfish	6/14/2017	6.77	0.140
Panfish	6/14/2017	8.43	0.163
Panfish	6/14/2017	5.80	0.138
Panfish	6/14/2017	10.10	0.157
Panfish	6/14/2017	9.30	0.193
Panfish	6/14/2017	3.89	0.148

Table 10 Nonradiological Fish Sampling Results (continued)

Location: Lower Three Runs Creek River Mouth

Fish Type	Collection Date	Antimony (µg/g)	Detection Limit (µg/g)	Arsenic (µg/g)	Detection Limit (µg/g)	Cadmium (µg/g)	Detection Limit (µg/g)
Bass	8/16/2017	< 0.757	0.757	< 0.505	0.505	< 0.0505	0.0505
Bass	8/16/2017	< 0.968	0.968	< 0.646	0.646	< 0.0646	0.0646
Bass	8/16/2017	< 0.878	0.878	< 0.586	0.586	< 0.0586	0.0586
Bass	8/16/2017	< 0.757	0.757	< 0.505	0.505	< 0.0505	0.0505
Bass	8/16/2017	< 1.07	1.07	< 0.715	0.715	< 0.0715	0.0715
Bass	8/16/2017	< 0.899	0.899	< 0.6	0.6	< 0.06	0.06
Bass	8/16/2017	< 1.05	1.05	< 0.698	0.698	< 0.0698	0.0698
Catfish	8/16/2017	< 0.979	0.979	< 0.652	0.652	< 0.0652	0.0652
Catfish	8/16/2017	< 1.23	1.23	< 0.819	0.819	< 0.0819	0.0819
Catfish	8/16/2017	< 1.09	1.09	< 0.726	0.726	< 0.0726	0.0726
Catfish	9/20/2017	< 1.59	1.59	< 1.06	1.06	< 0.106	0.106
Catfish	9/20/2017	< 1.04	1.04	< 0.696	0.696	< 0.0696	0.0696
Panfish	8/16/2017	< 0.965	0.965	< 0.643	0.643	< 0.0643	0.0643
Panfish	8/16/2017	< 1.05	1.05	< 0.702	0.702	< 0.0702	0.0702
Panfish	8/16/2017	< 1.04	1.04	< 0.693	0.693	< 0.0693	0.0693
Panfish	8/16/2017	< 1.22	1.22	< 0.815	0.815	< 0.0815	0.0815
Panfish	8/16/2017	< 0.952	0.952	< 0.634	0.634	< 0.0634	0.0634
Panfish	8/16/2017	< 1.04	1.04	< 0.692	0.692	< 0.0692	0.0692
Panfish	8/16/2017	< 0.847	0.847	< 0.564	0.564	< 0.0564	0.0564

Table 10 Nonradiological Fish Sampling Results (continued)

Location: Lower Three Runs Creek River Mouth (continued)

Fish Type	Collection Date	Chromium (µg/g)	Detection Limit (µg/g)	Copper (µg/g)	Detection Limit (µg/g)	Lead (µg/g)	Detection Limit (µg/g)
Bass	8/16/2017	0.0735	0.0505	< 0.101	0.101	< 0.505	0.505
Bass	8/16/2017	< 0.0646	0.0646	< 0.129	0.129	< 0.646	0.646
Bass	8/16/2017	0.114	0.0586	0.341	0.117	< 0.586	0.586
Bass	8/16/2017	0.0544	0.0505	0.202	0.101	< 0.505	0.505
Bass	8/16/2017	0.0914	0.0715	< 0.143	0.143	< 0.715	0.715
Bass	8/16/2017	0.0751	0.06	0.123	0.12	< 0.6	0.6
Bass	8/16/2017	< 0.0698	0.0698	< 0.14	0.14	< 0.698	0.698
Catfish	8/16/2017	< 0.0652	0.0652	0.363	0.13	< 0.652	0.652
Catfish	8/16/2017	< 0.0819	0.0819	0.563	0.164	< 0.819	0.819
Catfish	8/16/2017	< 0.0726	0.0726	0.391	0.145	< 0.726	0.726
Catfish	9/20/2017	< 0.106	0.106	0.349	0.212	< 1.06	1.06
Catfish	9/20/2017	< 0.0696	0.0696	0.193	0.139	< 0.696	0.696
Panfish	8/16/2017	< 0.0643	0.0643	0.24	0.129	< 0.643	0.643
Panfish	8/16/2017	0.0883	0.0702	0.241	0.14	< 0.702	0.702
Panfish	8/16/2017	< 0.0693	0.0693	0.416	0.139	< 0.693	0.693
Panfish	8/16/2017	< 0.0815	0.0815	0.382	0.163	< 0.815	0.815
Panfish	8/16/2017	< 0.0634	0.0634	< 0.127	0.127	< 0.634	0.634
Panfish	8/16/2017	< 0.0692	0.0692	0.544	0.138	< 0.692	0.692
Panfish	8/16/2017	< 0.0564	0.0564	0.285	0.113	< 0.564	0.564

Note:

Values highlighted in yellow are laboratory qualified as an estimated value.

Table 10 Nonradiological Fish Sampling Results (continued)

Location: Lower Three Runs Creek River Mouth (continued)

Fish Type	Collection Date	Manganese (µg/g)	Detection Limit (µg/g)	Mercury (µg/g)	Detection Limit (µg/g)	Nickel (µg/g)	Detection Limit (µg/g)
Bass	8/16/2017	0.0564	0.0505	0.792	0.02	< 0.101	0.101
Bass	8/16/2017	0.0932	0.0646	0.674	0.02	< 0.129	0.129
Bass	8/16/2017	0.0748	0.0586	0.717	0.02	< 0.117	0.117
Bass	8/16/2017	0.064	0.0505	0.452	0.02	< 0.101	0.101
Bass	8/16/2017	0.076	0.0715	0.202	0.02	< 0.143	0.143
Bass	8/16/2017	0.0672	0.06	0.583	0.02	< 0.12	0.12
Bass	8/16/2017	< 0.0698	0.0698	0.436	0.02	< 0.14	0.14
Catfish	8/16/2017	0.132	0.0652	0.237	0.02	< 0.13	0.13
Catfish	8/16/2017	0.0897	0.0819	0.324	0.02	< 0.164	0.164
Catfish	8/16/2017	0.139	0.0726	0.196	0.02	< 0.145	0.145
Catfish	9/20/2017	0.244	0.106	0.372	0.02	< 0.212	0.212
Catfish	9/20/2017	0.166	0.0696	0.0684	0.02	< 0.139	0.139
Panfish	8/16/2017	0.0841	0.0643	0.0872	0.02	< 0.129	0.129
Panfish	8/16/2017	0.101	0.0702	0.243	0.02	< 0.14	0.14
Panfish	8/16/2017	0.0813	0.0693	0.227	0.02	< 0.139	0.139
Panfish	8/16/2017	0.228	0.0815	0.113	0.02	< 0.163	0.163
Panfish	8/16/2017	0.0876	0.0634	0.633	0.02	< 0.127	0.127
Panfish	8/16/2017	< 0.0692	0.0692	0.559	0.02	< 0.138	0.138
Panfish	8/16/2017	0.085	0.0564	0.316	0.02	< 0.113	0.113

Note:

Values highlighted in yellow are laboratory qualified as an estimated value.

Table 10 Nonradiological Fish Sampling Results (continued)

Location: Lower Three Runs Creek River Mouth (continued)

Fish Type	Collection Date	Zinc (µg/g)	Detection Limit (µg/g)
Bass	8/16/2017	3.05	0.101
Bass	8/16/2017	4.86	0.129
Bass	8/16/2017	3.52	0.117
Bass	8/16/2017	3.6	0.101
Bass	8/16/2017	3.77	0.143
Bass	8/16/2017	4.23	0.12
Bass	8/16/2017	6.35	0.14
Catfish	8/16/2017	6.77	0.13
Catfish	8/16/2017	9.06	0.164
Catfish	8/16/2017	6.09	0.145
Catfish	9/20/2017	7.41	0.212
Catfish	9/20/2017	5.16	0.139
Panfish	8/16/2017	5.97	0.129
Panfish	8/16/2017	4.9	0.14
Panfish	8/16/2017	7.87	0.139
Panfish	8/16/2017	7.29	0.163
Panfish	8/16/2017	3.21	0.127
Panfish	8/16/2017	4.27	0.138
Panfish	8/16/2017	4.61	0.113

Table 10 Nonradiological Fish Sampling Results (continued)

Location: New Savannah Bluff Lock and Dam

Fish Type	Collection Date	Antimony (µg/g)	Detection Limit (µg/g)	Arsenic (µg/g)	Detection Limit (µg/g)	Cadmium (µg/g)	Detection Limit (µg/g)
Bass	7/12/2017	< 1.25	1.25	1.720	0.835	< 0.0835	0.0835
Bass	7/12/2017	< 0.824	0.824	0.731	0.549	< 0.0549	0.0549
Bass	7/12/2017	< 0.905	0.905	0.752	0.603	< 0.0603	0.0603
Bass	7/26/2017	< 1.16	1.16	< 0.776	0.776	< 0.0776	0.0776
Bass	7/26/2017	< 1.11	1.11	< 0.742	0.742	< 0.0742	0.0742
Bass	7/26/2017	< 0.75	0.75	< 0.500	0.500	< 0.05	0.05
Bass	7/26/2017	< 0.894	0.894	< 0.596	0.596	< 0.0596	0.0596
Catfish	7/12/2017	< 1.10	1.10	1.140	0.735	< 0.0735	0.0735
Catfish	7/12/2017	< 1.27	1.27	< 0.846	0.846	< 0.0846	0.0846
Catfish	7/12/2017	< 1.26	1.26	0.878	0.839	< 0.0839	0.0839
Catfish	7/12/2017	< 1.19	1.19	0.893	0.791	< 0.0791	0.0791
Catfish	7/12/2017	< 1.49	1.49	< 0.995	0.995	< 0.0995	0.0995
Catfish	7/12/2017	< 0.904	0.904	1.190	0.603	< 0.0603	0.0603
Catfish	7/12/2017	< 1.04	1.04	1.000	0.692	< 0.0692	0.0692
Panfish	7/12/2017	< 1.01	1.01	< 0.671	0.671	< 0.0671	0.0671
Panfish	7/12/2017	< 1.08	1.08	< 0.723	0.723	< 0.0723	0.0723
Panfish	7/12/2017	< 1.19	1.19	1.110	0.793	< 0.0793	0.0793
Panfish	7/12/2017	< 1.27	1.27	< 0.846	0.846	< 0.0846	0.0846
Panfish	7/12/2017	< 1.05	1.05	0.967	0.701	< 0.0701	0.0701
Panfish	7/12/2017	< 1.44	1.44	< 0.961	0.961	< 0.0961	0.0961
Panfish	7/12/2017	< 1.06	1.06	0.754	0.707	< 0.0707	0.0707

Table 10 Nonradiological Fish Sampling Results (continued)

Location: New Savannah Bluff Lock and Dam (continued)

Fish Type	Collection Date	Chromium (µg/g)	Detection Limit (µg/g)	Copper (µg/g)	Detection Limit (µg/g)	Lead (µg/g)	Detection Limit (µg/g)
Bass	7/12/2017	< 0.0835	0.0835	0.289	0.167	< 0.835	0.835
Bass	7/12/2017	0.0577	0.0549	0.213	0.11	< 0.549	0.549
Bass	7/12/2017	0.0651	0.0603	0.404	0.121	< 0.603	0.603
Bass	7/26/2017	< 0.0776	0.0776	0.222	0.155	< 0.776	0.776
Bass	7/26/2017	< 0.0742	0.0742	0.155	0.148	< 0.742	0.742
Bass	7/26/2017	0.0827	0.0500	0.181	0.1	< 0.500	0.500
Bass	7/26/2017	0.0699	0.0596	< 0.119	0.119	< 0.596	0.596
Catfish	7/12/2017	< 0.0735	0.0735	0.297	0.147	< 0.735	0.735
Catfish	7/12/2017	< 0.0846	0.0846	0.397	0.169	< 0.846	0.846
Catfish	7/12/2017	< 0.0839	0.0839	0.695	0.168	< 0.839	0.839
Catfish	7/12/2017	0.0922	0.0791	0.354	0.158	< 0.791	0.791
Catfish	7/12/2017	< 0.0995	0.0995	0.442	0.199	< 0.995	0.995
Catfish	7/12/2017	< 0.0603	0.0603	0.237	0.121	< 0.603	0.603
Catfish	7/12/2017	0.0750	0.0692	0.248	0.138	< 0.692	0.692
Panfish	7/12/2017	0.0749	0.0671	0.255	0.134	< 0.671	0.671
Panfish	7/12/2017	< 0.0723	0.0723	0.407	0.145	< 0.723	0.723
Panfish	7/12/2017	< 0.0793	0.0793	0.19	0.159	< 0.793	0.793
Panfish	7/12/2017	0.0884	0.0846	0.379	0.169	< 0.846	0.846
Panfish	7/12/2017	< 0.0701	0.0701	0.24	0.14	< 0.701	0.701
Panfish	7/12/2017	< 0.0961	0.0961	0.407	0.192	< 0.961	0.961
Panfish	7/12/2017	0.1010	0.0707	0.19	0.141	< 0.707	0.707

Note:

Values highlighted in yellow are laboratory qualified as an estimated value.

Table 10 Nonradiological Fish Sampling Results (continued)

Location: New Savannah Bluff Lock and Dam (continued)

Fish Type	Collection Date	Manganese (µg/g)	Detection Limit (µg/g)	Mercury (µg/g)	Detection Limit (µg/g)	Nickel (µg/g)	Detection Limit (µg/g)
Bass	7/12/2017	< 0.0835	0.0835	0.5040	0.02	< 0.167	0.167
Bass	7/12/2017	< 0.0549	0.0549	0.3550	0.02	< 0.110	0.110
Bass	7/12/2017	0.132	0.0603	0.0703	0.02	< 0.121	0.121
Bass	7/26/2017	< 0.0776	0.0776	0.0798	0.02	< 0.155	0.155
Bass	7/26/2017	< 0.0742	0.0742	0.2930	0.02	< 0.148	0.148
Bass	7/26/2017	0.0829	0.0500	0.1090	0.02	< 0.100	0.100
Bass	7/26/2017	0.0809	0.0596	0.3770	0.02	< 0.119	0.119
Catfish	7/12/2017	0.1030	0.0735	0.2440	0.02	< 0.147	0.147
Catfish	7/12/2017	0.2400	0.0846	0.0972	0.02	< 0.169	0.169
Catfish	7/12/2017	0.2250	0.0839	0.1100	0.02	0.247	0.168
Catfish	7/12/2017	0.1230	0.0791	0.2550	0.02	< 0.158	0.158
Catfish	7/12/2017	0.1180	0.0995	0.1270	0.02	< 0.199	0.199
Catfish	7/12/2017	0.1760	0.0603	0.0457	0.02	< 0.121	0.121
Catfish	7/12/2017	0.1560	0.0692	0.0462	0.02	< 0.138	0.138
Panfish	7/12/2017	0.1320	0.0671	0.0392	0.02	< 0.134	0.134
Panfish	7/12/2017	0.1970	0.0723	0.0407	0.02	< 0.145	0.145
Panfish	7/12/2017	0.1030	0.0793	0.0243	0.02	< 0.159	0.159
Panfish	7/12/2017	0.1700	0.0846	0.0684	0.02	< 0.169	0.169
Panfish	7/12/2017	0.1680	0.0701	0.0596	0.02	< 0.140	0.140
Panfish	7/12/2017	0.1840	0.0961	0.0656	0.02	< 0.192	0.192
Panfish	7/12/2017	1.0300	0.0707	0.1300	0.02	0.180	0.141

Note:

Values highlighted in yellow are laboratory qualified as an estimated value.

Table 10 Nonradiological Fish Sampling Results (continued)

Location: New Savannah Bluff Lock and Dam (continued)

Fish Type	Collection Date	Zinc (µg/g)	Detection Limit (µg/g)
Bass	7/12/2017	4.86	0.167
Bass	7/12/2017	4.37	0.110
Bass	7/12/2017	4.66	0.121
Bass	7/26/2017	4.47	0.155
Bass	7/26/2017	4.53	0.148
Bass	7/26/2017	3.77	0.100
Bass	7/26/2017	4.45	0.119
Catfish	7/12/2017	8.01	0.147
Catfish	7/12/2017	12.2	0.169
Catfish	7/12/2017	8.51	0.168
Catfish	7/12/2017	7.13	0.158
Catfish	7/12/2017	11.3	0.199
Catfish	7/12/2017	7.31	0.121
Catfish	7/12/2017	5.54	0.138
Panfish	7/12/2017	6.93	0.134
Panfish	7/12/2017	5.75	0.145
Panfish	7/12/2017	6.47	0.159
Panfish	7/12/2017	5.64	0.169
Panfish	7/12/2017	6.55	0.140
Panfish	7/12/2017	7.97	0.192
Panfish	7/12/2017	7.74	0.141

Table 10 Nonradiological Fish Sampling Results (continued)

Location: Steel Creek River Mouth (incomplete – missing one catfish)

Fish Type	Collection Date	Antimony (µg/g)	Detection Limit (µg/g)	Arsenic (µg/g)	Detection Limit (µg/g)	Cadmium (µg/g)	Detection Limit (µg/g)
Bass	4/19/2017	< 0.918	0.918	< 0.612	0.612	< 0.0612	0.0612
Bass	4/19/2017	< 0.833	0.833	< 0.555	0.555	< 0.0555	0.0555
Bass	4/19/2017	< 0.775	0.775	< 0.517	0.517	< 0.0517	0.0517
Bass	4/19/2017	< 0.949	0.949	< 0.633	0.633	< 0.0633	0.0633
Bass	4/19/2017	< 0.975	0.975	< 0.650	0.650	< 0.065	0.065
Bass	4/19/2017	< 0.828	0.828	< 0.552	0.552	< 0.0552	0.0552
Bass	4/19/2017	< 1.210	1.210	< 0.805	0.805	< 0.0805	0.0805
Catfish	4/19/2017	< 0.769	0.769	< 0.512	0.512	< 0.0512	0.0512
Catfish	4/19/2017	< 1.170	1.170	< 0.777	0.777	< 0.0777	0.0777
Catfish	4/19/2017	< 1.180	1.180	< 0.783	0.783	< 0.0783	0.0783
Catfish	4/19/2017	NA	NA	NA	NA	NA	NA
Catfish	4/19/2017	< 1.330	1.330	< 0.886	0.886	< 0.0886	0.0886
Catfish	4/19/2017	< 0.911	0.911	< 0.607	0.607	< 0.0607	0.0607
Catfish	4/19/2017	< 0.902	0.902	< 0.601	0.601	0.103	0.0601
Panfish	4/19/2017	< 0.859	0.859	< 0.573	0.573	< 0.0573	0.0573
Panfish	4/19/2017	< 1.030	1.030	< 0.689	0.689	< 0.0689	0.0689
Panfish	4/19/2017	< 1.580	1.580	< 1.060	1.060	< 0.106	0.106
Panfish	4/19/2017	< 1.050	1.050	< 0.703	0.703	< 0.0703	0.0703
Panfish	4/19/2017	< 1.010	1.010	< 0.671	0.671	< 0.0671	0.0671
Panfish	4/19/2017	< 1.340	1.340	< 0.891	0.891	< 0.0891	0.0891
Panfish	4/19/2017	< 0.996	0.996	< 0.664	0.664	< 0.0664	0.0664

Note:

Values highlighted in yellow are laboratory qualified as an estimated value.

NA = not analyzed

Table 10 Nonradiological Fish Sampling Results (continued)

Location: Steel Creek River Mouth (continued)

Fish Type	Collection Date	Chromium (µg/g)	Detection Limit (µg/g)	Copper (µg/g)	Detection Limit (µg/g)	Lead (µg/g)	Detection Limit (µg/g)
Bass	4/19/2017	0.0616	0.0612	0.178	0.122	< 0.612	0.612
Bass	4/19/2017	0.0898	0.0555	0.439	0.111	< 0.555	0.555
Bass	4/19/2017	0.1560	0.0517	0.207	0.103	< 0.517	0.517
Bass	4/19/2017	< 0.0633	0.0633	0.235	0.127	< 0.633	0.633
Bass	4/19/2017	< 0.0650	0.0650	< 0.130	0.130	< 0.65	0.65
Bass	4/19/2017	0.0833	0.0552	0.192	0.110	< 0.552	0.552
Bass	4/19/2017	< 0.0805	0.0805	0.303	0.161	< 0.805	0.805
Catfish	4/19/2017	< 0.0512	0.0512	0.133	0.102	< 0.512	0.512
Catfish	4/19/2017	< 0.0777	0.0777	< 0.155	0.155	< 0.777	0.777
Catfish	4/19/2017	< 0.0783	0.0783	0.180	0.157	< 0.783	0.783
Catfish	4/19/2017	NA	NA	NA	NA	NA	NA
Catfish	4/19/2017	< 0.0886	0.0886	< 0.177	0.177	< 0.886	0.886
Catfish	4/19/2017	< 0.0607	0.0607	0.240	0.121	< 0.607	0.607
Catfish	4/19/2017	0.1010	0.0601	0.162	0.12	< 0.601	0.601
Panfish	4/19/2017	0.0686	0.0573	< 0.115	0.115	< 0.573	0.573
Panfish	4/19/2017	0.0971	0.0689	0.147	0.138	< 0.689	0.689
Panfish	4/19/2017	< 0.1060	0.1060	< 0.211	0.211	< 1.06	1.06
Panfish	4/19/2017	< 0.0703	0.0703	< 0.141	0.141	< 0.703	0.703
Panfish	4/19/2017	< 0.0671	0.0671	0.185	0.134	< 0.671	0.671
Panfish	4/19/2017	< 0.0891	0.0891	0.343	0.178	< 0.891	0.891
Panfish	4/19/2017	< 0.0664	0.0664	0.164	0.133	< 0.664	0.664

Note:

Values highlighted in yellow are laboratory qualified as an estimated value.

NA = not analyzed

Table 10 Nonradiological Fish Sampling Results (continued)

Location: Steel Creek River Mouth (continued)

Fish Type	Collection Date	Manganese (µg/g)	Detection Limit (µg/g)	Mercury (µg/g)	Detection Limit (µg/g)	Nickel (µg/g)	Detection Limit (µg/g)
Bass	4/19/2017	< 0.0612	0.0612	0.224	0.02	< 0.122	0.122
Bass	4/19/2017	0.1050	0.0555	0.349	0.02	0.142	0.111
Bass	4/19/2017	0.0715	0.0517	0.265	0.02	< 0.103	0.103
Bass	4/19/2017	< 0.0633	0.0633	0.341	0.02	< 0.127	0.127
Bass	4/19/2017	< 0.0650	0.0650	0.559	0.02	< 0.13	0.13
Bass	4/19/2017	< 0.0552	0.0552	0.212	0.02	< 0.11	0.11
Bass	4/19/2017	< 0.0805	0.0805	0.473	0.02	< 0.161	0.161
Catfish	4/19/2017	0.1290	0.0512	0.204	0.02	< 0.102	0.102
Catfish	4/19/2017	0.1920	0.0777	0.206	0.02	< 0.155	0.155
Catfish	4/19/2017	0.1610	0.0783	0.110	0.02	< 0.157	0.157
Catfish	4/19/2017	NA	NA	0.277	0.02	NA	NA
Catfish	4/19/2017	0.1090	0.0886	0.181	0.02	< 0.177	0.177
Catfish	4/19/2017	0.1630	0.0607	0.218	0.02	< 0.121	0.121
Catfish	4/19/2017	0.2000	0.0601	0.214	0.02	< 0.12	0.12
Panfish	4/19/2017	< 0.0573	0.0573	0.228	0.02	< 0.115	0.115
Panfish	4/19/2017	0.2010	0.0689	0.153	0.02	< 0.138	0.138
Panfish	4/19/2017	< 0.1060	0.106	0.283	0.02	< 0.211	0.211
Panfish	4/19/2017	< 0.0703	0.0703	0.151	0.02	< 0.141	0.141
Panfish	4/19/2017	< 0.0671	0.0671	0.335	0.02	< 0.134	0.134
Panfish	4/19/2017	0.2000	0.0891	0.0601	0.02	< 0.178	0.178
Panfish	4/19/2017	0.1320	0.0664	0.0539	0.02	< 0.133	0.133

NOTE: Values highlighted in yellow are laboratory qualified as an estimated value.

NA = not analyzed.

Table 10 Nonradiological Fish Sampling Results (continued)

Location: Steel Creek River Mouth (continued)

Fish Type	Collection Date	Zinc (µg/g)	Detection Limit (µg/g)
Bass	4/19/2017	3.38	0.122
Bass	4/19/2017	5.94	0.111
Bass	4/19/2017	4.47	0.103
Bass	4/19/2017	3.83	0.127
Bass	4/19/2017	3.68	0.13
Bass	4/19/2017	3.72	0.11
Bass	4/19/2017	3.92	0.161
Catfish	4/19/2017	4.08	0.102
Catfish	4/19/2017	3.26	0.155
Catfish	4/19/2017	5.74	0.157
Catfish	4/19/2017	NA	NA
Catfish	4/19/2017	3.58	0.177
Catfish	4/19/2017	4.75	0.121
Catfish	4/19/2017	4.56	0.12
Panfish	4/19/2017	3.88	0.115
Panfish	4/19/2017	5.49	0.138
Panfish	4/19/2017	3.09	0.211
Panfish	4/19/2017	5.66	0.141
Panfish	4/19/2017	5.27	0.134
Panfish	4/19/2017	4.74	0.178
Panfish	4/19/2017	4.89	0.133

NOTE: NA = not analyzed

Table 10 Nonradiological Fish Sampling Results (continued)

Location: Upper Three Runs Creek River Mouth (incomplete – missing some bass and panfish)

Fish Type	Collection Date	Antimony (µg/g)	Detection Limit (µg/g)	Arsenic (µg/g)	Detection Limit (µg/g)	Cadmium (µg/g)	Detection Limit (µg/g)
Bass	3/8/2017	< 1.27	1.27	< 0.845	0.845	0.1280	0.0845
Bass	3/8/2017	< 1.41	1.41	< 0.943	0.943	< 0.0943	0.0943
Bass	3/8/2017	< 1.13	1.13	< 0.756	0.756	0.2050	0.0756
Bass	3/8/2017	< 1.42	1.42	< 0.946	0.946	< 0.0946	0.0946
Bass	3/8/2017	< 1.34	1.34	< 0.895	0.895	< 0.0895	0.0895
Bass	3/8/2017	< 1.00	1.00	< 0.667	0.667	< 0.0667	0.0667
Bass	NA	NA	NA	NA	NA	NA	NA
Catfish	3/8/2017	< 1.35	1.35	< 0.9	0.9	0.0901	0.0900
Catfish	3/8/2017	< 1.33	1.33	< 0.889	0.889	< 0.0889	0.0889
Catfish	3/8/2017	< 1.00	1.00	< 0.667	0.667	< 0.0667	0.0667
Catfish	3/8/2017	< 1.12	1.12	< 0.75	0.75	< 0.075	0.075
Catfish	3/8/2017	< 1.03	1.03	< 0.689	0.689	< 0.0689	0.0689
Catfish	3/8/2017	< 11.6	11.6	< 7.76	7.76	< 0.776	0.776
Catfish	3/8/2017	< 1.35	1.35	< 0.903	0.903	< 0.0903	0.0903
Panfish	3/8/2017	< 1.27	1.27	< 0.845	0.845	< 0.0845	0.0845
Panfish	3/8/2017	< 1.14	1.14	< 0.758	0.758	< 0.0758	0.0758
Panfish	3/8/2017	< 1.38	1.38	< 0.918	0.918	< 0.0918	0.0918
Panfish	3/8/2017	< 1.38	1.38	< 0.921	0.921	< 0.0921	0.0921
Panfish	NA	NA	NA	NA	NA	NA	NA
Panfish	NA	NA	NA	NA	NA	NA	NA
Panfish	NA	NA	NA	NA	NA	NA	NA

NOTE: Values highlighted in yellow are laboratory qualified as an estimated value.

Table 10 Nonradiological Fish Sampling Results (continued)

Location: Upper Three Runs Creek River Mouth (continued)

Fish Type	Collection Date	Chromium (µg/g)	Detection Limit (µg/g)	Copper (µg/g)	Detection Limit (µg/g)	Lead (µg/g)	Detection Limit (µg/g)
Bass	3/8/2017	< 0.0845	0.0845	0.182	0.169	< 0.845	0.845
Bass	3/8/2017	< 0.0943	0.0943	< 0.189	0.189	< 0.943	0.943
Bass	3/8/2017	0.0842	0.0756	0.189	0.151	< 0.756	0.756
Bass	3/8/2017	< 0.0946	0.0946	0.223	0.189	< 0.946	0.946
Bass	3/8/2017	< 0.0895	0.0895	0.201	0.179	< 0.895	0.895
Bass	3/8/2017	0.0695	0.0667	0.196	0.133	< 0.667	0.667
Bass	NA	NA	NA	NA	NA	NA	NA
Catfish	3/8/2017	0.1600	0.0900	0.633	0.180	< 0.900	0.900
Catfish	3/8/2017	< 0.0889	0.0889	0.513	0.178	< 0.889	0.889
Catfish	3/8/2017	< 0.0667	0.0667	0.412	0.133	< 0.667	0.667
Catfish	3/8/2017	0.0761	0.0750	0.510	0.150	< 0.750	0.750
Catfish	3/8/2017	0.0709	0.0689	0.511	0.138	< 0.689	0.689
Catfish	3/8/2017	< 0.7760	0.7760	< 1.550	1.550	< 7.760	7.760
Catfish	3/8/2017	< 0.0903	0.0903	0.461	0.181	< 0.903	0.903
Panfish	3/8/2017	< 0.0845	0.0845	0.299	0.169	< 0.845	0.845
Panfish	3/8/2017	0.0799	0.0758	0.249	0.152	< 0.758	0.758
Panfish	3/8/2017	< 0.0918	0.0918	0.539	0.184	< 0.918	0.918
Panfish	3/8/2017	< 0.0921	0.0921	0.205	0.184	< 0.921	0.921
Panfish	NA	NA	NA	NA	NA	NA	NA
Panfish	NA	NA	NA	NA	NA	NA	NA
Panfish	NA	NA	NA	NA	NA	NA	NA

NOTE: Values highlighted in yellow are laboratory qualified as an estimated value.

Table 10 Nonradiological Fish Sampling Results (continued)

Location: Upper Three Runs Creek River Mouth (continued)

Fish Type	Collection Date	Manganese (µg/g)	Detection Limit (µg/g)	Mercury (µg/g)	Detection Limit (µg/g)	Nickel (µg/g)	Detection Limit (µg/g)
Bass	3/8/2017	0.282	0.0845	0.99	0.02	< 0.169	0.169
Bass	3/8/2017	0.467	0.0943	2.10	0.02	< 0.189	0.189
Bass	3/8/2017	0.126	0.0756	1.04	0.02	< 0.151	0.151
Bass	3/8/2017	0.381	0.0946	1.06	0.02	< 0.189	0.189
Bass	3/8/2017	0.091	0.0895	0.34	0.02	< 0.179	0.179
Bass	3/8/2017	0.073	0.0667	0.43	0.02	< 0.133	0.133
Bass	3/8/2017	NA	NA	0.50	0.02	NA	NA
Catfish	3/8/2017	0.419	0.0900	0.20	0.02	< 0.180	0.180
Catfish	3/8/2017	0.442	0.0889	0.27	0.02	< 0.178	0.178
Catfish	3/8/2017	0.239	0.0667	0.08	0.02	< 0.133	0.133
Catfish	3/8/2017	0.187	0.0750	0.23	0.02	< 0.150	0.150
Catfish	3/8/2017	0.243	0.0689	0.58	0.02	< 0.138	0.138
Catfish	3/8/2017	< 0.776	0.7760	0.30	0.02	< 1.550	1.550
Catfish	3/8/2017	0.243	0.0903	0.56	0.02	< 0.181	0.181
Panfish	3/8/2017	0.15	0.0845	0.07	0.02	< 0.169	0.169
Panfish	3/8/2017	0.388	0.0758	0.14	0.02	< 0.152	0.152
Panfish	3/8/2017	0.122	0.0918	0.08	0.02	< 0.184	0.184
Panfish	3/8/2017	0.111	0.0921	0.08	0.02	< 0.184	0.184
Panfish	3/8/2017	NA	NA	0.32	0.02	NA	NA
Panfish	3/8/2017	NA	NA	0.33	0.02	NA	NA
Panfish	3/8/2017	NA	NA	0.08	0.02	NA	NA

NOTE: Values highlighted in yellow are laboratory qualified as an estimated value.

NA = not analyzed.

Table 10 Nonradiological Fish Sampling Results (continued)

Location: Upper Three Runs Creek River Mouth (continued)

Fish Type	Collection Date	Zinc (µg/g)	Detection Limit (µg/g)
Bass	3/16/2016	3.41	0.169
Bass	3/16/2016	2.75	0.189
Bass	3/16/2016	3.15	0.151
Bass	3/16/2016	5.51	0.189
Bass	3/16/2016	3.41	0.179
Bass	3/16/2016	3.3	0.133
Bass	NA	NA	NA
Catfish	3/16/2016	5.67	0.18
Catfish	3/16/2016	5.17	0.178
Catfish	5/4/2016	5.17	0.133
Catfish	5/4/2016	5.42	0.15
Catfish	5/4/2016	8.94	0.138
Catfish	5/4/2016	5.15	1.55
Catfish	5/4/2016	9.5	0.181
Panfish	3/16/2016	5.25	0.169
Panfish	3/16/2016	3.85	0.152
Panfish	3/16/2016	5.18	0.184
Panfish	3/16/2016	5.06	0.184
Panfish	NA	NA	NA
Panfish	NA	NA	NA
Panfish	NA	NA	NA

NOTE: Values highlighted in yellow are laboratory qualified as an estimated value.
NA = not analyzed.

Table 10 Nonradiological Fish Sampling Results (continued)

Location: River Miles 0-8 (complete)

Fish Type	Collection Date	Antimony (µg/g)	Detection Limit (µg/g)	Arsenic (µg/g)	Detection Limit (µg/g)	Cadmium (µg/g)	Detection Limit (µg/g)
Mullet	1/24/2017	< 1.17	1.17	< 0.783	0.783	< 0.0783	0.0783
Mullet	1/24/2017	< 1.36	1.36	< 0.91	0.91	< 0.091	0.091
Mullet	1/24/2017	< 1.32	1.32	< 0.883	0.883	< 0.0883	0.0883
Mullet	1/24/2017	< 1.42	1.42	< 0.945	0.945	< 0.0945	0.0945
Mullet	1/24/2017	< 1.43	1.43	< 0.956	0.956	< 0.0956	0.0956
Mullet	1/24/2017	< 1.23	1.23	< 0.821	0.821	< 0.0821	0.0821
Mullet	1/24/2017	< 0.763	0.763	0.705	0.508	< 0.0508	0.0508
Red Drum	1/24/2017	< 1.20	1.20	< 0.8	0.8	< 0.08	0.08
Red Drum	1/24/2017	< 1.11	1.11	< 0.739	0.739	< 0.0739	0.0739
Red Drum	1/24/2017	< 1.35	1.35	1.03	0.9	0.09	0.09
Red Drum	1/24/2017	< 1.09	1.09	< 0.726	0.726	< 0.0726	0.0726
Red Drum	1/24/2017	< 1.32	1.32	< 0.881	0.881	< 0.0881	0.0881
Red Drum	1/24/2017	< 1.15	1.15	0.973	0.765	< 0.0765	0.0765
Red Drum	1/24/2017	< 0.943	0.943	0.656	0.629	< 0.0629	0.0629
Sea Trout	11/7/2016	< 1.39	1.39	< 0.93	0.93	< 0.093	0.093
Sea Trout	12/7/2016	< 1.18	1.18	< 0.784	0.784	< 0.0784	0.0784
Sea Trout	12/20/2016	< 1.25	1.25	< 0.833	0.833	< 0.0833	0.0833
Sea Trout	12/20/2016	< 1.25	1.25	< 0.833	0.833	< 0.0833	0.0833
Sea Trout	12/20/2016	< 0.765	0.765	< 0.51	0.51	< 0.051	0.051
Sea Trout	12/20/2016	< 0.948	0.948	< 0.632	0.632	< 0.0632	0.0632
Sea Trout	12/20/2016	< 0.948	0.948	< 0.632	0.632	< 0.0632	0.0632

NOTE:

Values highlighted in yellow are laboratory qualified as an estimated value.

Table 10 Nonradiological Fish Sampling Results (continued)

Location: River Miles 0-8 (continued)

Fish Type	Collection Date	Chromium (µg/g)	Detection Limit (µg/g)	Copper (µg/g)	Detection Limit (µg/g)	Lead (µg/g)	Detection Limit (µg/g)
Mullet	1/24/2017	0.112	0.0783	0.408	0.157	< 0.783	0.783
Mullet	1/24/2017	< 0.091	0.091	0.393	0.182	< 0.91	0.91
Mullet	1/24/2017	0.445	0.0883	0.735	0.177	< 0.883	0.883
Mullet	1/24/2017	0.130	0.0945	< 0.189	0.189	< 0.945	0.945
Mullet	1/24/2017	< 0.0956	0.0956	0.624	0.191	< 0.956	0.956
Mullet	1/24/2017	0.245	0.0821	0.577	0.164	< 0.821	0.821
Mullet	1/24/2017	0.0865	0.0508	0.927	0.102	< 0.508	0.508
Red Drum	1/24/2017	< 0.08	0.08	0.355	0.16	< 0.8	0.8
Red Drum	1/24/2017	< 0.0739	0.0739	0.208	0.148	< 0.739	0.739
Red Drum	1/24/2017	< 0.09	0.09	0.224	0.18	< 0.9	0.9
Red Drum	1/24/2017	< 0.0726	0.0726	0.386	0.145	< 0.726	0.726
Red Drum	1/24/2017	0.391	0.0881	0.346	0.176	< 0.881	0.881
Red Drum	1/24/2017	< 0.0765	0.0765	0.214	0.153	< 0.765	0.765
Red Drum	1/24/2017	< 0.0629	0.0629	0.28	0.126	< 0.629	0.629
Sea Trout	11/7/2016	< 0.093	0.093	0.293	0.186	< 0.93	0.93
Sea Trout	12/7/2016	0.0815	0.0784	0.323	0.157	< 0.784	0.784
Sea Trout	12/20/2016	0.0997	0.0833	0.24	0.126	< 0.833	0.833
Sea Trout	12/20/2016	0.125	0.0833	0.354	0.126	< 0.833	0.833
Sea Trout	12/20/2016	< 0.051	0.051	0.287	0.102	< 0.51	0.51
Sea Trout	12/20/2016	< 0.0632	0.0632	0.351	0.167	< 0.632	0.632
Sea Trout	12/20/2016	< 0.0632	0.0632	0.327	0.167	< 0.632	0.632

NOTE:

Values highlighted in yellow are laboratory qualified as an estimated value.

Table 10 Nonradiological Fish Sampling Results (continued)

Location: River Miles 0-8 (continued)

Fish Type	Collection Date	Manganese (µg/g)	Detection Limit (µg/g)	Mercury (µg/g)	Detection Limit (µg/g)	Nickel (µg/g)	Detection Limit (µg/g)
Mullet	1/24/2017	0.174	0.0783	0.0203	0.02	< 0.157	0.157
Mullet	1/24/2017	0.13	0.091	< 0.02	0.02	< 0.182	0.182
Mullet	1/24/2017	0.939	0.0883	< 0.02	0.02	< 0.177	0.177
Mullet	1/24/2017	0.258	0.0945	< 0.02	0.02	< 0.189	0.189
Mullet	1/24/2017	0.164	0.0956	< 0.02	0.02	< 0.191	0.191
Mullet	1/24/2017	1.09	0.0821	< 0.02	0.02	< 0.164	0.164
Mullet	1/24/2017	0.264	0.0508	< 0.02	0.02	< 0.102	0.102
Red Drum	1/24/2017	0.0933	0.08	0.199	0.02	0.16	0.16
Red Drum	1/24/2017	0.0951	0.0739	0.0935	0.02	< 0.148	0.148
Red Drum	1/24/2017	0.121	0.09	0.115	0.02	0.18	0.18
Red Drum	1/24/2017	0.153	0.0726	0.0937	0.02	0.145	0.145
Red Drum	1/24/2017	0.222	0.0881	0.18	0.02	< 0.176	0.176
Red Drum	1/24/2017	0.236	0.0765	0.166	0.02	< 0.153	0.153
Red Drum	1/24/2017	0.189	0.0629	0.099	0.02	< 0.126	0.126
Sea Trout	10/30/2017	0.125	0.093	0.174	0.02	0.343	0.186
Sea Trout	10/30/2017	< 0.0784	0.0784	0.216	0.02	0.244	0.157
Sea Trout	11/13/2017	< 0.0632	0.0632	0.177	0.02	0.235	0.167
Sea Trout	11/13/2017	< 0.0632	0.0632	0.114	0.02	0.204	0.167
Sea Trout	11/13/2017	< 0.051	0.051	0.121	0.02	< 0.102	0.102
Sea Trout	11/13/2017	< 0.0833	0.0833	0.0579	0.02	0.154	0.126
Sea Trout	12/11/2017	< 0.0833	0.0833	0.120	0.02	0.17	0.126

NOTE:

Values highlighted in yellow are laboratory qualified as an estimated value.

Table 10 Nonradiological Fish Sampling Results (continued)

Location: River Miles 0-8 (continued)

Fish Type	Collection Date	Zinc (µg/g)	Detection Limit (µg/g)
Mullet	1/24/2017	5.20	0.157
Mullet	1/24/2017	9.96	0.182
Mullet	1/24/2017	4.24	0.177
Mullet	1/24/2017	3.11	0.189
Mullet	1/24/2017	4.85	0.191
Mullet	1/24/2017	3.57	0.164
Mullet	1/24/2017	5.37	0.102
Red Drum	1/24/2017	3.47	0.16
Red Drum	1/24/2017	3.56	0.148
Red Drum	1/24/2017	3.25	0.18
Red Drum	1/24/2017	4.52	0.145
Red Drum	1/24/2017	4.27	0.176
Red Drum	1/24/2017	3.62	0.153
Red Drum	1/24/2017	3.34	0.126
Sea Trout	10/30/2017	4.78	0.145
Sea Trout	10/30/2017	3.84	0.168
Sea Trout	11/13/2017	3.47	0.186
Sea Trout	11/13/2017	3.09	0.183
Sea Trout	11/13/2017	3.09	0.183
Sea Trout	11/13/2017	3.82	0.160
Sea Trout	12/11/2017	4.00	0.149

Data Tables Supporting the Radiological Environmental Monitoring Program

Table 11 Radioactivity in Air Emission Samples

Tritium is monitored with continuous real-time instrumentation. Results of this online monitoring are included with the analytical results provided in this table.

The releases of Kr-85, C-14, and tritium (H-3) from the H-Area Canyon Facility (292-H) were calculated based on the “burn-up” of spent fuel processed in that facility. Results from these calculations are not included in this table.

The units for all samples are pCi/m³. Significant results are identified by bold text and cell boxes highlighted in blue.

Location: 264-H Stack

Sample Date	Cr-51		Co-58		Co-60	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/7/2017	5.16E-02	2.91E-02	-1.86E-03	3.34E-03	-1.40E-03	2.96E-03
1/14/2017	-3.41E-02	3.70E-02	1.56E-04	3.41E-03	-2.05E-03	3.05E-03
1/22/2017	4.92E-02	2.46E-02	-2.02E-03	2.32E-03	4.51E-04	3.07E-03
1/28/2017	-9.00E-03	3.98E-02	-7.51E-04	3.54E-03	-1.52E-03	3.82E-03
2/2/2017	5.92E-02	5.03E-02	-5.30E-03	4.60E-03	9.41E-03	5.29E-03
2/9/2017	-3.86E-03	4.70E-02	6.41E-03	4.01E-03	-1.44E-03	3.31E-03
2/16/2017	-1.82E-02	3.92E-02	2.61E-03	3.54E-03	-1.97E-03	3.31E-03
2/23/2017	6.51E-02	3.82E-02	3.95E-03	2.89E-03	7.16E-04	3.27E-03
3/2/2017	-3.41E-02	3.24E-02	-2.02E-03	2.77E-03	-2.03E-03	2.73E-03
3/9/2017	2.33E-02	3.06E-02	-2.53E-03	2.80E-03	3.81E-04	2.57E-03
3/16/2017	-3.51E-02	3.25E-02	5.08E-03	4.13E-03	-3.30E-03	3.79E-03
3/23/2017	-1.83E-02	3.70E-02	1.32E-03	3.32E-03	1.60E-03	1.55E-03
3/30/2017	3.08E-02	2.94E-02	-2.38E-03	3.13E-03	1.60E-03	2.25E-03
4/6/2017	-3.89E-02	3.79E-02	-4.03E-03	3.17E-03	4.62E-03	2.92E-03
4/13/2017	1.79E-02	3.46E-02	4.78E-04	3.20E-03	1.09E-03	3.30E-03
4/20/2017	-5.54E-03	4.11E-02	1.82E-03	2.78E-03	4.30E-03	3.95E-03
4/27/2017	-7.11E-03	3.31E-02	-6.08E-04	3.68E-03	2.40E-03	3.34E-03
5/4/2017	7.05E-02	3.79E-02	-7.59E-04	3.66E-03	7.43E-04	3.29E-03
5/11/2017	5.19E-02	3.14E-02	6.11E-03	3.13E-03	3.76E-03	1.77E-03
5/18/2017	4.11E-02	4.05E-02	-3.62E-03	3.83E-03	2.56E-04	3.21E-03
5/25/2017	-1.68E-02	3.49E-02	-3.43E-03	3.08E-03	-3.16E-04	2.73E-03
6/1/2017	2.92E-02	3.43E-02	4.19E-03	2.69E-03	2.49E-03	2.90E-03
6/8/2017	-5.24E-02	2.97E-02	-1.11E-03	2.61E-03	3.54E-03	2.74E-03
6/15/2017	-1.34E-02	4.18E-02	6.51E-03	3.27E-03	1.40E-03	2.82E-03
6/22/2017	-6.08E-03	2.87E-02	8.27E-04	2.25E-03	-3.35E-05	2.16E-03

Data Tables Supporting the Radiological Environmental Monitoring Program

Sample Date	Cr-51		Co-58		Co-60	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
6/28/2017	-8.97E-02	4.74E-02	-2.95E-03	4.55E-03	-1.92E-03	4.21E-03
7/6/2017	-5.68E-03	3.43E-02	-1.15E-03	2.91E-03	3.65E-03	3.32E-03
7/13/2017	-1.48E-02	3.74E-02	5.97E-04	3.27E-03	4.92E-03	3.16E-03
7/20/2017	2.78E-02	3.51E-02	-6.76E-03	3.50E-03	-1.80E-05	3.46E-03
7/27/2017	1.36E-02	4.31E-02	5.65E-03	4.27E-03	6.24E-03	3.33E-03
8/3/2017	-9.68E-03	3.70E-02	-2.20E-03	3.05E-03	4.19E-03	3.96E-03
8/10/2017	6.16E-02	4.18E-02	3.22E-03	3.14E-03	5.95E-03	3.08E-03
8/17/2017	8.62E-03	3.43E-02	5.43E-03	3.94E-03	1.95E-03	3.70E-03
8/24/2017	-4.57E-02	4.29E-02	3.54E-03	3.35E-03	4.70E-03	3.40E-03
8/31/2017	3.38E-03	3.64E-02	2.12E-05	3.24E-03	-3.11E-03	4.02E-03
9/7/2017	-5.27E-02	2.63E-02	4.54E-04	2.27E-03	-1.55E-04	2.31E-03
9/14/2017	1.92E-02	2.29E-02	8.59E-04	2.23E-03	2.53E-03	2.04E-03
9/21/2017	-4.24E-02	2.55E-02	-5.14E-03	2.40E-03	1.88E-04	2.17E-03
9/28/2017	-7.59E-03	2.24E-02	-2.29E-03	2.26E-03	-2.15E-04	1.93E-03
10/5/2017	1.92E-03	2.57E-02	1.33E-03	2.27E-03	1.92E-04	2.18E-03
10/12/2017	3.11E-02	2.16E-02	-1.28E-03	2.01E-03	-7.32E-04	2.10E-03
10/19/2017	3.19E-03	2.48E-02	-3.86E-04	2.56E-03	-2.81E-03	2.25E-03
10/26/2017	3.97E-02	2.15E-02	1.63E-03	2.31E-03	2.39E-03	1.92E-03
11/2/2017	-2.14E-02	2.45E-02	-4.92E-04	2.02E-03	-1.19E-03	2.46E-03
11/9/2017	1.02E-02	1.90E-02	-6.16E-03	2.35E-03	3.97E-04	2.25E-03
11/16/2017	2.34E-02	2.55E-02	-2.78E-03	2.61E-03	-1.85E-03	2.48E-03
11/23/2017	-1.15E-02	2.22E-02	1.90E-03	2.10E-03	-2.22E-03	2.17E-03
11/30/2017	-1.16E-02	2.52E-02	-2.55E-04	2.51E-03	-1.01E-03	2.13E-03
12/7/2017	-4.24E-03	2.09E-02	0.00E+00	2.17E-06	-1.17E-03	2.18E-03
12/14/2017	-4.43E-03	2.55E-02	-1.14E-03	2.23E-03	4.08E-03	2.06E-03
12/21/2017	-2.11E-02	2.61E-02	2.65E-03	2.69E-03	3.19E-04	2.07E-03
12/28/2017	3.16E-02	2.53E-02	-5.70E-04	2.15E-03	3.14E-03	2.19E-03
1/4/2018	-9.46E-03	2.42E-02	-1.77E-03	2.30E-03	-1.52E-03	2.24E-03

Table 11 Radioactivity in Air Emission Samples (continued)

Location: 264-H Stack (continued)

Sample Date	Cs-137		Se-75	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/7/2017	5.76E-03	3.58E-03	7.27E-03	4.63E-03
1/14/2017	-7.76E-04	3.25E-03	1.75E-03	4.23E-03
1/22/2017	2.19E-03	2.40E-03	-7.30E-04	3.51E-03
1/28/2017	2.06E-03	3.71E-03	-4.70E-04	5.60E-03
2/2/2017	8.27E-03	4.98E-03	-2.31E-03	6.36E-03
2/9/2017	1.20E-03	3.78E-03	-9.59E-04	4.61E-03
2/16/2017	1.90E-03	3.70E-03	3.49E-03	4.77E-03
2/23/2017	-3.11E-04	3.08E-03	5.35E-04	4.24E-03
3/2/2017	7.03E-03	3.54E-03	-3.59E-03	4.42E-03
3/9/2017	-6.14E-04	2.50E-03	5.35E-03	3.96E-03
3/16/2017	4.54E-03	3.52E-03	2.43E-03	4.74E-03
3/23/2017	3.62E-04	3.49E-03	-4.92E-03	4.31E-03
3/30/2017	2.35E-03	2.73E-03	3.84E-03	4.13E-03
4/6/2017	2.55E-03	2.97E-03	3.41E-03	3.66E-03
4/13/2017	-9.70E-04	3.74E-03	-6.70E-03	4.65E-03
4/20/2017	-6.38E-03	3.19E-03	-5.86E-05	4.99E-03
4/27/2017	-4.30E-03	3.16E-03	2.07E-03	4.46E-03
5/4/2017	-4.27E-03	3.86E-03	9.11E-03	4.84E-03
5/11/2017	-1.08E-03	3.39E-03	8.03E-03	4.62E-03
5/18/2017	-5.68E-05	3.64E-03	-4.24E-03	4.86E-03
5/25/2017	-3.84E-03	3.19E-03	5.05E-03	3.96E-03
6/1/2017	3.03E-03	3.57E-03	2.40E-03	4.22E-03
6/8/2017	3.78E-04	3.57E-03	2.69E-03	4.15E-03
6/15/2017	-1.54E-03	3.30E-03	5.00E-03	4.60E-03
6/22/2017	-1.49E-03	3.43E-03	-1.64E-03	4.11E-03
6/28/2017	7.22E-03	4.59E-03	9.38E-03	5.59E-03
7/6/2017	7.65E-04	3.41E-03	-1.55E-03	3.98E-03
7/13/2017	3.27E-03	3.07E-03	-1.08E-03	4.00E-03
7/20/2017	7.00E-04	3.52E-03	-2.54E-03	4.90E-03
7/27/2017	-5.97E-03	3.74E-03	-9.54E-04	5.11E-03
8/3/2017	4.51E-03	3.65E-03	-4.97E-03	4.86E-03
8/10/2017	-3.46E-03	3.46E-03	-1.54E-03	4.96E-03
8/17/2017	4.59E-03	3.82E-03	3.78E-03	4.40E-03
8/24/2017	3.54E-03	3.48E-03	1.51E-03	4.54E-03
8/31/2017	-2.37E-03	2.94E-03	8.35E-04	4.54E-03
9/7/2017	-7.65E-04	2.28E-03	2.66E-03	3.24E-03
9/14/2017	2.42E-03	2.27E-03	-1.48E-03	2.91E-03
9/21/2017	-3.00E-03	2.29E-03	-2.40E-03	3.02E-03
9/28/2017	4.57E-04	2.08E-03	-3.73E-03	3.12E-03

Data Tables Supporting the Radiological Environmental Monitoring Program

Sample Date	Cs-137		Se-75	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
10/5/2017	-9.86E-04	2.44E-03	-4.43E-04	3.01E-03
10/12/2017	3.78E-03	2.05E-03	-2.23E-03	2.73E-03
10/19/2017	5.22E-05	2.51E-03	4.22E-03	3.19E-03
10/26/2017	3.59E-03	2.46E-03	-4.08E-03	3.05E-03
11/2/2017	3.73E-04	2.25E-03	-1.43E-03	3.03E-03
11/9/2017	-1.25E-03	2.14E-03	3.11E-03	2.91E-03
11/16/2017	-2.18E-03	2.16E-03	8.14E-04	3.22E-03
11/23/2017	4.03E-03	2.36E-03	-2.55E-03	3.23E-03
11/30/2017	-1.98E-03	2.02E-03	1.63E-03	2.96E-03
12/7/2017	4.00E-04	2.08E-03	-1.58E-03	2.90E-03
12/14/2017	-3.86E-05	1.94E-03	-4.00E-03	2.74E-03
12/21/2017	5.70E-03	2.50E-03	1.08E-03	3.29E-03
12/28/2017	1.95E-03	2.29E-03	-3.27E-03	3.07E-03
1/4/2018	-2.59E-03	2.23E-03	-2.02E-03	3.14E-03

Table 11 Radioactivity in Air Emission Samples (continued)

Location: 264-H Stack (continued)

Sample Date	Gross Beta		Gross Alpha	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/7/2017	7.30E-03	3.02E-03	8.65E-05	9.00E-04
1/22/2017	8.19E-03	1.68E-03	4.65E-04	6.06E-04
2/2/2017	1.20E-02	2.56E-03	7.46E-04	9.56E-04
2/16/2017	1.32E-02	1.61E-03	6.08E-04	5.73E-04
3/2/2017	9.97E-03	1.96E-03	1.61E-03	1.04E-03
3/16/2017	7.95E-03	1.26E-03	1.68E-03	7.16E-04
3/30/2017	8.97E-03	1.79E-03	1.85E-03	9.93E-04
4/13/2017	6.46E-03	1.72E-03	1.39E-05	5.49E-04
4/27/2017	1.06E-02	2.04E-03	1.77E-03	1.05E-03
5/11/2017	-4.19E-04	1.08E-03	9.41E-04	7.50E-04
5/25/2017	1.39E-02	2.12E-03	5.76E-04	6.94E-04
6/8/2017	5.70E-03	1.16E-03	-1.29E-04	2.41E-04
6/22/2017	1.01E-02	1.92E-03	2.29E-03	1.09E-03
7/6/2017	1.35E-02	2.13E-03	2.44E-04	5.41E-04
7/20/2017	6.89E-03	1.74E-03	8.30E-05	5.43E-04
8/3/2017	6.11E-03	1.66E-03	1.76E-03	1.03E-03
8/17/2017	8.95E-03	1.41E-03	4.05E-04	5.30E-04
8/31/2017	1.20E-02	2.11E-03	1.19E-04	5.58E-04
9/14/2017	1.29E-02	2.14E-03	8.57E-05	5.73E-04
9/28/2017	2.25E-02	2.72E-03	3.38E-03	1.47E-03
10/12/2017	1.13E-02	2.06E-03	9.62E-05	5.58E-04
10/26/2017	1.03E-02	1.91E-03	1.10E-03	8.88E-04
11/9/2017	1.15E-02	1.94E-03	1.07E-03	8.63E-04
11/23/2017	1.13E-02	2.04E-03	1.81E-03	1.12E-03
12/7/2017	2.62E-02	2.69E-03	1.09E-03	8.84E-04
12/21/2017	1.60E-02	1.53E-03	3.14E-03	1.00E-03
1/4/2017	1.16E-02	2.11E-03	-7.65E-05	5.33E-04

Table 11 Radioactivity in Air Emission Samples (continued)

Location: 210-Z Building Stack

Sample Date	Co-60		Cs-137		Sr-89/90	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
2/13/2017	-1.01E-01	5.98E-02	-1.02E-02	4.52E-02	1.04E-02	1.21E-02
5/9/2017	3.68E-02	4.43E-02	1.94E-02	4.51E-02		
5/16/2017	-7.65E-03	3.53E-02	-1.08E-02	4.63E-02	7.68E-03	4.48E-03
8/15/2017	2.08E-02	4.63E-02	1.11E-01	5.52E-02		
8/22/2017	-9.84E-03	3.52E-02	3.41E-02	4.77E-02	4.70E-03	7.49E-03
11/8/2017	1.92E-02	2.73E-02	-1.91E-03	3.19E-02		
11/15/2017	-1.85E-02	2.97E-02	-1.79E-03	3.54E-02	7.73E-03	7.30E-03

Sample Date	U-234		U-235		U-238	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
2/13/2017	1.11E-03	4.06E-04	-9.14E-06	1.03E-05	1.73E-03	4.59E-04
5/16/2017	9.22E-04	2.50E-04	2.47E-05	8.92E-05	1.15E-03	2.83E-04
8/22/2017	5.84E-04	2.17E-04	6.86E-05	7.26E-05	7.54E-04	2.16E-04
11/15/2017	1.01E-03	2.76E-04	1.37E-04	1.00E-04	4.51E-04	1.64E-04

Sample Date	Pu-238		Pu-239		Am-241	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
2/13/2017	-3.70E-05	1.53E-04	2.05E-04	1.61E-04	5.38E-04	2.59E-04
5/16/2017	-3.73E-05	3.63E-05	1.06E-04	7.77E-05	3.78E-04	1.75E-04
8/22/2017	2.29E-04	1.24E-04	2.11E-04	1.07E-04	2.58E-04	1.28E-04
11/15/2017	1.32E-04	1.06E-04	-7.97E-05	5.37E-05	2.28E-04	1.39E-04

Sample Date	Cm-244		Gross Beta		Gross Alpha	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
2/13/2017	0.00E+00	1.31E-04	2.31E-03	6.63E-02	4.05E-03	2.47E-02
5/16/2017	-4.11E-05	4.11E-05	-3.43E-03	3.01E-02	2.28E-03	1.18E-02
8/22/2017	5.43E-05	5.45E-05	1.00E-01	4.14E-02	3.30E-03	1.38E-02
11/15/2017	0.00E+00	6.11E-05	2.89E-02	3.16E-02	3.54E-03	1.34E-02

Table 11 Radioactivity in Air Emission Samples (continued)

Location: 221-S Personnel Area (Zone 2)

Sample Date	Co-60		Cs-137		Sr-89/90	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/23/2017	1.19E-02	4.94E-02	-3.22E-02	5.71E-02	-5.43E-03	1.08E-02
4/17/2017	-1.83E-02	8.80E-02	-1.24E-01	7.53E-02	2.46E-02	2.25E-02
7/12/2017	-5.78E-02	8.38E-02	1.22E-01	8.22E-02		
7/17/2017	-4.27E-03	6.33E-02	-5.95E-02	8.34E-02	-5.27E-03	1.14E-02
10/9/2017	-2.11E-02	3.63E-02	4.68E-02	4.16E-02		
10/16/2017	-3.11E-02	4.23E-02	-6.30E-02	3.76E-02	1.33E-02	9.21E-03

Sample Date	U-234		U-235		U-238	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/23/2017	7.59E-04	3.65E-04	-8.00E-06	8.96E-06	8.54E-04	3.51E-04
4/17/2017	1.36E-03	5.22E-04	-3.89E-06	4.37E-06	1.25E-03	5.95E-04
7/17/2017	1.30E-03	3.58E-04	0.00E+00	1.05E-04	4.89E-04	2.38E-04
10/16/2017	1.16E-03	3.11E-04	-7.24E-05	6.42E-05	8.00E-04	2.66E-04

Sample Date	Pu-238		Pu-239		Am-241	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/23/2017	4.41E-05	1.59E-04	3.84E-04	2.33E-04	9.89E-04	4.05E-04
4/17/2017	3.38E-04	2.74E-04	1.69E-04	1.91E-04	1.07E-03	4.42E-04
7/17/2017	0.00E+00	1.06E-04	2.40E-05	1.08E-04	5.46E-04	2.37E-04
10/16/2017	-4.59E-05	4.61E-05	-1.16E-06	1.46E-06	1.98E-04	1.84E-04

Sample Date	Cm-244		Gross Beta		Gross Alpha	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/23/2017	0.00E+00	1.76E-04	3.95E-02	6.10E-02	4.46E-02	3.15E-02
4/17/2017	4.92E-05	2.13E-04	3.19E-01	1.30E-01	-2.97E-02	9.71E-03
7/17/2017	0.00E+00	1.22E-04	5.27E-02	5.16E-02	1.05E-02	2.26E-02
10/16/2017	0.00E+00	9.00E-05	9.65E-03	3.74E-02	3.41E-02	2.73E-02

Table 11 Radioactivity in Air Emission Samples (continued)

Location: 235-F Sandfilter Discharge

Sample Date	Co-60		Cs-137	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/10/2017	-3.41E-03	2.48E-03	-3.27E-04	2.03E-03
1/17/2017	-7.51E-04	1.79E-03	-1.04E-03	2.56E-03
1/24/2017	-1.12E-03	2.04E-03	4.00E-03	2.12E-03
1/31/2017	1.00E-03	2.31E-03	-2.86E-04	2.40E-03
2/7/2017	3.22E-04	2.73E-03	-1.12E-03	2.00E-03
2/14/2017	-8.54E-04	2.25E-03	6.11E-04	2.28E-03
2/21/2017	-3.27E-04	2.07E-03	3.84E-03	2.06E-03
2/28/2017	1.18E-03	1.99E-03	-2.59E-03	2.40E-03
3/7/2017	3.76E-03	1.92E-03	4.03E-03	2.12E-03
3/14/2017	3.08E-04	2.12E-03	-5.11E-03	2.46E-03
3/21/2017	2.56E-04	2.63E-03	-2.81E-03	2.64E-03
3/28/2017	1.78E-03	2.32E-03	2.36E-03	2.55E-03
4/4/2017	-1.45E-03	1.77E-03	-1.11E-03	2.07E-03
4/11/2017	2.01E-04	2.38E-03	-2.66E-04	2.47E-03
4/18/2017	-2.38E-03	1.94E-03	-1.96E-03	2.66E-03
4/25/2017	1.44E-03	1.51E-03	1.88E-03	2.11E-03
5/2/2017	-3.24E-03	2.34E-03	-8.46E-04	2.32E-03
5/9/2017	2.64E-03	2.08E-03	-1.64E-03	2.28E-03
5/16/2017	-3.81E-03	2.10E-03	3.08E-03	2.16E-03
5/23/2017	1.61E-03	1.78E-03	-2.26E-03	2.08E-03
5/30/2017	4.49E-03	2.16E-03	-2.10E-03	2.52E-03
6/6/2017	1.60E-03	2.56E-03	1.80E-03	2.30E-03
6/13/2017	-1.79E-03	2.41E-03	-2.73E-03	2.31E-03
6/20/2017	-1.16E-03	2.46E-03	-3.62E-04	2.37E-03
6/27/2017	-1.17E-03	2.20E-03	4.14E-03	2.13E-03
7/4/2017	-2.51E-03	2.14E-03	9.62E-04	1.97E-03
7/11/2017	-1.13E-03	2.05E-03	1.72E-03	1.96E-03
7/18/2017	4.19E-04	2.23E-03	5.97E-03	2.18E-03
7/25/2017	-1.14E-03	2.29E-03	9.76E-04	2.24E-03
8/1/2017	-9.16E-04	2.73E-03	-2.36E-03	2.32E-03
8/8/2017	-2.22E-04	1.99E-03	2.28E-03	2.49E-03
8/15/2017	7.89E-04	2.27E-03	3.22E-03	2.46E-03
8/22/2017	-1.74E-03	2.52E-03	-7.97E-05	2.58E-03
8/29/2017	1.04E-03	1.87E-03	-4.89E-05	2.52E-03
9/5/2017	1.66E-03	1.52E-03	-7.00E-05	1.48E-03
9/12/2017	-1.45E-03	1.44E-03	-9.11E-04	1.46E-03
9/19/2017	-1.78E-05	1.61E-03	1.23E-03	1.50E-03
9/26/2017	-2.97E-04	1.53E-03	-5.14E-04	1.60E-03
10/3/2017	4.46E-04	1.59E-03	-1.47E-03	1.62E-03
10/10/2017	-1.91E-03	1.54E-03	6.03E-04	1.56E-03

Data Tables Supporting the Radiological Environmental Monitoring Program

Sample Date	Co-60		Cs-137	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
10/17/2017	1.41E-03	1.41E-03	2.20E-03	1.77E-03
10/24/2017	8.73E-04	1.20E-03	9.86E-04	1.51E-03
10/31/2017	-1.82E-03	1.46E-03	4.27E-03	2.25E-03
11/7/2017	2.51E-03	1.55E-03	1.96E-03	1.58E-03
11/14/2017	1.57E-03	1.37E-03	-1.08E-03	1.49E-03
11/21/2017	6.03E-04	1.47E-03	1.61E-03	1.63E-03
11/28/2017	1.32E-04	1.63E-03	-5.62E-04	1.44E-03
12/5/2017	-9.41E-05	1.51E-03	3.16E-04	1.47E-03
12/12/2017	8.54E-04	1.55E-03	1.14E-03	1.71E-03
12/19/2017	1.48E-03	1.51E-03	-6.51E-04	1.72E-03
12/26/2017	8.14E-05	1.27E-03	-2.32E-04	1.50E-03
1/2/2018	-1.88E-03	1.55E-03	3.51E-03	1.59E-03

Sample Date	U-234		U-235		U-238	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/17/2017	5.78E-05	1.31E-05	-2.26E-06	2.27E-06	5.22E-05	1.24E-05
1/31/2017	3.65E-05	1.09E-05	-2.28E-07	2.58E-07	4.89E-05	1.26E-05
2/14/2017	2.20E-05	1.05E-05	3.95E-06	3.96E-06	2.55E-05	9.21E-06
2/28/2017	4.38E-05	1.19E-05	0.00E+00	3.58E-06	1.46E-05	6.68E-06
3/14/2017	3.97E-05	1.24E-05	1.34E-06	4.85E-06	4.57E-05	1.26E-05
3/28/2017	3.41E-05	1.11E-05	2.40E-06	6.13E-06	4.46E-05	1.21E-05
4/11/2017	3.49E-05	1.30E-05	-5.73E-06	4.12E-06	4.86E-05	1.34E-05
4/25/2017	2.63E-05	8.88E-06	-5.86E-08	6.59E-08	4.30E-05	1.18E-05
5/9/2017	3.38E-05	9.93E-06	4.62E-06	5.42E-06	6.38E-05	1.41E-05
5/23/2017	2.65E-05	9.24E-06	3.49E-06	3.72E-06	3.89E-05	1.10E-05
6/6/2017	3.73E-05	1.08E-05	1.17E-05	7.62E-06	3.57E-05	1.08E-05
6/20/2017	6.24E-05	1.41E-05	-1.96E-07	2.20E-07	4.57E-05	1.17E-05
7/4/2017	4.24E-05	1.09E-05	6.54E-06	4.65E-06	3.41E-05	9.86E-06
7/18/2017	2.92E-05	9.36E-06	1.20E-06	4.32E-06	4.41E-05	1.22E-05
8/1/2017	3.78E-05	1.08E-05	0.00E+00	3.52E-06	5.51E-05	1.32E-05
8/15/2017	3.22E-05	1.03E-05	2.17E-06	5.98E-06	2.64E-05	9.36E-06
8/29/2017	3.81E-05	1.17E-05	3.65E-06	3.87E-06	4.95E-05	1.28E-05
9/12/2017	3.24E-05	1.05E-05	-1.85E-07	2.08E-07	4.95E-05	1.28E-05
9/26/2017	3.54E-05	1.07E-05	4.70E-06	5.78E-06	4.84E-05	1.28E-05
10/10/2017	3.54E-05	1.08E-05	3.22E-06	3.61E-06	3.43E-05	1.01E-05
10/24/2017	4.68E-05	1.22E-05	-2.76E-06	2.43E-06	5.19E-05	1.34E-05
11/7/2017	3.49E-05	1.09E-05	3.54E-06	3.57E-06	3.70E-05	1.07E-05
11/21/2017	6.11E-05	1.42E-05	-1.84E-07	2.06E-07	4.08E-05	1.13E-05
12/5/2017	5.97E-05	1.44E-05	1.91E-05	9.17E-06	3.95E-05	1.17E-05
12/19/2017	4.03E-05	1.19E-05	0.00E+00	3.53E-06	3.43E-05	1.09E-05
1/2/2018	4.81E-05	1.32E-05	7.76E-06	5.50E-06	2.81E-05	9.59E-06

Table 11 Radioactivity in Air Emission Samples (continued)

Location: 235-F Sandfilter Discharge (continued)

Sample Date	Pu-238		Pu-239		Am-241	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/17/2017	2.95E-06	2.95E-06	8.81E-06	5.12E-06	9.59E-06	6.10E-06
1/31/2017	2.76E-06	2.76E-06	2.33E-06	2.83E-06	1.25E-05	7.22E-06
2/14/2017	0.00E+00	3.17E-06	2.61E-06	2.61E-06	1.05E-05	5.95E-06
2/28/2017	0.00E+00	3.59E-06	0.00E+00	3.58E-06	8.16E-06	5.44E-06
3/14/2017	0.00E+00	3.21E-06	1.09E-05	5.49E-06	8.00E-06	5.82E-06
3/28/2017	5.73E-06	4.06E-06	5.57E-06	4.08E-06	1.36E-05	6.83E-06
4/11/2017	-4.22E-06	3.00E-06	6.16E-06	4.50E-06	1.23E-05	6.91E-06
4/25/2017	4.62E-06	3.81E-06	2.31E-06	2.65E-06	7.32E-06	6.09E-06
5/9/2017	1.71E-06	4.49E-06	5.14E-06	3.76E-06	1.54E-05	7.28E-06
5/23/2017	-3.84E-06	2.72E-06	-1.95E-06	1.91E-06	1.11E-05	5.83E-06
6/6/2017	-1.93E-06	1.94E-06	2.86E-06	2.91E-06	2.42E-05	8.88E-06
6/20/2017	4.81E-06	5.69E-06	9.30E-05	1.78E-05	1.97E-05	7.74E-06
7/4/2017	1.08E-05	5.46E-06	1.34E-05	6.13E-06	8.38E-06	4.90E-06
7/18/2017	-2.05E-06	2.05E-06	-2.14E-06	2.05E-06	1.78E-05	8.08E-06
8/1/2017	0.00E+00	3.25E-06	5.62E-06	4.15E-06	8.24E-06	5.25E-06
8/15/2017	0.00E+00	3.28E-06	8.86E-07	3.36E-06	1.27E-05	6.33E-06
8/29/2017	-1.46E-07	1.83E-07	-4.08E-06	2.78E-06	9.03E-06	6.23E-06
9/12/2017	2.67E-06	2.83E-06	3.59E-06	4.42E-06	8.76E-06	6.06E-06
9/26/2017	2.78E-06	2.95E-06	5.70E-06	4.18E-06	2.55E-05	9.00E-06
10/10/2017	3.76E-06	4.42E-06	2.78E-06	2.83E-06	1.54E-05	7.45E-06
10/24/2017	2.84E-06	2.83E-06	8.43E-06	4.94E-06	8.97E-06	5.81E-06
11/7/2017	1.21E-05	6.55E-06	8.19E-06	4.90E-06	5.49E-06	5.34E-06
11/21/2017	2.70E-06	2.76E-06	-2.02E-06	5.34E-06	1.31E-05	6.63E-06
12/5/2017	-4.68E-06	3.88E-06	1.37E-06	4.79E-06	5.92E-06	5.16E-06
12/19/2017	-1.86E-06	4.99E-06	8.14E-06	5.11E-06	2.84E-05	9.71E-06
1/2/2018	0.00E+00	3.45E-06	1.67E-05	7.13E-06	1.72E-05	7.49E-06

Table 11 Radioactivity in Air Emission Samples (continued)

Location: 235-F Sandfilter Discharge (continued)

Sample Date	Cm-244		Gross Beta		Gross Alpha	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/17/2017	2.84E-06	2.85E-06	4.16E-03	1.94E-03	5.76E-05	5.96E-04
1/31/2017	6.00E-06	4.25E-06	1.93E-03	1.86E-03	7.19E-04	8.96E-04
2/14/2017	0.00E+00	3.62E-06	5.86E-05	1.26E-03	1.08E-04	4.90E-04
2/28/2017	2.97E-06	2.99E-06	3.11E-03	1.96E-03	1.06E-04	6.77E-04
3/14/2017	0.00E+00	3.46E-06	3.19E-03	1.39E-03	-6.54E-05	3.64E-04
3/28/2017	0.00E+00	3.76E-06	-9.05E-04	1.44E-03	1.31E-03	1.04E-03
4/11/2017	0.00E+00	3.81E-06	2.58E-03	1.89E-03	2.69E-05	6.63E-04
4/25/2017	-1.46E-07	1.62E-07	1.03E-03	1.62E-03	-3.76E-04	1.77E-04
5/9/2017	8.49E-07	3.06E-06	3.38E-03	1.84E-03	6.49E-04	7.78E-04
5/23/2017	0.00E+00	3.19E-06	1.69E-03	1.72E-03	2.48E-03	1.33E-03
6/6/2017	0.00E+00	3.67E-06	1.27E-03	1.25E-03	1.04E-03	6.99E-04
6/20/2017	0.00E+00	3.33E-06	3.78E-03	1.94E-03	-4.35E-04	2.60E-04
7/4/2017	0.00E+00	3.69E-06	1.54E-03	1.54E-03	9.00E-04	8.80E-04
7/18/2017	2.65E-06	2.65E-06	6.68E-03	2.17E-03	7.05E-04	9.00E-04
8/1/2017	0.00E+00	3.63E-06	6.14E-04	1.44E-03	-3.19E-04	2.46E-04
8/15/2017	0.00E+00	3.25E-06	4.51E-03	1.50E-03	1.64E-04	5.20E-04
8/29/2017	0.00E+00	3.14E-06	2.69E-03	1.83E-03	1.05E-04	6.73E-04
9/12/2017	0.00E+00	3.38E-06	1.05E-03	1.64E-03	-4.89E-04	2.94E-04
9/26/2017	6.70E-06	5.34E-06	2.24E-03	1.91E-03	-4.92E-04	2.47E-04
10/10/2017	0.00E+00	3.72E-06	7.08E-04	1.76E-03	1.39E-04	6.68E-04
10/24/2017	0.00E+00	4.00E-06	1.59E-04	1.47E-03	-4.51E-04	3.14E-04
11/7/2017	-1.82E-06	1.82E-06	1.82E-03	1.64E-03	-4.46E-04	3.09E-04
11/21/2017	0.00E+00	3.25E-06	3.14E-03	1.75E-03	-4.65E-04	1.80E-04
12/5/2017	2.57E-06	2.73E-06	3.65E-03	1.83E-03	2.55E-03	1.38E-03
12/19/2017	2.62E-06	2.77E-06	2.81E-03	1.23E-03	-6.59E-04	2.42E-04
1/2/2018	-1.96E-06	1.97E-06	2.12E-03	1.85E-03	5.03E-04	8.80E-04

Table 11 Radioactivity in Air Emission Samples (continued)

Location: 241-278H Caustic Extraction

Sample Date	Co-60		Cs-137		Sr-89/90	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
3/23/2017	-1.01E-03	2.91E-03	-7.84E-04	2.55E-03	-3.65E-04	6.38E-04
10/22/2017	-2.07E-03	6.45E-03	-8.73E-03	7.54E-03	-1.18E-03	3.34E-03

Sample Date	U-234		U-235		U-238	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
3/23/2017	7.70E-06	9.36E-06	-9.84E-06	7.05E-06	7.68E-06	9.36E-06
10/22/2017	4.27E-04	1.15E-04	3.35E-05	3.38E-05	1.54E-04	7.70E-05

Sample Date	Pu-238		Pu-239		Am-241	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
3/23/2017	2.01E-06	7.25E-06	2.97E-05	1.37E-05	3.03E-05	1.50E-05
10/22/2017	2.09E-05	2.80E-05	3.49E-05	4.16E-05	2.61E-04	9.48E-05

Sample Date	Cm-244		Gross Beta		Gross Alpha	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
3/23/2017	-4.24E-06	4.26E-06	4.00E-03	2.63E-03	4.46E-04	8.54E-04
10/22/2017	-1.88E-05	1.88E-05	1.31E-02	1.72E-02	1.17E-02	9.36E-03

Location: 241-2H Mercury Stack

Sample Date	Co-60		Cs-137		Gross Beta		Gross Alpha	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
3/23/2017	1.05E-04	2.97E-03	4.24E-03	2.76E-03	3.78E-03	1.75E-03	7.22E-04	7.32E-04
10/26/2017	-8.95E-04	1.73E-03	5.49E-04	1.70E-03	1.27E-02	3.07E-03	1.32E-04	7.25E-04

Table 11 Radioactivity in Air Emission Samples (continued)

Location: 241-81H ETP Process Stack

Sample Date	Co-60		Cs-137	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
12/21/2017	3.92E-03	2.14E-03	3.08E-03	2.72E-03
12/28/2017	5.24E-03	2.37E-03	-7.86E-04	2.68E-03

Sample Date	Radionuclide	Conc. (pCi/m ³)	Standard Dev.
12/28/2017	Sr-89/90	6.16E-04	4.82E-04
12/28/2017	U-234	5.59E-05	1.74E-05
12/28/2017	U-235	2.11E-06	7.59E-06
12/28/2017	U-238	1.07E-04	2.44E-05
12/28/2017	Pu-238	4.57E-06	4.59E-06
12/28/2017	Pu-239	8.57E-06	6.59E-06
12/28/2017	Am-241	5.19E-06	7.42E-06
12/28/2017	Cm-244	-1.53E-06	6.32E-06
12/28/2017	Gross B	1.27E-02	3.83E-03
12/28/2017	Gross A	3.76E-03	2.22E-03

Location: 241-84H ETP Lab Stack

Sample Date	Co-60		Cs-137	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
12/21/2017	7.92E-04	2.45E-03	8.24E-04	2.64E-03
12/28/2017	-1.92E-03	2.62E-03	2.19E-03	2.53E-03

Sample Date	Radionuclide	Conc. (pCi/m ³)	Standard Dev.
12/28/2017	Sr-89/90	-3.86E-05	4.20E-04
12/28/2017	U-234	6.41E-05	2.05E-05
12/28/2017	U-235	1.22E-05	8.63E-06
12/28/2017	U-238	5.89E-05	1.97E-05
12/28/2017	Pu-238	1.52E-05	8.84E-06
12/28/2017	Pu-239	6.16E-06	7.99E-06
12/28/2017	Am-241	3.14E-05	1.26E-05
12/28/2017	Cm-244	6.08E-06	7.13E-06
12/28/2017	Gross B	6.73E-03	3.36E-03
12/28/2017	Gross A	2.78E-03	2.01E-03

Table 11 Radioactivity in Air Emission Samples (continued)

Location: 250-S Glass Waste Bldg. #1488

Sample Date	Co-60		Cs-137	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
10/3/2017	-2.92E-04	1.87E-03	3.62E-03	2.00E-03
10/10/2017	-2.07E-03	1.86E-03	-2.17E-03	1.89E-03

Sample Date	Radionuclide	Conc. (pCi/m ³)	Standard Dev.
10/10/2017	Sr-89/90	4.32E-04	2.72E-04
10/10/2017	U-234	7.65E-05	1.82E-05
10/10/2017	U-235	-3.19E-06	3.19E-06
10/10/2017	U-238	8.43E-05	1.90E-05
10/10/2017	Pu-238	3.59E-06	3.60E-06
10/10/2017	Pu-239	2.15E-06	6.12E-06
10/10/2017	Am-241	7.95E-06	7.57E-06
10/10/2017	Cm-244	3.89E-06	3.91E-06
10/10/2017	Gross B	1.66E-02	3.25E-03
10/10/2017	Gross A	2.54E-03	1.62E-03

Location: 250-S Glass Waste Bldg. #1509

Sample Date	Co-60		Cs-137	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
10/3/2017	-1.11E-03	2.29E-03	-2.67E-03	2.37E-03
10/10/2017	-4.89E-03	2.21E-03	-2.03E-03	2.04E-03

Sample Date	Radionuclide	Conc. (pCi/m ³)	Standard Dev.
10/10/2017	Sr-89/90	1.64E-04	2.95E-04
10/10/2017	U-234	4.41E-05	1.47E-05
10/10/2017	U-235	1.66E-05	9.63E-06
10/10/2017	U-238	6.65E-05	1.79E-05
10/10/2017	Pu-238	-5.41E-06	3.90E-06
10/10/2017	Pu-239	1.59E-05	8.23E-06
10/10/2017	Am-241	1.95E-05	9.82E-06
10/10/2017	Cm-244	0.00E+00	4.85E-06
10/10/2017	Gross B	2.73E-02	4.24E-03
10/10/2017	Gross A	2.95E-03	1.87E-03

Table 11 Radioactivity in Air Emission Samples (continued)

Location: 250-S Glass Waste Bldg. #3928

Sample Date	Co-60		Cs-137	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
10/3/2017	-2.95E-02	3.66E-02	-1.45E-02	3.91E-02
10/10/2017	1.64E-03	2.16E-03	1.24E-03	2.02E-03

Sample Date	Radionuclide	Conc. (pCi/m ³)	Standard Dev.
10/10/2017	Sr-89/90	4.78E-05	2.41E-04
10/10/2017	U-234	6.14E-05	1.68E-05
10/10/2017	U-235	-3.05E-06	3.06E-06
10/10/2017	U-238	5.14E-05	1.44E-05
10/10/2017	Pu-238	7.54E-06	5.34E-06
10/10/2017	Pu-239	1.11E-05	6.62E-06
10/10/2017	Am-241	1.21E-05	7.03E-06
10/10/2017	Cm-244	3.30E-06	3.32E-06
10/10/2017	Gross B	1.92E-02	3.42E-03
10/10/2017	Gross A	2.54E-03	1.61E-03

Location: 250-S Glass Waste Bldg. #3940

Sample Date	Co-60		Cs-137	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
10/3/2017	-1.68E-03	2.25E-03	-3.81E-03	2.39E-03
10/10/2017	6.92E-04	1.88E-03	-1.33E-03	2.48E-03

Sample Date	Radionuclide	Conc. (pCi/m ³)	Standard Dev.
10/10/2017	Sr-89/90	4.97E-04	3.14E-04
10/10/2017	U-234	4.46E-05	1.46E-05
10/10/2017	U-235	1.65E-06	5.93E-06
10/10/2017	U-238	3.95E-05	1.30E-05
10/10/2017	Pu-238	5.43E-06	6.38E-06
10/10/2017	Pu-239	3.81E-06	4.13E-06
10/10/2017	Am-241	8.32E-06	8.07E-06
10/10/2017	Cm-244	0.00E+00	4.83E-06
10/10/2017	Gross B	9.05E-03	3.01E-03
10/10/2017	Gross A	6.22E-03	2.47E-03

Table 11 Radioactivity in Air Emission Samples (continued)

Location: 291-F Stack Isokinetic

Sample Date	Co-60		Cs-137		Sr-89/90	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/9/2017	3.03E-02	1.07E-02	1.23E-01	2.48E-02	8.73E-02	7.96E-03
1/11/2017	-2.86E-02	3.46E-02	1.46E-02	3.14E-02	5.14E-03	5.84E-03
1/16/2017	1.21E-02	1.14E-02	-4.84E-03	1.29E-02	2.70E-03	2.73E-03
1/23/2017	1.18E-02	8.33E-03	7.46E-02	1.49E-02	3.78E-02	5.18E-03
1/30/2017	1.42E-03	7.46E-03	2.18E-02	1.18E-02	1.18E-02	3.19E-03
2/6/2017	-6.08E-03	5.49E-03	1.62E-01	2.28E-02	1.11E-01	9.24E-03
2/13/2017	-1.37E-02	7.25E-03	4.81E-02	1.35E-02	3.43E-02	4.86E-03
2/20/2017	-3.70E-03	8.22E-03	7.59E-03	7.88E-03	1.54E-03	2.77E-03
2/27/2017	7.38E-04	7.65E-03	8.84E-03	9.09E-03	2.45E-03	2.99E-03
3/6/2017	6.46E-03	6.83E-03	1.25E-03	8.47E-03	4.68E-03	3.14E-03
3/13/2017	-1.02E-02	8.63E-03	4.22E-02	1.51E-02	1.50E-02	3.71E-03
3/20/2017	-3.89E-04	9.21E-03	3.05E-02	9.40E-03	6.16E-03	3.23E-03
3/27/2017	1.51E-02	7.61E-03	8.16E-03	1.03E-02	1.12E-02	3.47E-03
4/3/2017	-9.73E-04	6.73E-03	2.76E-03	7.31E-03	8.84E-04	2.12E-03
4/10/2017	3.65E-03	8.92E-03	2.84E-02	1.63E-02	1.89E-02	5.21E-03
4/17/2017	5.70E-03	1.38E-02	8.95E-03	1.41E-02	2.95E-03	4.41E-03
4/24/2017	-8.68E-03	1.68E-02	4.41E-01	5.02E-02	4.81E-01	3.06E-02
5/1/2017	9.84E-03	1.63E-02	3.03E-01	3.74E-02	3.19E-01	2.27E-02
5/8/2017	1.08E-02	1.64E-02	-9.24E-04	1.51E-02	4.68E-02	7.38E-03
5/15/2017	1.49E-02	1.45E-02	3.57E-02	1.66E-02	5.59E-03	4.89E-03
5/22/2017	2.13E-03	1.21E-02	-1.03E-02	1.35E-02	7.81E-03	5.07E-03
5/29/2017	-1.01E-02	1.00E-02	-6.65E-03	1.08E-02	1.81E-03	3.52E-03
6/5/2017	7.51E-03	9.48E-03	2.38E-02	1.45E-02	5.89E-03	4.72E-03
6/12/2017	-7.97E-03	1.28E-02	1.40E-02	1.40E-02	6.32E-03	4.60E-03
6/19/2017	-4.35E-03	1.31E-02	1.61E-01	2.72E-02	5.35E-02	7.47E-03
6/26/2017	4.59E-03	1.14E-02	-7.81E-03	1.62E-02	4.46E-03	4.13E-03
7/3/2017	6.78E-04	1.38E-02	1.26E-02	1.44E-02	6.86E-04	3.15E-03
7/10/2017	3.05E-02	1.17E-02	-2.03E-02	1.41E-02	3.81E-03	4.16E-03
7/17/2017	-1.02E-02	1.43E-02	4.05E-02	1.58E-02	8.05E-03	4.38E-03
7/24/2017	2.08E-02	1.49E-02	2.02E-02	1.69E-02	2.95E-02	6.33E-03
7/31/2017	2.04E-03	1.42E-02	2.17E-02	1.54E-02	1.10E-02	5.25E-03
8/7/2017	-2.55E-02	1.76E-02	-5.41E-03	1.32E-02	-2.81E-03	4.23E-03
8/14/2017	1.45E-03	1.79E-02	3.00E-02	1.55E-02	3.00E-03	4.63E-03
8/21/2017	1.10E-02	1.20E-02	1.91E-01	2.96E-02	2.62E-02	5.33E-03
8/28/2017	-1.76E-02	1.23E-02	3.27E-02	1.54E-02	1.10E-02	4.48E-03
9/4/2017	6.86E-04	9.82E-03	-8.97E-04	9.97E-03	8.27E-05	4.37E-03
9/10/2017	1.22E-02	1.06E-02	-1.24E-02	1.05E-02	-4.16E-03	4.60E-03
9/18/2017	2.36E-03	8.19E-03	3.86E-03	8.43E-03	7.70E-04	3.58E-03
9/25/2017	-1.04E-03	9.40E-03	2.02E-01	2.60E-02	4.59E-02	7.49E-03

Data Tables Supporting the Radiological Environmental Monitoring Program

Sample Date	Co-60		Cs-137		Sr-89/90	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
10/2/2017	-7.05E-03	1.02E-02	1.88E-02	1.01E-02	6.14E-03	3.97E-03
10/9/2017	7.11E-03	7.86E-03	4.05E-02	1.11E-02	1.31E-02	4.35E-03
10/16/2017	-1.57E-02	1.06E-02	1.83E-02	1.03E-02	5.16E-03	3.92E-03
10/23/2017	1.03E-03	9.56E-03	6.27E-02	1.60E-02	2.28E-02	5.71E-03
10/30/2017	-6.14E-03	8.59E-03	4.05E-03	9.93E-03	-2.78E-03	3.69E-03
11/6/2017	1.16E-02	9.13E-03	1.86E-01	2.66E-02	4.38E-02	6.92E-03
11/13/2017	7.97E-03	9.32E-03	2.54E-02	1.26E-02	2.28E-02	5.65E-03
11/20/2017	-2.05E-03	9.32E-03	1.33E-01	2.24E-02	1.94E-02	5.25E-03
11/27/2017	2.84E-02	9.00E-03	-2.51E-03	1.02E-02	-3.54E-04	3.74E-03
12/4/2017	3.27E-03	1.09E-02	7.97E-02	1.86E-02	1.93E-02	5.21E-03
12/11/2017	4.73E-03	1.20E-02	1.51E-02	1.28E-02	9.00E-03	5.45E-03
12/18/2017	3.86E-04	9.36E-03	3.97E-02	1.86E-02	2.81E-03	4.98E-03
12/25/2017	-5.22E-03	8.92E-03	-1.19E-02	9.59E-03	1.10E-02	5.23E-03
1/1/2018	-8.24E-04	9.28E-03	4.51E-03	9.71E-03	4.08E-03	3.19E-03

Sample Date	U-234		U-235		Np-237	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/9/2017	9.19E-02	5.97E-03	5.97E-03	6.10E-04	2.00E-04	8.88E-05
1/11/2017	1.34E-02	1.29E-03	7.73E-04	2.66E-04	2.25E-04	1.31E-04
1/16/2017	7.68E-03	6.93E-04	4.68E-04	1.40E-04	1.01E-05	3.64E-05
1/23/2017	2.78E-02	2.05E-03	1.84E-03	2.99E-04	1.17E-04	5.86E-05
1/30/2017	1.38E-02	1.01E-03	7.49E-04	1.43E-04	-8.89E-06	2.70E-05
2/6/2017	2.28E-01	1.61E-02	1.55E-02	1.49E-03	9.22E-04	1.54E-04
2/13/2017	4.89E-02	3.29E-03	3.22E-03	3.77E-04	8.51E-05	5.71E-05
2/20/2017	2.29E-03	2.70E-04	7.32E-05	6.10E-05	6.27E-05	3.69E-05
2/27/2017	5.00E-04	1.11E-04	7.92E-05	4.61E-05	6.76E-06	2.78E-05
3/6/2017	1.47E-04	6.71E-05	3.65E-05	4.29E-05	2.05E-05	2.16E-05
3/13/2017	1.62E-02	1.16E-03	9.27E-04	1.63E-04	2.73E-05	2.87E-05
3/20/2017	8.51E-03	6.90E-04	6.24E-04	1.40E-04	3.30E-05	3.93E-05
3/27/2017	9.62E-03	7.71E-04	3.43E-04	1.05E-04	6.70E-05	4.32E-05
4/3/2017	2.59E-03	2.67E-04	2.37E-04	7.74E-05	3.76E-05	3.00E-05
4/10/2017	3.54E-02	2.50E-03	2.37E-03	3.50E-04	1.90E-04	7.89E-05
4/17/2017	8.08E-04	1.72E-04	4.14E-05	4.16E-05	7.81E-05	5.72E-05
4/24/2017	1.50E+00	1.21E-01	1.64E-01	1.51E-02	3.19E-03	4.23E-04
5/1/2017	6.14E-01	4.40E-02	6.59E-02	5.69E-03	1.08E-03	2.16E-04
5/8/2017	4.84E-02	3.31E-03	2.45E-03	3.65E-04	1.88E-04	9.09E-05
5/15/2017	3.30E-03	4.01E-04	1.73E-04	8.80E-05	1.11E-04	6.54E-05
5/22/2017	1.73E-02	1.34E-03	1.55E-03	2.81E-04	1.22E-04	8.18E-05
5/29/2017	1.45E-03	2.25E-04	8.11E-05	6.69E-05	3.76E-05	4.41E-05
6/5/2017	7.05E-03	6.65E-04	5.43E-04	1.56E-04	0.00E+00	4.04E-05
6/12/2017	1.15E-03	2.08E-04	2.57E-05	6.56E-05	3.65E-05	3.90E-05

Data Tables Supporting the Radiological Environmental Monitoring Program

Sample Date	U-234		U-235		Np-237	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
6/19/2017	4.11E-01	2.82E-02	2.53E-02	2.34E-03	7.92E-03	8.28E-04
6/26/2017	1.18E-02	9.82E-04	7.43E-04	1.97E-04	7.86E-05	5.80E-05
7/3/2017	1.22E-03	2.22E-04	1.41E-05	5.06E-05	8.43E-05	6.93E-05
7/10/2017	2.30E-04	1.07E-04	8.14E-05	5.76E-05	1.55E-04	7.99E-05
7/17/2017	5.11E-04	1.41E-04	0.00E+00	4.13E-05	3.78E-05	3.79E-05
7/24/2017	6.51E-02	4.40E-03	4.38E-03	5.35E-04	1.26E-04	7.41E-05
7/31/2017	5.05E-04	1.40E-04	-2.03E-06	2.25E-06	1.57E-04	8.53E-05
8/7/2017	3.92E-04	1.24E-04	5.70E-05	6.70E-05	-5.78E-05	4.14E-05
8/14/2017	4.24E-04	1.31E-04	0.00E+00	4.09E-05	-2.29E-05	2.29E-05
8/21/2017	2.16E-01	1.45E-02	1.34E-02	1.31E-03	1.40E-03	2.53E-04
8/28/2017	2.59E-02	1.87E-03	1.91E-03	3.14E-04	2.13E-04	9.00E-05
9/4/2017	4.76E-04	1.31E-04	4.19E-05	4.20E-05	8.30E-05	9.86E-05
9/10/2017	3.41E-04	1.31E-04	6.46E-05	7.57E-05	-2.10E-06	3.23E-06
9/18/2017	2.31E-04	8.28E-05	-1.18E-05	4.89E-05	-5.43E-05	5.39E-05
9/25/2017	3.16E-01	2.13E-02	2.22E-02	2.02E-03	1.01E-03	2.37E-04
10/2/2017	1.99E-03	2.97E-04	1.68E-04	8.63E-05	4.65E-05	5.47E-05
10/9/2017	4.00E-02	2.76E-03	2.66E-03	3.79E-04	1.28E-04	8.55E-05
10/16/2017	9.68E-03	8.32E-04	6.05E-04	1.64E-04	1.08E-04	6.87E-05
10/23/2017	3.73E-02	2.60E-03	2.67E-03	3.86E-04	2.05E-04	9.17E-05
10/30/2017	5.03E-03	5.25E-04	3.38E-04	1.23E-04	-2.01E-06	3.19E-06
11/6/2017	2.62E-01	1.76E-02	2.70E-02	2.35E-03	1.08E-03	2.27E-04
11/13/2017	5.65E-02	3.81E-03	6.70E-03	7.17E-04	1.33E-04	7.06E-05
11/20/2017	9.73E-02	6.38E-03	1.16E-02	1.08E-03	3.68E-04	1.23E-04
11/27/2017	2.14E-03	2.99E-04	1.54E-04	8.21E-05	-1.63E-05	5.24E-05
12/4/2017	8.24E-02	5.50E-03	1.02E-02	9.86E-04	4.49E-04	1.32E-04
12/11/2017	4.76E-02	3.24E-03	2.97E-03	4.12E-04	2.22E-05	5.66E-05
12/18/2017	1.30E-03	2.31E-04	1.28E-04	7.61E-05	1.20E-04	8.00E-05
12/25/2017	5.00E-02	3.41E-03	3.54E-03	4.57E-04	1.16E-03	2.30E-04
1/1/2018	9.78E-04	1.99E-04	8.32E-05	6.10E-05	1.15E-05	4.80E-05

Table 11 Radioactivity in Air Emission Samples (continued)

Location: 291-F Stack Isokinetic (continued)

Sample Date	U-238		Pu-238		Pu-239	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/9/2017	1.39E-01	8.51E-03	1.55E-03	2.57E-04	7.68E-02	6.51E-03
1/11/2017	2.05E-02	1.72E-03	1.16E-03	3.30E-04	4.19E-02	3.79E-03
1/16/2017	1.05E-02	8.55E-04	1.88E-04	8.34E-05	9.95E-03	9.52E-04
1/23/2017	4.32E-02	2.95E-03	5.08E-04	1.16E-04	2.89E-02	2.44E-03
1/30/2017	2.02E-02	1.35E-03	3.84E-04	9.32E-05	1.99E-02	1.67E-03
2/6/2017	3.35E-01	2.25E-02	9.49E-03	7.74E-04	5.08E-01	3.40E-02
2/13/2017	7.32E-02	4.63E-03	6.68E-04	1.43E-04	4.27E-02	3.59E-03
2/20/2017	4.41E-03	4.11E-04	4.70E-05	3.92E-05	3.14E-03	3.59E-04
2/27/2017	9.41E-04	1.53E-04	7.32E-05	4.91E-05	1.15E-03	1.83E-04
3/6/2017	6.35E-04	1.29E-04	3.92E-05	3.07E-05	5.92E-04	1.20E-04
3/13/2017	2.34E-02	1.54E-03	3.08E-04	9.74E-05	1.57E-02	1.50E-03
3/20/2017	1.28E-02	9.32E-04	2.73E-04	8.52E-05	9.86E-03	9.56E-04
3/27/2017	1.34E-02	9.74E-04	1.41E-04	5.43E-05	9.19E-03	8.36E-04
4/3/2017	4.35E-03	3.77E-04	2.27E-04	6.60E-05	8.46E-03	7.66E-04
4/10/2017	4.92E-02	3.22E-03	1.16E-03	2.15E-04	8.97E-02	7.35E-03
4/17/2017	1.05E-03	2.02E-04	-1.75E-06	2.73E-06	1.82E-03	3.09E-04
4/24/2017	1.99E+00	1.55E-01	2.16E-02	1.93E-03	1.91E+00	1.53E-01
5/1/2017	8.14E-01	5.59E-02	1.55E-03	2.64E-04	1.72E-01	1.40E-02
5/8/2017	6.43E-02	4.13E-03	6.16E-04	1.63E-04	4.41E-02	3.75E-03
5/15/2017	4.32E-03	4.69E-04	7.00E-05	5.36E-05	4.54E-03	5.53E-04
5/22/2017	2.68E-02	1.87E-03	4.59E-04	1.31E-04	2.37E-02	2.08E-03
5/29/2017	1.71E-03	2.45E-04	5.41E-05	4.00E-05	1.14E-03	2.00E-04
6/5/2017	1.00E-02	8.36E-04	1.32E-04	6.83E-05	1.02E-02	1.00E-03
6/12/2017	1.22E-03	2.12E-04	2.36E-04	1.08E-04	2.09E-03	3.32E-04
6/19/2017	5.78E-01	3.79E-02	1.44E-02	1.36E-03	1.27E+00	1.02E-01
6/26/2017	1.62E-02	1.24E-03	2.84E-04	1.22E-04	3.76E-02	3.40E-03
7/3/2017	1.38E-03	2.39E-04	3.22E-05	3.78E-05	2.23E-03	3.41E-04
7/10/2017	3.62E-04	1.11E-04	1.77E-04	1.04E-04	1.34E-04	9.71E-05
7/17/2017	2.89E-04	1.12E-04	-1.90E-06	2.96E-06	1.85E-04	8.55E-05
7/24/2017	8.03E-02	5.11E-03	2.89E-04	1.14E-04	1.29E-02	1.33E-03
7/31/2017	4.30E-04	1.36E-04	1.76E-04	8.28E-05	7.54E-04	1.76E-04
8/7/2017	4.84E-04	1.33E-04	4.14E-05	4.34E-05	6.59E-04	1.83E-04
8/14/2017	2.78E-04	9.97E-05	1.01E-04	5.96E-05	3.95E-04	1.32E-04
8/21/2017	3.46E-01	2.19E-02	1.44E-02	1.38E-03	8.70E-01	7.17E-02
8/28/2017	3.70E-02	2.45E-03	1.42E-03	2.53E-04	8.24E-02	7.00E-03
9/4/2017	7.22E-04	1.67E-04	1.22E-04	7.47E-05	9.78E-04	2.25E-04
9/10/2017	5.46E-04	1.50E-04	-1.75E-05	5.53E-05	6.41E-04	1.69E-04
9/18/2017	3.16E-04	9.71E-05	5.08E-05	6.35E-05	1.49E-04	8.46E-05
9/25/2017	4.84E-01	3.11E-02	2.33E-02	2.32E-03	1.30E+00	1.16E-01

Data Tables Supporting the Radiological Environmental Monitoring Program

Sample Date	U-238		Pu-238		Pu-239	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
10/2/2017	3.11E-03	3.76E-04	4.22E-05	5.49E-05	5.32E-03	6.15E-04
10/9/2017	6.68E-02	4.23E-03	2.28E-03	3.42E-04	1.16E-01	9.78E-03
10/16/2017	1.58E-02	1.18E-03	7.46E-04	1.72E-04	2.76E-02	2.43E-03
10/23/2017	5.86E-02	3.76E-03	2.43E-03	3.54E-04	9.41E-02	7.78E-03
10/30/2017	6.84E-03	6.34E-04	2.22E-04	1.06E-04	1.34E-02	1.33E-03
11/6/2017	4.11E-01	2.61E-02	1.93E-02	1.84E-03	8.86E-01	7.49E-02
11/13/2017	8.81E-02	5.52E-03	3.43E-03	4.45E-04	1.67E-01	1.40E-02
11/20/2017	1.63E-01	1.00E-02	8.49E-03	9.13E-04	3.43E-01	2.92E-02
11/27/2017	3.59E-03	4.05E-04	1.24E-04	8.04E-05	6.05E-03	7.09E-04
12/4/2017	1.38E-01	8.59E-03	6.57E-03	7.25E-04	2.42E-01	2.02E-02
12/11/2017	8.46E-02	5.30E-03	3.43E-03	4.49E-04	1.33E-01	1.11E-02
12/18/2017	1.66E-03	2.65E-04	2.97E-04	1.19E-04	1.69E-03	2.97E-04
12/25/2017	8.68E-02	5.46E-03	4.11E-03	5.20E-04	1.58E-01	1.35E-02
1/1/2018	1.28E-03	2.25E-04	1.84E-04	1.04E-04	2.25E-03	3.64E-04

Sample Date	Am-241		Cm-244		Gross Beta		Gross Alpha	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/9/2017	1.17E-02	9.17E-04	2.89E-04	9.32E-05	5.73E-01	4.70E-02	3.68E-01	4.56E-02
1/11/2017	2.34E-03	4.43E-04	0.00E+00	9.13E-05	1.07E-01	3.61E-02	7.73E-02	2.50E-02
1/16/2017	2.09E-03	2.89E-04	1.58E-04	7.09E-05	2.41E-02	1.99E-02	6.22E-02	2.05E-02
1/23/2017	6.73E-03	5.82E-04	3.89E-04	1.01E-04	2.00E-01	1.85E-02	1.48E-01	1.80E-02
1/30/2017	1.31E-03	1.90E-04	7.08E-05	4.70E-05	3.38E-02	1.67E-02	6.62E-02	1.69E-02
2/6/2017	3.84E-02	2.49E-03	9.62E-04	1.56E-04	7.49E-01	5.76E-02	1.23E+00	7.53E-02
2/13/2017	3.95E-03	3.75E-04	2.12E-04	6.82E-05	2.47E-01	3.11E-02	1.74E-01	2.82E-02
2/20/2017	1.96E-04	6.65E-05	0.00E+00	3.03E-05	3.62E-02	1.20E-02	1.20E-02	6.17E-03
2/27/2017	1.30E-04	5.42E-05	-2.86E-05	2.04E-05	1.73E-02	1.45E-02	5.22E-03	6.53E-03
3/6/2017	1.10E-04	5.04E-05	-1.47E-05	1.47E-05	-3.27E-03	1.26E-02	5.27E-03	6.55E-03
3/13/2017	3.32E-03	3.38E-04	1.32E-04	5.45E-05	1.15E-01	1.53E-02	5.38E-02	1.14E-02
3/20/2017	1.41E-03	2.02E-04	8.92E-05	4.57E-05	4.73E-02	1.20E-02	2.67E-02	8.28E-03
3/27/2017	1.86E-03	2.36E-04	8.68E-05	4.44E-05	6.65E-02	1.76E-02	1.82E-02	9.74E-03
4/3/2017	4.97E-04	9.89E-05	5.86E-06	2.11E-05	2.22E-02	1.19E-02	1.04E-02	6.93E-03
4/10/2017	5.65E-03	5.64E-04	4.62E-05	5.43E-05	1.11E-01	3.25E-02	2.31E-01	3.92E-02
4/17/2017	2.35E-04	9.86E-05	-2.35E-06	2.65E-06	1.65E-02	2.05E-02	2.89E-03	7.55E-03
4/24/2017	2.84E-01	1.74E-02	2.70E-03	3.47E-04	5.03E+00	1.53E-01	5.30E+00	1.98E-01
5/1/2017	1.02E-01	6.45E-03	1.10E-03	2.08E-04	1.99E+00	9.56E-02	1.82E+00	1.14E-01
5/8/2017	5.97E-03	5.96E-04	1.05E-04	6.36E-05	2.66E-01	3.85E-02	2.41E-01	4.13E-02
5/15/2017	3.73E-04	1.28E-04	-2.81E-05	2.74E-05	4.38E-02	2.37E-02	8.59E-03	1.03E-02
5/22/2017	5.78E-03	6.00E-04	1.19E-04	6.95E-05	1.21E-01	2.96E-02	1.32E-01	3.09E-02
5/29/2017	5.65E-04	1.34E-04	0.00E+00	3.34E-05	2.20E-02	1.76E-02	-4.57E-03	1.50E-03
6/5/2017	2.15E-03	3.00E-04	1.35E-04	6.76E-05	4.14E-02	1.72E-02	3.62E-02	1.22E-02
6/12/2017	1.41E-04	7.11E-05	-3.49E-06	3.89E-06	1.81E-02	2.16E-02	-5.16E-03	3.12E-03

Data Tables Supporting the Radiological Environmental Monitoring Program

Sample Date	Am-241		Cm-244		Gross Beta		Gross Alpha	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
6/19/2017	6.38E-02	4.12E-03	1.11E-03	2.09E-04	8.95E-01	8.88E-02	2.32E+00	1.29E-01
6/26/2017	2.15E-03	3.13E-04	-1.92E-06	2.16E-06	7.59E-02	2.50E-02	1.05E-01	2.82E-02
7/3/2017	1.01E-04	5.87E-05	9.97E-05	5.79E-05	1.93E-02	1.93E-02	1.07E-02	1.05E-02
7/10/2017	3.92E-05	3.92E-05	0.00E+00	4.68E-05	-1.97E-03	1.69E-02	1.84E-02	1.30E-02
7/17/2017	7.57E-05	5.36E-05	3.73E-05	3.74E-05	4.11E-02	2.34E-02	8.14E-03	1.04E-02
7/24/2017	1.26E-02	1.06E-03	-2.78E-05	2.78E-05	1.86E-01	3.47E-02	1.69E-01	3.52E-02
7/31/2017	1.83E-04	8.38E-05	0.00E+00	4.29E-05	1.16E-02	1.81E-02	-3.62E-03	2.78E-03
8/7/2017	1.04E-04	8.67E-05	3.86E-05	3.87E-05	6.51E-02	1.91E-02	-1.71E-03	4.77E-03
8/14/2017	1.56E-04	7.85E-05	-2.56E-05	2.57E-05	-3.76E-03	1.49E-02	-1.61E-03	4.79E-03
8/21/2017	3.41E-02	2.34E-03	5.97E-04	1.54E-04	5.89E-01	7.11E-02	1.43E+00	1.02E-01
8/28/2017	3.95E-03	4.45E-04	0.00E+00	4.22E-05	7.14E-02	3.20E-02	2.12E-01	3.97E-02
9/4/2017	5.35E-05	6.29E-05	1.32E-05	4.77E-05	-7.43E-03	1.86E-02	-5.78E-03	3.48E-03
9/10/2017	0.00E+00	4.74E-05	0.00E+00	4.74E-05	9.70E-04	2.23E-02	-6.62E-03	3.97E-03
9/18/2017	1.81E-05	5.43E-05	0.00E+00	3.80E-05	-4.86E-03	1.79E-02	7.65E-03	9.17E-03
9/25/2017	4.68E-02	3.12E-03	4.92E-04	1.35E-04	7.92E-01	8.04E-02	1.74E+00	1.13E-01
10/2/2017	3.00E-04	1.02E-04	0.00E+00	4.34E-05	-9.24E-03	2.07E-02	2.32E-02	1.46E-02
10/9/2017	7.19E-03	6.78E-04	4.92E-05	5.79E-05	1.49E-01	3.81E-02	2.68E-01	4.46E-02
10/16/2017	1.17E-03	2.20E-04	0.00E+00	4.20E-05	3.16E-02	2.16E-02	5.05E-02	2.01E-02
10/23/2017	6.30E-03	6.09E-04	2.12E-04	8.72E-05	1.46E-01	3.11E-02	1.41E-01	3.22E-02
10/30/2017	5.16E-04	1.55E-04	3.73E-05	3.74E-05	4.08E-03	2.29E-02	5.05E-02	2.00E-02
11/6/2017	4.08E-02	2.73E-03	7.49E-04	1.75E-04	1.12E+00	7.33E-02	1.31E+00	9.89E-02
11/13/2017	7.81E-03	7.03E-04	3.46E-04	1.11E-04	2.14E-01	3.60E-02	3.57E-01	5.17E-02
11/20/2017	1.68E-02	1.30E-03	3.78E-04	1.21E-04	4.81E-01	4.96E-02	5.84E-01	6.56E-02
11/27/2017	2.86E-04	1.03E-04	0.00E+00	4.42E-05	4.16E-02	2.20E-02	1.67E-02	1.29E-02
12/4/2017	1.52E-02	1.19E-03	3.78E-04	1.26E-04	3.92E-01	4.53E-02	4.73E-01	5.90E-02
12/11/2017	9.05E-03	8.47E-04	2.18E-04	9.97E-05	2.59E-01	2.72E-02	2.50E-01	3.09E-02
12/18/2017	1.14E-04	7.25E-05	1.02E-04	5.88E-05	2.81E-02	1.50E-02	3.54E-03	7.10E-03
12/25/2017	9.11E-03	7.93E-04	2.59E-04	1.04E-04	2.76E-01	2.76E-02	3.11E-01	3.43E-02
1/1/2018	8.27E-05	6.71E-05	0.00E+00	4.31E-05	2.61E-02	2.28E-02	5.81E-03	1.02E-02

Table 11 Radioactivity in Air Emission Samples (continued)

Location: 291-H Stack Isokinetic

Sample Date	Co-60		Cs-137		Sr-89/90	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/5/2017	9.41E-04	3.12E-03	2.81E-03	5.58E-03	8.76E-03	1.81E-03
1/12/2017	7.81E-03	4.17E-03	2.03E-02	5.49E-03	6.78E-03	1.45E-03
1/9/2017	8.86E-04	4.70E-03	4.76E-03	4.76E-03	3.03E-03	1.09E-03
1/26/2017	-6.73E-03	5.34E-03	9.49E-03	5.58E-03	6.30E-03	1.79E-03
2/2/2017	2.97E-03	5.25E-03	-3.19E-03	4.69E-03	3.86E-03	1.61E-03
2/9/2017	4.27E-03	4.18E-03	2.86E-03	5.41E-03	5.89E-03	1.83E-03
2/16/2017	-4.73E-03	5.58E-03	2.02E-02	6.21E-03	1.73E-03	1.55E-03
2/23/2017	-2.05E-03	4.88E-03	7.73E-03	4.74E-03	3.59E-03	1.65E-03
3/2/2017	3.65E-03	4.42E-03	6.49E-03	5.14E-03	6.41E-03	1.88E-03
3/9/2017	-1.70E-03	3.46E-03	7.41E-04	4.63E-03	1.81E-03	1.40E-03
3/6/2017	-1.98E-03	4.12E-03	-6.03E-03	3.83E-03	1.95E-03	1.51E-03
3/23/2017	5.32E-03	3.74E-03	2.56E-03	5.05E-03	7.57E-04	1.37E-03
3/30/2017	-5.84E-03	3.52E-03	8.92E-03	4.72E-03	2.78E-03	1.55E-03
4/6/2017	-4.76E-04	3.80E-03	1.66E-02	6.52E-03	6.65E-03	1.78E-03
4/13/2017	1.04E-03	5.02E-03	1.02E-02	4.33E-03	4.46E-03	1.55E-03
4/20/2017	-4.03E-03	4.64E-03	1.82E-02	7.59E-03	1.01E-02	1.95E-03
4/27/2017	-9.70E-04	4.50E-03	-5.54E-04	4.55E-03	6.19E-03	1.68E-03
5/4/2017	1.88E-03	5.36E-03	1.29E-02	4.73E-03	3.32E-03	1.55E-03
5/11/2017	4.35E-03	3.91E-03	9.05E-03	5.17E-03	2.86E-03	1.59E-03
5/18/2017	7.68E-03	4.32E-03	6.05E-03	4.95E-03	5.41E-03	1.71E-03
5/25/2017	-8.73E-04	4.33E-03	1.31E-02	5.28E-03	2.18E-03	1.53E-03
6/1/2017	-1.08E-03	5.19E-03	1.76E-02	4.75E-03	3.57E-03	1.58E-03
6/8/2017	3.00E-03	4.53E-03	8.78E-04	4.65E-03	4.84E-03	1.71E-03
6/15/2017	-1.15E-03	4.71E-03	7.16E-03	5.03E-03	4.62E-03	1.61E-03
6/22/2017	2.38E-03	3.63E-03	3.97E-03	5.40E-03	5.97E-03	1.68E-03
6/29/2017	1.89E-03	5.03E-03	1.66E-02	4.82E-03	9.22E-03	1.96E-03
7/6/2017	5.05E-03	3.64E-03	1.15E-02	5.62E-03	4.32E-03	1.29E-03
7/13/2017	-3.32E-03	3.88E-03	3.70E-03	5.41E-03	4.59E-03	1.63E-03
7/20/2017	6.19E-03	4.20E-03	2.46E-02	8.18E-03	6.43E-03	1.86E-03
7/27/2017	-5.16E-03	4.67E-03	1.48E-02	5.69E-03	4.86E-03	1.63E-03
8/3/2017	4.92E-03	4.10E-03	1.67E-02	5.57E-03	9.32E-03	2.06E-03
8/10/2017	5.78E-03	5.61E-03	6.46E-03	5.00E-03	5.11E-03	1.85E-03
8/17/2017	5.11E-03	3.98E-03	2.54E-04	5.05E-03	2.78E-03	1.59E-03
8/24/2017	-3.08E-03	4.99E-03	-3.78E-03	4.72E-03	1.09E-02	1.29E-03
8/31/2017	8.41E-03	4.51E-03	6.22E-03	5.21E-03	7.97E-03	1.72E-03
9/7/2017	4.46E-04	2.40E-03	4.00E-03	3.16E-03	2.34E-03	1.60E-03
9/14/2017	-2.32E-03	3.39E-03	1.17E-03	3.45E-03	3.95E-03	1.80E-03
9/21/2017	-5.22E-04	2.65E-03	6.65E-03	3.14E-03	1.32E-03	1.38E-03
9/28/2017	-1.73E-03	2.90E-03	-1.78E-04	3.23E-03	2.78E-03	1.49E-03

Data Tables Supporting the Radiological Environmental Monitoring Program

Sample Date	Co-60		Cs-137		Sr-89/90	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
10/5/2017	-6.43E-05	2.96E-03	-7.03E-04	2.91E-03	8.46E-04	1.13E-03
10/12/2017	1.66E-03	2.81E-03	1.84E-04	3.06E-03	1.76E-03	1.25E-03
10/19/2017	3.05E-03	3.20E-03	1.11E-02	4.69E-03	5.62E-03	1.47E-03
10/26/2017	3.81E-03	2.45E-03	5.97E-03	3.54E-03	6.24E-03	1.77E-03
11/2/2017	3.81E-03	3.00E-03	1.45E-03	3.21E-03	9.46E-04	1.38E-03
11/10/2017	-4.46E-03	2.68E-03	-2.54E-03	2.73E-03	1.88E-03	1.20E-03
11/16/2017	8.08E-04	3.83E-03	3.11E-03	3.90E-03	3.14E-03	1.48E-03
11/23/2017	3.59E-04	2.59E-03	8.73E-04	2.85E-03	2.97E-03	1.27E-03
11/30/2017	-5.08E-03	2.73E-03	1.26E-03	2.82E-03	3.11E-04	1.07E-03
12/7/2017	2.34E-03	3.02E-03	-2.78E-03	2.74E-03	6.35E-04	1.46E-03
12/14/2017	1.71E-03	2.57E-03	7.97E-03	2.73E-03	3.22E-03	1.66E-03
12/21/2017	3.19E-03	3.13E-03	-1.87E-03	3.20E-03	5.70E-04	1.45E-03
12/28/2017	-1.61E-03	2.74E-03	1.67E-03	3.08E-03	3.84E-03	1.67E-03
1/4/2018	-2.36E-03	3.11E-03	-1.90E-03	2.94E-03	2.48E-03	1.05E-03

Sample Date	U-234		U-235		Np-237	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/5/2017	1.08E-04	3.57E-05	-9.62E-07	1.07E-06	-1.52E-05	1.09E-05
1/12/2017	1.73E-04	4.59E-05	-7.16E-07	8.03E-07	-7.19E-06	7.22E-06
1/19/2017	1.40E-04	4.26E-05	-5.38E-06	1.93E-05	-1.75E-05	1.76E-05
1/26/2017	8.78E-05	3.53E-05	-7.32E-07	8.18E-07	3.78E-05	2.53E-05
2/2/2017	1.04E-04	4.02E-05	-7.54E-07	8.43E-07	3.81E-05	2.34E-05
2/9/2017	8.30E-05	3.17E-05	2.92E-05	2.08E-05	1.21E-05	1.24E-05
2/16/2017	6.41E-05	3.28E-05	-1.76E-05	1.25E-05	2.65E-05	2.14E-05
2/23/2017	6.65E-05	2.74E-05	4.57E-06	1.65E-05	-4.03E-06	1.32E-05
3/2/2017	1.06E-04	3.57E-05	0.00E+00	1.21E-05	9.97E-06	1.05E-05
3/9/2017	1.10E-04	3.70E-05	-8.81E-06	8.80E-06	9.59E-06	1.01E-05
3/6/2017	1.19E-04	3.55E-05	1.23E-05	1.24E-05	-5.76E-07	8.80E-07
3/23/2017	9.35E-05	3.63E-05	1.31E-05	1.34E-05	1.06E-05	1.09E-05
3/30/2017	7.46E-05	3.48E-05	-2.31E-07	2.58E-07	-2.35E-07	3.66E-07
4/6/2017	1.15E-04	4.04E-05	-1.80E-05	1.29E-05	0.00E+00	1.29E-05
4/13/2017	7.30E-05	3.48E-05	8.76E-06	2.23E-05	1.15E-05	1.15E-05
4/20/2017	1.62E-04	4.04E-05	-1.18E-05	1.80E-05	-5.35E-07	8.27E-07
4/27/2017	1.39E-04	4.05E-05	0.00E+00	1.19E-05	2.36E-05	1.73E-05
5/4/2017	1.13E-04	3.52E-05	2.55E-05	1.82E-05	2.15E-05	1.52E-05
5/11/2017	5.54E-05	2.50E-05	-9.24E-07	1.03E-06	-7.92E-06	7.96E-06
5/18/2017	7.59E-05	2.90E-05	-9.14E-06	8.92E-06	2.70E-05	2.18E-05
5/25/2017	8.95E-05	3.80E-05	-2.78E-05	1.60E-05	1.67E-05	1.98E-05
6/1/2017	8.30E-05	3.12E-05	1.14E-05	1.24E-05	1.14E-05	1.15E-05
6/8/2017	1.14E-04	3.70E-05	2.73E-05	2.02E-05	-3.95E-06	1.63E-05
6/15/2017	7.05E-05	2.70E-05	1.24E-05	1.25E-05	-1.25E-05	1.83E-05

Data Tables Supporting the Radiological Environmental Monitoring Program

Sample Date	U-234		U-235		Np-237	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
6/22/2017	2.28E-04	5.28E-05	-1.32E-05	2.02E-05	1.10E-05	1.17E-05
6/29/2017	6.84E-05	2.83E-05	5.51E-05	2.87E-05	-8.78E-06	8.10E-06
7/6/2017	2.36E-05	2.10E-05	0.00E+00	1.26E-05	9.05E-06	9.78E-06
7/13/2017	1.14E-04	3.82E-05	1.37E-05	1.26E-05	3.05E-06	1.33E-05
7/20/2017	3.70E-05	2.57E-05	-4.30E-06	1.77E-05	2.38E-05	1.69E-05
7/27/2017	1.01E-04	3.33E-05	-8.41E-06	8.47E-06	-2.95E-05	1.47E-05
8/3/2017	6.14E-05	2.73E-05	-9.49E-06	8.84E-06	1.19E-05	1.19E-05
8/10/2017	1.17E-04	3.79E-05	0.00E+00	1.24E-05	-7.57E-06	7.64E-06
8/17/2017	1.34E-04	3.88E-05	1.28E-05	1.28E-05	0.00E+00	1.28E-05
8/24/2017	1.70E-04	3.29E-05	1.30E-05	9.78E-06	4.81E-05	1.73E-05
8/31/2017	1.70E-04	4.70E-05	2.69E-05	1.97E-05	3.22E-06	1.36E-05
9/7/2017	2.39E-05	1.91E-05	0.00E+00	1.12E-05	3.43E-06	1.45E-05
9/14/2017	1.34E-04	4.13E-05	4.49E-05	2.62E-05	2.81E-06	1.24E-05
9/21/2017	8.16E-05	3.85E-05	1.37E-05	1.37E-05	3.76E-06	1.43E-05
9/28/2017	6.16E-05	3.67E-05	2.68E-05	1.90E-05	1.12E-05	1.15E-05
10/5/2017	5.51E-05	3.32E-05	-8.95E-07	1.00E-06	2.13E-05	2.52E-05
10/12/2017	6.70E-05	3.13E-05	2.45E-05	1.81E-05	0.00E+00	1.64E-05
10/19/2017	4.95E-05	2.91E-05	1.24E-05	1.36E-05	0.00E+00	1.17E-05
10/26/2017	1.00E-04	3.47E-05	3.97E-06	1.67E-05	-1.66E-05	1.13E-05
11/2/2017	6.95E-05	3.09E-05	1.30E-05	1.38E-05	2.39E-05	1.76E-05
11/10/2017	1.02E-04	3.42E-05	-3.65E-06	1.50E-05	-1.40E-05	9.97E-06
11/16/2017	1.05E-04	3.71E-05	0.00E+00	1.35E-05	-8.62E-06	8.63E-06
11/23/2017	1.42E-04	4.17E-05	-9.14E-06	9.17E-06	0.00E+00	1.27E-05
11/30/2017	5.59E-05	2.53E-05	9.24E-06	1.15E-05	1.06E-05	1.20E-05
12/7/2017	1.34E-04	3.81E-05	2.67E-06	1.40E-05	3.68E-06	1.32E-05
12/14/2017	1.31E-04	3.86E-05	1.09E-05	1.24E-05	3.27E-05	1.90E-05
12/21/2017	7.35E-05	2.89E-05	-6.11E-07	6.88E-07	-4.59E-06	1.42E-05
12/28/2017	8.22E-05	3.48E-05	1.28E-05	1.35E-05	5.51E-05	2.76E-05
1/4/2018	9.70E-05	3.58E-05	4.95E-05	2.54E-05	9.49E-06	1.01E-05

Table 11 Radioactivity in Air Emission Samples (continued)

Location: 291-H Stack Isokinetic (continued)

Sample Date	U-238		Pu-238		Pu-239		Ru-106*	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/5/2017	8.00E-05	3.20E-05	1.14E-03	1.45E-04	3.89E-04	7.39E-05		
1/12/2017	9.16E-05	3.32E-05	6.35E-03	5.57E-04	2.33E-03	2.42E-04		
1/19/2017	1.13E-04	3.67E-05	8.57E-04	1.75E-04	5.43E-04	1.34E-04		
1/26/2017	9.49E-05	3.45E-05	6.89E-04	1.07E-04	5.22E-04	8.92E-05		
2/2/2017	1.11E-04	3.94E-05	4.68E-04	8.84E-05	1.85E-04	5.40E-05		
2/9/2017	5.89E-05	2.67E-05	1.64E-03	1.94E-04	6.32E-04	1.04E-04		
2/16/2017	9.57E-05	3.25E-05	5.68E-04	9.24E-05	5.76E-04	9.48E-05		
2/23/2017	1.22E-04	3.74E-05	4.54E-04	8.09E-05	2.92E-04	6.38E-05		
3/2/2017	1.03E-04	3.32E-05	1.06E-03	1.28E-04	6.41E-04	9.24E-05		
3/9/2017	8.89E-05	3.32E-05	4.57E-04	7.49E-05	2.28E-04	5.06E-05		
3/6/2017	5.22E-05	2.57E-05	9.14E-04	1.29E-04	2.76E-04	6.26E-05		
3/23/2017	8.59E-05	3.11E-05	2.81E-03	2.85E-04	1.89E-03	2.08E-04		
3/30/2017	8.84E-05	3.33E-05	6.49E-04	1.04E-04	3.22E-04	6.99E-05		
4/6/2017	6.78E-05	3.05E-05	2.84E-04	6.34E-05	2.31E-04	5.47E-05		
4/13/2017	5.16E-05	2.42E-05	4.84E-04	8.67E-05	2.22E-04	5.68E-05		
4/20/2017	2.08E-04	4.66E-05	6.95E-04	1.07E-04	5.89E-04	9.67E-05		
4/27/2017	1.79E-04	4.63E-05	3.86E-04	7.65E-05	4.30E-04	8.05E-05		
5/4/2017	1.79E-04	4.58E-05	3.00E-04	6.22E-05	2.78E-04	6.01E-05		
5/11/2017	9.95E-05	3.35E-05	1.46E-03	1.81E-04	1.07E-03	1.43E-04		
5/18/2017	9.73E-05	3.30E-05	4.27E-04	7.94E-05	2.61E-04	6.19E-05		
5/25/2017	9.30E-05	3.47E-05	2.28E-04	5.91E-05	1.04E-04	3.97E-05		
6/1/2017	8.95E-05	3.05E-05	6.00E-04	9.63E-05	3.30E-04	6.65E-05		
6/8/2017	7.97E-05	3.07E-05	3.27E-04	6.80E-05	1.41E-04	4.22E-05	6.19E-02	4.22E-02
6/15/2017	1.10E-04	3.41E-05	5.46E-04	9.44E-05	3.95E-04	7.68E-05	7.57E-03	3.94E-02
6/22/2017	1.39E-04	3.95E-05	4.92E-04	8.67E-05	4.30E-04	7.97E-05	1.08E-01	4.40E-02
6/29/2017	1.12E-04	3.71E-05	3.46E-04	7.26E-05	1.92E-04	5.06E-05	-8.35E-03	4.24E-02
7/6/2017	6.57E-05	2.76E-05	8.76E-04	1.15E-04	4.95E-04	7.94E-05	-2.67E-02	4.05E-02
7/13/2017	8.84E-05	3.17E-05	3.19E-04	6.62E-05	7.76E-05	3.33E-05	4.38E-02	4.09E-02
7/20/2017	9.32E-05	3.20E-05	4.51E-04	8.33E-05	4.65E-05	2.41E-05	-3.14E-02	5.43E-02
7/27/2017	8.14E-05	2.94E-05	2.70E-04	5.89E-05	3.24E-05	1.89E-05	5.41E-02	4.64E-02
8/3/2017	1.16E-04	3.67E-05	3.41E-04	7.02E-05	1.06E-04	3.64E-05	2.01E-03	4.86E-02
8/10/2017	7.95E-05	2.87E-05	2.02E-04	5.07E-05	2.13E-04	5.19E-05	-3.32E-02	4.71E-02
8/17/2017	7.27E-05	2.78E-05	2.39E-04	6.13E-05	5.89E-05	3.51E-05	-1.67E-02	4.39E-02
8/24/2017	1.07E-04	2.76E-05	3.86E-04	5.43E-05	3.03E-04	4.70E-05	-3.78E-02	3.64E-02
8/31/2017	9.95E-05	3.42E-05	4.86E-04	8.49E-05	7.05E-05	3.13E-05	-1.66E-02	5.15E-02
9/7/2017	5.38E-05	2.63E-05	2.48E-04	5.91E-05	5.51E-05	3.16E-05	-7.11E-03	2.73E-02
9/14/2017	4.78E-05	2.45E-05	2.86E-04	6.03E-05	2.43E-04	5.34E-05	-4.08E-02	3.01E-02
9/21/2017	4.08E-05	2.70E-05	2.73E-04	6.67E-05	7.05E-05	2.94E-05	-5.22E-03	2.56E-02
9/28/2017	6.51E-05	2.68E-05	8.95E-05	3.31E-05	9.03E-05	3.28E-05	1.31E-02	3.05E-02

Data Tables Supporting the Radiological Environmental Monitoring Program

Sample Date	U-238		Pu-238		Pu-239		Ru-106*	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
10/5/2017	1.13E-04	3.65E-05	3.19E-04	7.14E-05	2.10E-04	5.81E-05	-6.78E-02	3.00E-02
10/12/2017	1.54E-04	4.08E-05	1.21E-04	4.26E-05	2.78E-04	6.95E-05	2.84E-02	2.73E-02
10/19/2017	4.35E-05	2.20E-05	7.65E-04	1.13E-04	1.65E-04	4.77E-05	-3.08E-02	2.86E-02
10/26/2017	8.24E-05	3.30E-05	5.46E-04	9.67E-05	1.77E-04	4.87E-05	4.43E-02	2.89E-02
11/2/2017	6.68E-05	3.41E-05	9.00E-04	1.37E-04	2.30E-04	5.70E-05	-1.78E-02	3.05E-02
11/10/2017	3.54E-05	2.41E-05	5.05E-04	8.59E-05	2.28E-04	5.31E-05	2.01E-02	2.27E-02
11/16/2017	1.43E-04	4.21E-05	8.35E-04	1.26E-04	4.24E-04	8.40E-05	7.00E-03	3.46E-02
11/23/2017	1.15E-04	3.81E-05	2.78E-03	2.92E-04	1.41E-03	1.75E-04	-1.12E-02	2.40E-02
11/30/2017	1.17E-04	3.34E-05	7.89E-04	1.18E-04	3.76E-04	7.61E-05	1.10E-02	2.54E-02
12/7/2017	8.41E-05	2.87E-05	5.76E-04	9.59E-05	4.68E-04	8.18E-05	-2.73E-02	3.01E-02
12/14/2017	1.28E-04	3.65E-05	1.88E-03	2.17E-04	7.05E-04	1.06E-04	-7.78E-02	2.74E-02
12/21/2017	8.41E-05	3.07E-05	8.70E-04	1.21E-04	4.65E-04	8.09E-05	5.00E-03	2.56E-02
12/28/2017	8.57E-05	3.13E-05	1.01E-03	1.36E-04	8.84E-04	1.24E-04	-1.46E-02	2.53E-02
1/4/2018	1.28E-04	4.00E-05	5.14E-03	4.80E-04	7.08E-04	1.04E-04	-5.78E-02	3.00E-02

NOTE: Ru-106 was added to the analyses beginning June 8, 2017.

Sample Date	Am-241		Cm-244		Gross Beta		Gross Alpha	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/5/2017	9.73E-05	3.50E-05	2.41E-05	1.71E-05	5.19E-02	1.03E-02	2.05E-04	2.22E-03
1/12/2017	3.32E-04	6.62E-05	5.86E-05	2.65E-05	3.95E-02	9.44E-03	8.97E-03	4.91E-03
1/19/2017	1.06E-04	3.61E-05	0.00E+00	1.31E-05	2.43E-02	8.07E-03	4.41E-03	3.66E-03
1/26/2017	5.92E-05	2.94E-05	1.35E-05	1.77E-05	2.03E-02	6.01E-03	-9.11E-04	1.21E-03
2/2/2017	7.73E-05	3.28E-05	1.15E-05	1.32E-05	6.62E-03	7.65E-03	2.78E-03	3.49E-03
2/9/2017	3.89E-05	2.48E-05	1.16E-05	1.16E-05	8.81E-03	7.94E-03	9.97E-03	5.42E-03
2/16/2017	9.81E-05	3.32E-05	0.00E+00	1.41E-05	2.05E-02	8.50E-03	3.76E-04	2.48E-03
2/23/2017	7.62E-05	2.92E-05	2.15E-05	1.53E-05	1.60E-02	5.99E-03	1.53E-03	2.17E-03
3/2/2017	9.62E-05	3.29E-05	0.00E+00	1.38E-05	1.76E-02	8.19E-03	3.78E-04	2.47E-03
3/9/2017	5.35E-05	2.45E-05	3.57E-06	1.28E-05	1.41E-02	7.51E-03	3.59E-04	2.31E-03
3/6/2017	2.22E-05	1.58E-05	0.00E+00	1.25E-05	1.03E-02	5.24E-03	9.05E-04	1.73E-03
3/23/2017	1.41E-04	4.16E-05	3.22E-05	1.91E-05	7.51E-03	5.03E-03	3.14E-03	2.34E-03
3/30/2017	4.38E-05	2.40E-05	1.09E-05	1.16E-05	1.59E-02	7.36E-03	-1.73E-03	5.66E-04
4/6/2017	4.59E-05	2.31E-05	1.13E-05	1.13E-05	1.87E-02	7.93E-03	8.11E-05	2.36E-03
4/13/2017	2.40E-05	1.70E-05	1.18E-05	1.18E-05	3.00E-02	8.76E-03	6.14E-05	2.32E-03
4/20/2017	6.27E-05	2.63E-05	9.73E-06	1.05E-05	1.72E-02	7.37E-03	7.43E-03	4.42E-03
4/27/2017	2.11E-04	5.06E-05	1.03E-05	1.11E-05	9.03E-03	6.68E-03	-1.33E-03	6.25E-04
5/4/2017	1.94E-04	4.60E-05	9.86E-06	1.01E-05	2.47E-02	8.06E-03	-1.72E-03	5.62E-04
5/11/2017	6.68E-05	2.82E-05	-1.22E-06	1.36E-06	1.60E-02	7.50E-03	2.62E-03	3.15E-03
5/18/2017	2.42E-05	1.77E-05	1.20E-05	1.23E-05	5.97E-02	1.05E-02	8.70E-03	4.67E-03
5/25/2017	1.67E-05	2.04E-05	4.05E-06	1.54E-05	2.66E-02	6.13E-03	4.32E-04	1.66E-03
6/1/2017	3.14E-05	2.60E-05	-1.55E-05	1.10E-05	4.65E-03	6.46E-03	-1.76E-03	5.75E-04
6/8/2017	7.54E-06	1.92E-05	0.00E+00	1.32E-05	7.68E-03	5.09E-03	3.78E-03	2.55E-03

Data Tables Supporting the Radiological Environmental Monitoring Program

Sample Date	Am-241		Cm-244		Gross Beta		Gross Alpha	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
6/15/2017	7.54E-05	3.30E-05	-1.11E-06	1.24E-06	2.17E-02	8.37E-03	2.81E-03	3.31E-03
6/22/2017	2.43E-05	1.74E-05	-1.10E-06	1.24E-06	2.81E-02	8.72E-03	-1.66E-03	9.78E-04
6/29/2017	1.24E-05	1.26E-05	-1.72E-05	1.17E-05	2.35E-02	7.77E-03	1.14E-03	2.46E-03
7/6/2017	1.06E-05	1.08E-05	0.00E+00	1.31E-05	3.19E-02	8.31E-03	1.09E-03	2.37E-03
7/13/2017	5.38E-05	2.70E-05	1.32E-05	1.33E-05	2.62E-02	7.98E-03	-1.19E-03	9.00E-04
7/20/2017	2.53E-05	1.79E-05	4.16E-06	1.50E-05	1.46E-02	7.54E-03	-1.82E-03	1.09E-03
7/27/2017	1.70E-05	2.00E-05	-8.38E-06	8.40E-06	2.06E-02	7.93E-03	3.73E-04	2.42E-03
8/3/2017	3.73E-05	2.21E-05	0.00E+00	1.33E-05	2.58E-02	7.86E-03	-1.17E-03	8.88E-04
8/10/2017	6.19E-05	2.80E-05	-1.63E-05	1.16E-05	1.29E-02	5.57E-03	5.97E-04	1.87E-03
8/17/2017	3.70E-05	2.15E-05	0.00E+00	1.36E-05	1.87E-02	5.89E-03	5.84E-04	1.86E-03
8/24/2017	9.49E-06	7.74E-06	1.01E-05	7.55E-06	1.48E-02	5.43E-03	2.84E-03	2.34E-03
8/31/2017	1.57E-05	1.92E-05	1.21E-05	1.21E-05	3.51E-02	9.44E-03	2.86E-03	3.40E-03
9/7/2017	3.35E-05	1.94E-05	1.10E-05	1.10E-05	7.78E-03	6.78E-03	3.73E-04	2.39E-03
9/14/2017	0.00E+00	1.32E-05	0.00E+00	1.32E-05	1.08E-02	7.32E-03	3.92E-04	2.52E-03
9/21/2017	-1.12E-06	1.25E-06	0.00E+00	1.31E-05	1.25E-02	7.65E-03	-1.77E-03	8.88E-04
9/28/2017	9.86E-06	1.11E-05	0.00E+00	1.30E-05	1.31E-04	6.54E-03	5.08E-04	2.42E-03
10/5/2017	-7.81E-06	7.82E-06	0.00E+00	1.39E-05	4.81E-03	7.11E-03	2.78E-03	3.34E-03
10/12/2017	-7.22E-06	7.23E-06	1.07E-05	1.07E-05	2.09E-02	8.31E-03	4.68E-04	2.39E-03
10/19/2017	2.47E-05	1.80E-05	-8.32E-06	8.33E-06	2.34E-02	7.82E-03	2.69E-03	3.25E-03
10/26/2017	2.97E-05	2.52E-05	2.24E-05	1.59E-05	9.62E-03	6.61E-03	-1.63E-03	1.13E-03
11/2/2017	7.49E-05	3.29E-05	0.00E+00	1.40E-05	1.10E-02	7.88E-03	5.08E-03	4.07E-03
11/10/2017	1.30E-05	1.52E-05	0.00E+00	1.04E-05	2.41E-02	7.14E-03	-1.43E-03	9.89E-04
11/16/2017	5.00E-05	2.52E-05	0.00E+00	1.44E-05	9.38E-03	7.35E-03	7.24E-04	2.76E-03
11/23/2017	9.84E-05	3.16E-05	9.70E-06	9.71E-06	2.73E-03	5.60E-03	2.81E-03	3.17E-03
11/30/2017	4.24E-05	2.16E-05	0.00E+00	1.20E-05	6.19E-03	5.75E-03	2.68E-03	3.03E-03
12/7/2017	3.32E-05	2.11E-05	9.30E-06	9.93E-06	6.19E-03	5.80E-03	2.49E-03	3.00E-03
12/14/2017	2.97E-05	1.73E-05	9.24E-06	9.86E-06	1.35E-02	4.71E-03	2.10E-03	2.31E-03
12/21/2017	5.76E-05	2.77E-05	2.14E-05	2.47E-05	1.07E-02	4.59E-03	2.14E-03	2.35E-03
12/28/2017	6.38E-05	2.62E-05	-6.97E-06	7.01E-06	1.18E-02	4.66E-03	3.24E-03	2.60E-03
1/4/2018	1.02E-04	3.30E-05	1.01E-05	1.01E-05	2.48E-02	8.24E-03	5.89E-03	4.24E-03

Table 11 Radioactivity in Air Emission Samples (continued)

Location: 291-S Vitrification Process (Zone 1)

Sample Date	Co-60		Cs-137		Sr-89/90	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/16/2017	4.00E-02	5.60E-02	8.19E-02	6.09E-02	9.54E-03	1.16E-02
4/17/2017	4.49E-03	7.68E-02	7.76E-02	8.11E-02	3.73E-03	2.15E-02
7/10/2017	1.39E-01	9.78E-02	1.71E-03	1.10E-01		
7/17/2017	5.35E-02	8.43E-02	1.22E-01	1.04E-01	2.01E-02	1.47E-02
10/9/2017	7.22E-02	5.30E-02	1.46E-02	5.85E-02		
10/16/2017	-1.98E-02	6.29E-02	8.76E-02	6.37E-02	4.16E-02	1.55E-02

Sample Date	U-234		U-235		U-238	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/16/2017	1.13E-03	4.23E-04	4.81E-05	2.02E-04	9.51E-04	3.63E-04
4/17/2017	2.70E-03	7.89E-04	2.47E-04	2.52E-04	2.78E-03	7.91E-04
7/17/2017	1.34E-03	4.24E-04	9.68E-05	2.47E-04	1.75E-03	4.69E-04
10/16/2017	1.68E-03	4.77E-04	-1.36E-05	1.54E-05	3.54E-04	2.96E-04

Sample Date	Pu-238		Pu-239		Am-241	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/16/2017	0.00E+00	1.70E-04	1.81E-04	2.29E-04	6.92E-04	3.41E-04
4/17/2017	-1.62E-04	1.31E-04	5.43E-04	3.30E-04	1.84E-04	1.84E-04
7/17/2017	-7.81E-05	7.89E-05	2.26E-04	1.67E-04	2.15E-04	1.73E-04
10/16/2017	-7.30E-05	2.92E-04	2.17E-04	1.55E-04	6.08E-04	3.24E-04

Sample Date	Cm-244		Gross Beta		Gross Alpha	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/16/2017	1.45E-04	1.45E-04	2.73E-01	7.31E-02	-1.09E-02	1.44E-02
4/17/2017	-9.84E-06	1.09E-05	1.35E-01	1.18E-01	1.72E-01	9.21E-02
7/17/2017	2.36E-04	1.67E-04	1.84E-01	7.47E-02	3.84E-02	3.75E-02
10/16/2017	2.22E-04	1.58E-04	2.61E-01	8.84E-02	-1.92E-02	9.48E-03

Table 11 Radioactivity in Air Emission Samples (continued)

Location: 292-F Main Stack (195 ft)

Sample Date	I-129	
	Conc. (pCi/m ³)	Standard Dev.
1/16/2017	5.11E-02	4.91E-03
1/16/2017	2.51E-02	3.42E-03
1/30/2017	5.41E-02	3.14E-03
1/30/2017	2.17E-02	2.04E-03
2/13/2017	1.05E-01	9.09E-03
2/13/2017	3.19E-02	4.06E-03
2/27/2017	9.68E-02	9.71E-03
2/27/2017	6.14E-02	6.90E-03
3/13/2017	6.84E-02	5.88E-03
3/13/2017	2.05E-02	3.45E-03
3/27/2017	7.19E-02	6.64E-03
3/27/2017	1.31E-02	3.15E-03
4/10/2017	1.50E-01	1.43E-02
4/10/2017	1.22E-02	5.20E-03
4/24/2017	2.17E-02	3.75E-03
4/24/2017	5.11E-03	2.01E-03
5/8/2017	1.26E-01	1.21E-02
5/8/2017	1.76E-02	2.91E-03
5/22/2017	1.49E-01	1.20E-02
5/22/2017	4.95E-03	1.58E-03
6/5/2017	1.07E-01	8.96E-03
6/5/2017	4.11E-02	4.91E-03
6/19/2017	1.34E-01	1.07E-02
6/19/2017	2.59E-02	4.29E-03
7/3/2017	1.39E-01	1.37E-02
7/3/2017	3.35E-02	5.21E-03
7/17/2017	1.33E-01	1.08E-02
7/17/2017	2.34E-02	3.06E-03
7/31/2017	1.34E-01	1.27E-02
7/31/2017	-3.76E-04	1.33E-03
8/14/2017	1.36E-01	1.08E-02
8/14/2017	1.29E-02	2.74E-03
8/28/2017	1.59E-01	1.51E-02
8/28/2017	2.81E-03	1.43E-03
9/10/2017	1.58E-01	1.25E-02
9/10/2017	2.70E-02	3.70E-03
9/25/2017	9.19E-02	9.13E-03
9/25/2017	3.62E-02	3.96E-03
10/9/2017	1.13E-01	1.13E-02
10/9/2017	2.62E-02	3.81E-03
10/23/2017	1.25E-01	1.24E-02
10/23/2017	6.03E-03	2.04E-03
11/6/2017	8.73E-02	7.74E-03

Sample Date	I-129	
	Conc. (pCi/m ³)	Standard Dev.
11/6/2017	3.62E-02	4.42E-03
11/20/2017	3.54E-02	4.68E-03
11/20/2017	6.35E-03	2.92E-03
12/4/2017	8.84E-02	9.28E-03
12/4/2017	1.65E-02	3.61E-03
12/18/2017	7.11E-02	6.54E-03
12/18/2017	2.54E-02	4.63E-03
1/1/2018	5.57E-02	5.43E-03
1/1/2018	2.30E-02	3.50E-03

Table 11 Radioactivity in Air Emission Samples (continued)

Location: 292-H Main Stack (195 ft)

Sample Date	I-129	
	Conc. (pCi/m ³)	Standard Dev.
1/18/2017	4.19E-01	3.53E-02
1/18/2017	1.77E-01	1.92E-02
2/1/2017	1.64E-01	1.08E-02
2/1/2017	1.43E-01	1.01E-02
2/15/2017	4.59E-01	3.42E-02
2/15/2017	3.43E-01	2.02E-02
3/1/2017	9.97E-01	6.96E-02
3/1/2017	5.70E-02	1.05E-02
3/15/2017	6.62E-01	5.11E-02
3/15/2017	5.22E-02	9.24E-03
3/29/2017	6.14E-01	4.83E-02
3/29/2017	2.95E-02	1.15E-02
4/12/2017	8.08E-01	6.10E-02
4/12/2017	4.14E-02	2.40E-02
4/26/2017	3.89E-01	3.27E-02
4/26/2017	2.44E-01	2.23E-02
5/10/2017	8.51E-01	6.38E-02
5/10/2017	7.30E-02	1.65E-02
5/24/2017	9.11E-01	6.40E-02
5/24/2017	8.27E-02	1.48E-02
6/7/2017	4.54E-01	3.72E-02
6/7/2017	2.59E-01	2.47E-02
6/21/2017	5.00E-01	3.94E-02
6/21/2017	2.42E-01	2.44E-02
7/5/2017	5.35E-01	4.17E-02
7/5/2017	3.05E-01	2.95E-02
7/19/2017	8.27E-02	7.02E-03
7/19/2017	4.81E-02	3.88E-03
8/2/2017	1.06E+00	7.81E-02
8/2/2017	5.14E-02	1.37E-02
8/16/2017	3.35E-01	3.05E-02
8/16/2017	2.12E-01	2.03E-02
8/30/2017	8.46E-01	6.27E-02
8/30/2017	2.42E-01	2.50E-02
9/13/2017	7.41E-01	5.58E-02
9/13/2017	2.51E-01	2.44E-02
9/27/2017	3.51E-01	2.85E-02
9/27/2017	1.81E-01	1.75E-02

Sample Date	I-129	
	Conc. (pCi/m ³)	Standard Dev.
10/11/2017	1.76E-01	1.74E-02
10/11/2017	1.29E-01	1.44E-02
10/25/2017	2.26E-01	2.18E-02
10/25/2017	1.56E-01	1.65E-02
11/8/2017	1.32E-01	1.56E-02
11/8/2017	1.13E-01	1.47E-02
11/21/2017	1.86E-01	1.90E-02
11/21/2017	1.41E-01	1.67E-02
12/6/2017	4.43E-01	3.51E-02
12/6/2017	1.25E-02	6.59E-03
12/20/2017	3.08E-01	2.70E-02
12/20/2017	5.51E-02	1.72E-02
1/3/2018	3.19E-01	2.06E-02
1/3/2018	2.76E-02	6.37E-03

Table 11 Radioactivity in Air Emission Samples (continued)

Location: 511-S Low Pt. Pump Pit

Sample Date	Co-60		Cs-137		Sr-89/90	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/16/2017	-2.76E-03	3.82E-02	-1.14E-01	6.49E-02	7.32E-03	1.20E-02
4/17/2017	-6.95E-02	8.23E-02	3.46E-02	7.84E-02	4.70E-02	2.36E-02
7/10/2017	-4.65E-02	7.51E-02	-4.30E-02	7.62E-02		
7/17/2017	1.09E-01	8.80E-02	-6.49E-02	8.30E-02	1.95E-02	1.19E-02
10/9/2017	-4.81E-02	3.42E-02	4.24E-02	3.19E-02		
10/16/2017	3.70E-03	3.61E-02	2.45E-03	3.38E-02	5.24E-03	7.33E-03

Sample Date	U-234		U-235		U-238	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/16/2017	1.81E-03	6.01E-04	-8.38E-06	9.36E-06	1.96E-03	5.54E-04
4/17/2017	2.44E-03	6.92E-04	2.28E-04	2.32E-04	8.89E-04	4.32E-04
7/17/2017	4.84E-04	2.32E-04	3.35E-04	1.95E-04	9.89E-04	3.07E-04
10/16/2017	1.28E-03	2.87E-04	6.46E-05	7.34E-05	4.68E-04	1.67E-04

Sample Date	Pu-238		Pu-239		Am-241	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/16/2017	1.41E-04	1.41E-04	1.02E-03	4.20E-04	3.22E-04	3.00E-04
4/17/2017	3.38E-04	2.74E-04	4.38E-05	2.26E-04	5.76E-04	3.34E-04
7/17/2017	3.38E-04	1.70E-04	1.63E-04	1.21E-04	9.22E-04	2.94E-04
10/16/2017	-3.86E-05	3.87E-05	1.15E-04	8.23E-05	3.00E-04	1.47E-04

Sample Date	Cm-244		Gross Beta		Gross Alpha	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/16/2017	-1.03E-04	1.04E-04	3.27E-02	6.34E-02	4.68E-02	3.31E-02
4/17/2017	-1.36E-04	1.27E-04	5.19E-02	1.06E-01	4.46E-02	5.35E-02
7/17/2017	8.46E-05	8.47E-05	4.76E-02	5.00E-02	7.16E-02	4.16E-02
10/16/2017	0.00E+00	6.89E-05	4.62E-02	3.72E-02	1.66E-02	2.00E-02

Table 11 Radioactivity in Air Emission Samples (continued)

Location: 512-S Late Wash

Sample Date	Co-60		Cs-137		Sr-89/90	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/16/2017	-1.02E-03	2.81E-03	-4.16E-04	2.55E-03	1.94E-03	6.61E-04
4/17/2017	-2.55E-03	2.77E-03	-6.59E-03	3.74E-03	6.81E-04	1.04E-03
7/10/2017	2.11E-03	2.24E-03	-2.23E-04	3.07E-03		
7/17/2017	-9.97E-04	3.09E-03	-3.95E-03	3.42E-03	-5.57E-05	4.20E-04
10/9/2017	2.14E-04	2.04E-03	2.51E-03	1.98E-03		
10/16/2017	6.89E-04	1.94E-03	1.84E-03	1.97E-03	7.86E-04	4.66E-04

Sample Date	U-234		U-235		U-238	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/16/2017	3.81E-05	1.57E-05	7.46E-06	7.87E-06	5.05E-05	1.81E-05
4/17/2017	1.04E-04	3.20E-05	1.15E-05	1.17E-05	9.22E-05	3.11E-05
7/17/2017	4.59E-05	1.31E-05	4.35E-06	4.37E-06	5.27E-05	1.41E-05
10/16/2017	5.35E-05	1.43E-05	-4.27E-07	4.79E-07	4.30E-05	1.26E-05

Sample Date	Pu-238		Pu-239		Am-241	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/16/2017	1.48E-05	1.18E-05	2.89E-05	1.68E-05	2.45E-05	1.83E-05
4/17/2017	-8.22E-06	6.64E-06	7.51E-05	2.77E-05	4.73E-05	2.13E-05
7/17/2017	7.08E-06	5.01E-06	6.84E-06	5.06E-06	2.11E-05	9.17E-06
10/16/2017	-2.04E-06	2.04E-06	1.32E-05	7.20E-06	2.16E-05	9.56E-06

Sample Date	Cm-244		Gross Beta		Gross Alpha	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/16/2017	6.54E-06	6.54E-06	5.16E-03	3.00E-03	2.03E-03	1.44E-03
4/17/2017	-4.86E-07	5.41E-07	-2.76E-03	4.73E-03	3.73E-04	1.92E-03
7/17/2017	3.59E-06	3.60E-06	2.76E-03	2.03E-03	1.19E-03	1.17E-03
10/16/2017	0.00E+00	4.52E-06	5.51E-03	2.35E-03	1.85E-04	8.43E-04

Table 11 Radioactivity in Air Emission Samples (continued)

Location: 735-A Stack

Sample Date	Co-60		Cs-137		Gross Beta		Gross Alpha	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
2/7/2017	-3.92E-04	1.16E-03	2.19E-04	1.33E-03	1.30E-03	9.59E-04	3.68E-04	4.59E-04
3/7/2017	9.14E-04	1.35E-03	-1.23E-03	1.37E-03	2.34E-03	1.25E-03	6.49E-05	4.19E-04
4/4/2017	1.64E-03	1.29E-03	-6.08E-04	1.47E-03	4.89E-03	1.44E-03	-3.97E-04	1.44E-04
5/2/2017	1.76E-03	1.52E-03	1.09E-03	1.25E-03	3.73E-03	1.29E-03	8.19E-04	6.53E-04
6/6/2017	-3.41E-04	8.59E-04	5.22E-04	1.17E-03	2.54E-03	7.40E-04	6.68E-04	3.80E-04
7/4/2017	1.68E-03	1.63E-03	2.40E-03	1.48E-03	3.00E-03	1.16E-03	5.76E-04	5.64E-04
8/1/2017	9.86E-04	1.45E-03	2.46E-03	1.71E-03	1.74E-03	8.92E-04	6.92E-04	4.70E-04
9/5/2017	8.46E-04	6.92E-04	-9.62E-04	8.05E-04	1.36E-03	9.09E-04	-2.48E-04	1.49E-04
10/3/2017	7.27E-04	9.48E-04	-8.03E-04	9.13E-04	3.89E-03	1.37E-03	-3.11E-04	1.54E-04
11/7/2017	-4.81E-04	7.68E-04	1.34E-04	8.29E-04	1.65E-03	8.96E-04	1.27E-03	6.84E-04
12/5/2017	4.11E-05	9.17E-04	1.43E-04	9.78E-04	2.30E-03	1.14E-03	8.41E-04	6.75E-04
1/2/2018	1.14E-03	1.07E-03	-5.03E-06	1.00E-03	2.39E-03	1.24E-03	-4.27E-04	1.67E-04

Location: 772-1F Stack

Sample Date	Co-60		Cs-137		Gross Beta		Gross Alpha	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/9/2017	-5.59E-02	6.20E-02	-3.68E-02	5.38E-02				
1/16/2017	1.90E-02	5.47E-02	5.84E-02	5.71E-02	5.68E-02	2.49E-02	8.03E-04	8.35E-03
1/23/2017	8.84E-02	5.83E-02	3.41E-02	6.98E-02				
1/30/2017	2.05E-02	5.76E-02	-1.42E-02	5.35E-02	3.57E-02	2.49E-02	1.92E-02	1.57E-02
2/6/2017	-5.24E-02	6.07E-02	8.46E-02	5.62E-02				
2/13/2017	-3.00E-02	5.30E-02	-1.05E-02	5.74E-02	1.44E-02	1.67E-02	-2.89E-03	5.44E-03
2/20/2017	-2.06E-02	5.69E-02	-4.59E-02	6.05E-02				
2/27/2017	1.77E-02	4.79E-02	-2.04E-02	5.71E-02	5.65E-02	2.63E-02	1.54E-03	9.97E-03
3/6/2017	-1.23E-01	6.16E-02	5.41E-02	5.69E-02				
3/13/2017	8.95E-02	6.37E-02	4.62E-02	6.25E-02	2.28E-02	1.66E-02	1.32E-02	9.86E-03
3/20/2017	-3.62E-02	4.75E-02	4.59E-02	4.77E-02				
3/27/2017	1.75E-02	5.16E-02	1.11E-01	5.28E-02	5.19E-02	2.42E-02	1.62E-03	8.49E-03
4/3/2017	4.46E-02	5.49E-02	1.28E-01	6.05E-02				
4/10/2017	5.57E-02	5.30E-02	5.92E-02	5.08E-02	3.43E-02	2.38E-02	-8.57E-03	3.14E-03
4/17/2017	4.22E-03	5.30E-02	-5.32E-02	6.02E-02				
4/24/2017	-1.20E-02	5.89E-02	-1.38E-02	5.88E-02	2.05E-02	2.12E-02	1.17E-02	1.21E-02
5/1/2017	5.32E-02	5.50E-02	6.19E-03	5.53E-02				
5/8/2017	-7.81E-03	6.28E-02	-1.41E-03	5.96E-02	2.13E-02	2.13E-02	2.29E-02	1.44E-02
5/15/2017	-8.46E-02	6.99E-02	-5.54E-03	5.52E-02				
5/22/2017	-8.57E-02	5.77E-02	-2.76E-02	6.22E-02	4.86E-02	2.42E-02	1.76E-03	9.17E-03
5/29/2017	-3.22E-03	4.51E-02	1.24E-01	6.52E-02				

Data Tables Supporting the Radiological Environmental Monitoring Program

Sample Date	Co-60		Cs-137		Gross Beta		Gross Alpha	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
6/5/2017	1.92E-02	5.68E-02	3.62E-02	5.49E-02	3.57E-02	1.69E-02	-2.57E-03	4.82E-03
6/12/2017	-5.59E-02	5.96E-02	-1.48E-02	5.18E-02				
6/19/2017	-1.39E-02	6.36E-02	-8.92E-02	5.12E-02	1.29E-02	2.22E-02	1.89E-02	1.49E-02
6/26/2017	-9.73E-02	6.76E-02	1.87E-02	5.69E-02				
7/3/2017	-9.97E-02	5.09E-02	-7.27E-02	5.77E-02	6.73E-03	1.80E-02	1.27E-02	1.24E-02
7/10/2017	1.90E-02	6.10E-02	-3.43E-02	5.80E-02				
7/17/2017	-1.83E-02	4.27E-02	-2.81E-02	6.45E-02	4.62E-03	2.02E-02	1.48E-03	9.40E-03
7/24/2017	-3.62E-02	6.09E-02	-1.09E-02	6.15E-02				
7/31/2017	8.32E-02	5.92E-02	-1.59E-02	5.69E-02	6.32E-02	2.39E-02	-4.73E-03	3.62E-03
8/7/2017	-1.79E-02	5.50E-02	-5.16E-02	5.92E-02				
8/14/2017	2.29E-02	4.55E-02	-2.02E-02	5.51E-02	2.55E-02	1.73E-02	1.14E-02	9.86E-03
8/21/2017	-2.63E-02	4.20E-02	-9.05E-03	5.68E-02				
8/28/2017	4.08E-02	5.58E-02	1.64E-02	5.75E-02	7.84E-02	2.73E-02	-6.76E-03	4.02E-03
9/4/2017	-6.35E-03	3.31E-02	-3.11E-02	3.94E-02				
9/11/2017	-2.95E-02	4.34E-02	2.03E-02	3.60E-02	8.81E-03	2.06E-02	1.53E-03	9.78E-03
9/18/2017	-5.16E-02	3.97E-02	4.16E-02	4.13E-02				
9/25/2017	7.86E-02	3.32E-02	8.57E-02	3.72E-02	1.08E-02	2.22E-02	-7.03E-03	3.54E-03
10/2/2017	3.19E-02	3.89E-02	-2.39E-02	4.10E-02				
10/9/2017	2.12E-03	4.26E-02	-7.32E-03	4.04E-02	1.83E-02	2.36E-02	2.03E-02	1.62E-02
10/16/2017	1.98E-02	3.74E-02	4.30E-02	4.15E-02				
10/23/2017	6.14E-03	4.45E-02	-4.11E-02	3.81E-02	3.22E-03	1.24E-03	5.49E-04	6.62E-04
10/30/2017	-2.41E-02	3.55E-02	3.11E-02	3.55E-02				
11/6/2017	3.22E-02	3.83E-02	-9.89E-03	4.11E-02	2.67E-02	2.11E-02	2.15E-03	9.74E-03
11/13/2017	-1.57E-02	3.94E-02	3.08E-02	3.81E-02				
11/20/2017	7.35E-02	3.74E-02	4.32E-02	4.05E-02	3.57E-02	2.18E-02	-6.81E-03	2.63E-03
11/27/2017	-4.89E-02	4.26E-02	1.58E-02	4.12E-02				
12/4/2017	3.46E-02	3.48E-02	7.24E-02	3.83E-02	6.43E-02	2.46E-02	2.19E-03	9.97E-03
12/11/2017	9.22E-02	3.97E-02	-5.76E-02	4.05E-02				
12/18/2017	4.57E-02	3.61E-02	-1.65E-02	4.03E-02	2.69E-03	1.34E-02	9.65E-03	1.06E-02
12/25/2017	4.62E-02	3.58E-02	-1.86E-02	3.79E-02				
1/1/2018	3.03E-02	3.11E-02	-5.84E-02	4.06E-02	7.27E-02	2.72E-02	7.16E-03	1.26E-02

Table 11 Radioactivity in Air Emission Samples (continued)

Location: 772-4F

Sample Date	Co-60		Cs-137	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/9/2017	-3.43E-03	2.61E-03	1.92E-03	3.19E-03
1/16/2017	2.41E-03	2.50E-03	1.40E-03	3.24E-03
1/23/2017	5.30E-03	3.48E-03	8.92E-04	3.13E-03
1/30/2017	-5.03E-03	3.59E-03	-2.64E-04	2.87E-03
2/6/2017	-1.45E-03	2.94E-03	-5.68E-03	2.90E-03
2/13/2017	-3.76E-03	3.01E-03	2.23E-03	2.78E-03
2/20/2017	2.81E-03	2.47E-03	3.43E-03	2.65E-03
2/27/2017	4.24E-03	2.74E-03	-1.32E-03	2.97E-03
3/6/2017	1.65E-03	2.61E-03	-1.13E-03	2.80E-03
3/13/2017	1.15E-03	2.77E-03	-4.49E-03	2.41E-03
3/20/2017	-8.65E-04	2.51E-03	-4.38E-03	2.82E-03
3/27/2017	1.51E-03	2.13E-03	8.76E-05	2.56E-03
4/3/2017	-4.08E-03	2.60E-03	-7.62E-04	2.54E-03
4/10/2017	1.45E-03	1.88E-03	1.99E-03	2.70E-03
4/17/2017	2.92E-03	2.57E-03	2.78E-03	2.65E-03
4/24/2017	2.81E-03	2.08E-03	-1.38E-03	2.62E-03
5/1/2017	-1.25E-03	2.17E-03	2.73E-03	2.82E-03
5/8/2017	-1.87E-03	2.80E-03	2.40E-03	2.82E-03
5/15/2017	-4.65E-03	2.40E-03	3.81E-03	2.92E-03
5/22/2017	-3.41E-04	2.77E-03	6.38E-04	2.45E-03
5/29/2017	2.81E-03	2.86E-03	1.83E-06	2.49E-03
6/5/2017	-4.19E-04	2.16E-03	3.70E-03	2.91E-03
6/12/2017	-2.81E-04	2.50E-03	1.37E-03	3.01E-03
6/19/2017	3.57E-04	3.14E-03	-4.68E-03	3.30E-03
6/26/2017	-2.42E-03	2.25E-03	-1.24E-03	2.43E-03
7/3/2017	1.18E-03	2.77E-03	2.51E-04	2.87E-03
7/10/2017	7.24E-04	2.62E-03	-2.08E-03	3.13E-03
7/17/2017	1.07E-03	3.34E-03	1.31E-03	2.90E-03
7/24/2017	4.08E-03	3.15E-03	1.54E-03	2.99E-03
7/31/2017	8.51E-04	2.92E-03	2.06E-04	3.08E-03
8/7/2017	8.27E-04	2.82E-03	-5.14E-04	2.96E-03
8/14/2017	-4.43E-03	3.14E-03	2.61E-04	2.83E-03
8/21/2017	2.81E-03	2.89E-03	5.11E-04	3.06E-03
8/28/2017	1.81E-04	2.54E-03	-3.16E-03	3.30E-03
9/4/2017	2.73E-03	1.95E-03	-4.59E-04	1.98E-03
9/11/2017	2.02E-03	2.01E-03	-1.50E-04	1.85E-03
9/18/2017	-6.78E-04	1.95E-03	3.76E-05	1.95E-03
9/25/2017	5.76E-04	1.83E-03	1.05E-03	1.90E-03
10/2/2017	-8.46E-04	1.66E-03	1.61E-03	1.75E-03
10/9/2017	-2.42E-03	1.79E-03	-7.27E-04	1.98E-03

Data Tables Supporting the Radiological Environmental Monitoring Program

Sample Date	Co-60		Cs-137	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
10/16/2017	1.86E-03	1.77E-03	1.84E-03	1.98E-03
10/23/2017	1.69E-03	2.78E-03	-4.11E-03	2.90E-03
10/30/2017	7.59E-03	5.28E-03	-5.05E-03	5.26E-03
11/6/2017	-9.49E-03	4.51E-03	4.81E-03	4.57E-03
11/13/2017	1.02E-03	3.42E-03	-2.84E-03	4.03E-03
11/20/2017	-2.89E-03	1.72E-03	-3.54E-04	1.97E-03
11/27/2017	1.44E-03	2.01E-03	2.18E-03	2.41E-03
12/4/2017	-1.88E-03	1.91E-03	-1.56E-03	1.76E-03
12/11/2017	-1.32E-03	1.89E-03	-2.11E-04	1.94E-03
12/18/2017	-2.86E-03	1.78E-03	-2.76E-03	1.92E-03
12/25/2017	2.24E-04	2.07E-03	-1.64E-03	1.85E-03
1/1/2018	4.54E-03	2.21E-03	-1.95E-03	2.01E-03

Sample Date	Sr-89/90		U-234		U-235		U-238	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/16/2017	-1.58E-04	2.74E-04	3.95E-05	1.21E-05	1.01E-05	8.24E-06	4.65E-05	1.31E-05
1/30/2017	9.73E-04	4.23E-04	4.11E-05	1.27E-05	-2.84E-07	3.21E-07	1.86E-05	8.44E-06
2/13/2017	1.46E-04	4.70E-04	3.97E-05	1.29E-05	4.38E-06	4.38E-06	4.59E-05	1.31E-05
2/27/2017	1.39E-04	4.48E-04	4.38E-05	1.38E-05	1.66E-06	5.98E-06	2.53E-05	1.11E-05
3/13/2017	3.54E-04	4.70E-04	3.27E-05	1.39E-05	1.07E-05	7.60E-06	1.43E-05	9.21E-06
3/27/2017	-2.33E-04	2.20E-04	3.35E-05	1.18E-05	-2.92E-07	3.27E-07	3.57E-05	1.16E-05
4/10/2017	-2.29E-05	3.97E-04	2.44E-05	9.44E-06	4.32E-06	4.33E-06	4.65E-05	1.36E-05
4/24/2017	-5.92E-05	3.50E-04	4.51E-05	1.34E-05	8.05E-06	5.79E-06	3.19E-05	1.08E-05
5/8/2017	8.97E-04	3.05E-04	2.81E-05	1.17E-05	1.51E-06	5.43E-06	5.03E-05	1.42E-05
5/22/2017	5.70E-04	3.71E-04	3.68E-05	1.26E-05	8.68E-06	6.36E-06	3.24E-05	1.10E-05
6/5/2017	1.16E-04	3.34E-04	3.22E-05	1.13E-05	4.24E-06	4.54E-06	4.00E-05	1.23E-05
6/19/2017	2.63E-04	3.42E-04	9.51E-05	1.96E-05	5.59E-06	6.87E-06	1.91E-04	2.83E-05
7/3/2017	-4.30E-04	4.41E-04	2.66E-05	9.52E-06	8.22E-06	5.84E-06	4.59E-05	1.29E-05
7/17/2017	-2.34E-04	4.46E-04	2.95E-05	1.24E-05	4.51E-06	4.54E-06	4.70E-05	1.36E-05
7/31/2017	2.73E-04	4.32E-04	3.51E-05	1.17E-05	1.39E-06	5.03E-06	3.24E-05	1.19E-05
8/14/2017	5.62E-04	5.08E-04	4.35E-05	1.32E-05	1.24E-06	5.23E-06	3.49E-05	1.14E-05
8/28/2017	1.38E-04	4.11E-04	2.89E-05	1.07E-05	5.84E-06	7.15E-06	4.76E-05	1.37E-05
9/11/2017	2.23E-04	4.28E-04	5.62E-05	1.86E-05	2.97E-05	1.36E-05	2.39E-05	1.10E-05
9/25/2017	9.30E-04	4.70E-04	5.84E-05	1.70E-05	9.65E-06	7.05E-06	6.89E-05	1.78E-05
10/9/2017	2.86E-04	1.98E-04	5.49E-05	1.70E-05	0.00E+00	5.45E-06	4.65E-05	1.64E-05
10/23/2017	8.32E-04	5.25E-04	4.24E-05	1.38E-05	4.76E-06	5.32E-06	3.11E-05	1.24E-05
11/6/2017	2.51E-04	6.49E-04	7.00E-05	2.91E-05	4.81E-05	2.44E-05	6.70E-05	2.64E-05
11/20/2017	-2.25E-04	5.64E-04	8.32E-05	2.13E-05	7.27E-06	8.92E-06	1.01E-04	2.25E-05
12/4/2017	-1.21E-04	5.09E-04	3.08E-05	1.12E-05	1.12E-05	8.92E-06	2.32E-05	1.19E-05
12/18/2017	5.11E-04	5.25E-04	6.08E-05	1.61E-05	0.00E+00	4.43E-06	7.46E-05	1.73E-05
1/1/2018	1.46E-04	3.40E-04	3.16E-05	1.09E-05	4.38E-06	4.37E-06	4.35E-05	1.33E-05

Table 11 Radioactivity in Air Emission Samples (continued)

Location: 772-4F (continued)

Sample Date	Pu-238		Pu-239		Am-241		Cm-244	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/16/2017	0.00E+00	3.98E-06	8.35E-07	4.30E-06	2.37E-06	7.31E-06	3.41E-06	3.42E-06
1/30/2017	0.00E+00	4.21E-06	6.49E-06	5.09E-06	1.79E-05	8.55E-06	-2.45E-06	2.46E-06
2/13/2017	-4.59E-06	3.29E-06	6.89E-06	4.89E-06	1.23E-05	7.02E-06	0.00E+00	4.06E-06
2/27/2017	0.00E+00	4.21E-06	1.03E-05	5.96E-06	1.21E-05	6.92E-06	0.00E+00	4.22E-06
3/13/2017	0.00E+00	4.32E-06	6.51E-06	4.62E-06	2.38E-05	1.03E-05	3.35E-06	3.36E-06
3/27/2017	0.00E+00	4.40E-06	1.13E-05	6.61E-06	-3.05E-06	2.35E-06	0.00E+00	3.94E-06
4/10/2017	3.24E-06	3.23E-06	1.38E-05	7.62E-06	2.11E-05	9.52E-06	-2.45E-06	2.45E-06
4/24/2017	7.68E-06	6.82E-06	1.40E-05	7.31E-06	1.33E-05	6.68E-06	-1.82E-07	2.02E-07
5/8/2017	-6.14E-08	7.64E-08	1.32E-05	6.79E-06	1.64E-05	8.11E-06	1.15E-06	4.14E-06
5/22/2017	1.04E-05	6.04E-06	-5.35E-08	6.68E-08	2.50E-05	9.86E-06	3.59E-06	3.62E-06
6/5/2017	1.20E-06	4.32E-06	7.14E-06	5.11E-06	1.44E-05	7.52E-06	-4.86E-06	3.46E-06
6/19/2017	7.27E-06	5.16E-06	3.89E-04	4.58E-05	5.14E-05	1.49E-05	0.00E+00	4.77E-06
7/3/2017	0.00E+00	4.44E-06	6.76E-06	7.95E-06	1.75E-05	7.91E-06	0.00E+00	3.91E-06
7/17/2017	0.00E+00	4.26E-06	3.16E-06	3.29E-06	2.64E-05	9.52E-06	0.00E+00	4.02E-06
7/31/2017	1.17E-06	4.22E-06	6.78E-06	5.01E-06	1.76E-05	8.45E-06	0.00E+00	4.23E-06
8/14/2017	7.05E-06	5.01E-06	3.46E-06	3.53E-06	2.73E-05	1.16E-05	-1.27E-06	5.25E-06
8/28/2017	-5.05E-06	3.44E-06	7.11E-06	5.21E-06	2.67E-05	1.07E-05	0.00E+00	4.68E-06
9/11/2017	-2.57E-06	2.39E-06	-1.82E-07	2.29E-07	1.24E-05	8.53E-06	0.00E+00	4.56E-06
9/25/2017	3.43E-06	3.64E-06	9.11E-05	1.96E-05	3.35E-05	1.18E-05	3.78E-06	3.78E-06
10/9/2017	0.00E+00	4.41E-06	1.39E-05	7.19E-06	1.83E-05	9.04E-06	3.46E-06	3.47E-06
10/23/2017	-1.41E-06	5.82E-06	5.57E-06	6.64E-06	2.76E-05	1.21E-05	0.00E+00	5.90E-06
11/6/2017	0.00E+00	1.15E-05	8.86E-06	9.59E-06	4.32E-05	2.18E-05	0.00E+00	1.15E-05
11/20/2017	6.08E-06	7.24E-06	1.12E-04	2.46E-05	2.95E-05	1.23E-05	0.00E+00	5.64E-06
12/4/2017	-6.30E-06	5.19E-06	4.46E-06	6.09E-06	3.57E-05	1.40E-05	1.01E-05	7.31E-06
12/18/2017	3.49E-06	6.97E-06	5.68E-05	1.54E-05	3.51E-05	1.16E-05	-1.74E-07	1.93E-07
1/1/2018	-2.34E-06	2.34E-06	7.73E-06	6.58E-06	6.81E-06	5.51E-06	-2.50E-06	2.50E-06

Table 11 Radioactivity in Air Emission Samples (continued)

Location: 772-4F (continued)

Sample Date	Gross Beta		Gross Alpha	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/16/2017	2.70E-03	2.20E-03	7.11E-05	7.31E-04
1/30/2017	-1.55E-03	3.95E-03	1.64E-03	2.68E-03
2/13/2017	3.76E-03	1.80E-03	-2.57E-04	4.76E-04
2/27/2017	-1.66E-04	2.04E-03	-6.46E-04	2.82E-04
3/13/2017	1.01E-03	1.55E-03	7.22E-04	7.32E-04
3/27/2017	-2.16E-04	1.89E-03	1.48E-04	7.66E-04
4/10/2017	1.54E-03	2.21E-03	3.59E-05	8.19E-04
4/24/2017	5.86E-03	2.44E-03	-4.59E-04	2.15E-04
5/8/2017	1.62E-02	3.25E-03	5.84E-03	2.30E-03
5/22/2017	1.44E-03	2.05E-03	1.48E-04	7.67E-04
6/5/2017	1.65E-03	1.55E-03	1.49E-04	5.62E-04
6/19/2017	1.21E-03	2.14E-03	2.00E-04	8.04E-04
7/3/2017	3.03E-04	1.74E-03	3.78E-04	8.14E-04
7/17/2017	1.74E-03	2.12E-03	-6.16E-04	3.70E-04
7/31/2017	1.01E-03	1.85E-03	2.78E-03	1.62E-03
8/14/2017	2.36E-03	1.68E-03	-1.78E-04	5.16E-04
8/28/2017	2.07E-03	2.16E-03	8.84E-04	1.13E-03
9/11/2017	9.97E-03	2.82E-03	8.84E-04	1.13E-03
9/25/2017	3.00E-03	2.39E-03	1.71E-04	8.40E-04
10/9/2017	4.65E-04	2.15E-03	1.75E-04	8.37E-04
10/23/2017	-7.38E-04	2.02E-03	-6.54E-04	4.55E-04
11/6/2017	1.24E-02	6.08E-03	2.46E-03	2.97E-03
11/20/2017	3.92E-03	2.74E-03	1.32E-03	1.50E-03
12/4/2017	4.08E-03	2.34E-03	9.92E-04	1.20E-03
12/18/2017	2.23E-03	1.46E-03	-4.22E-04	5.03E-04
1/1/2018	1.45E-03	2.20E-03	-1.11E-04	8.06E-04

Table 11 Radioactivity in Air Emission Samples (continued)

Location: 773-A B Stack

Sample Date	Co-60		Cs-137		Gross Beta		Gross Alpha	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
2/7/2017	-6.95E-04	1.06E-03	9.97E-04	1.07E-03	1.11E-04	7.57E-04	3.27E-04	4.08E-04
3/7/2017	-1.13E-03	1.20E-03	1.55E-03	1.14E-03	8.76E-04	1.01E-03	-2.86E-04	1.25E-04
4/4/2017	1.84E-04	1.39E-03	3.57E-04	1.54E-03	1.03E-03	1.07E-03	4.03E-04	5.61E-04
5/2/2017	-2.17E-03	1.05E-03	-2.32E-04	9.24E-04	1.64E-03	8.16E-04	5.11E-05	2.66E-04
6/6/2017	1.57E-03	8.09E-04	-1.65E-03	1.06E-03	4.62E-04	5.69E-04	5.57E-05	2.11E-04
7/4/2017	8.43E-04	1.29E-03	4.59E-04	1.38E-03	1.31E-03	9.44E-04	1.81E-04	3.89E-04
8/1/2017	8.27E-04	1.26E-03	-3.08E-03	1.51E-03	1.56E-03	9.86E-04	-1.87E-04	1.43E-04
9/5/2017	5.27E-04	6.63E-04	7.86E-04	7.27E-04	1.89E-03	9.32E-04	6.35E-04	5.26E-04
10/3/2017	1.56E-04	7.64E-04	1.27E-04	8.84E-04	1.72E-03	1.16E-03	4.54E-04	5.46E-04
11/7/2017	5.03E-04	5.96E-04	3.38E-04	7.49E-04	1.57E-03	8.40E-04	6.22E-04	5.00E-04
12/5/2017	6.16E-04	9.52E-04	-1.02E-03	1.08E-03	2.08E-03	1.10E-03	4.57E-04	5.52E-04
1/2/2018	-4.73E-04	8.63E-04	-1.41E-04	9.82E-04	2.38E-03	1.16E-03	-5.14E-05	3.71E-04

Location: 773-A C Stack

Sample Date	Co-60		Cs-137		Gross Beta		Gross Alpha	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
2/7/2017	-8.84E-05	6.48E-04	-1.54E-03	9.67E-04	1.62E-03	9.00E-04	3.24E-04	4.06E-04
3/7/2017	-4.97E-04	1.20E-03	2.51E-03	1.26E-03	2.31E-03	1.15E-03	5.86E-05	3.80E-04
4/4/2017	1.39E-03	1.36E-03	6.08E-04	1.50E-03	4.16E-03	1.32E-03	-3.84E-04	1.39E-04
5/2/2017	-1.74E-04	1.35E-03	1.75E-03	1.40E-03	1.18E-03	9.89E-04	7.51E-04	5.98E-04
6/6/2017	-1.05E-03	8.76E-04	-4.19E-04	1.10E-03	4.92E-05	5.29E-04	4.59E-04	3.11E-04
7/4/2017	-6.14E-04	1.06E-03	3.22E-04	1.36E-03	1.08E-03	8.92E-04	1.71E-04	3.69E-04
8/1/2017	-6.43E-04	1.40E-03	-4.38E-04	1.30E-03	3.62E-03	1.14E-03	-1.84E-04	1.40E-04
9/5/2017	-1.86E-04	5.89E-04	1.22E-03	7.52E-04	1.66E-03	8.72E-04	3.19E-04	4.08E-04
10/3/2017	4.86E-04	8.72E-04	6.49E-06	8.42E-04	1.36E-03	1.08E-03	8.03E-05	3.94E-04
11/7/2017	3.27E-04	6.50E-04	-7.59E-04	6.74E-04	2.40E-03	8.88E-04	8.62E-04	5.49E-04
12/5/2017	7.49E-06	9.00E-04	-9.59E-05	8.45E-04	3.24E-03	1.16E-03	1.47E-03	7.93E-04
1/2/2018	-9.51E-04	8.80E-04	2.15E-05	8.80E-04	1.92E-03	1.09E-03	2.78E-04	4.88E-04

Table 11 Radioactivity in Air Emission Samples (continued)

Location: 776-A Stack

Sample Date	Co-60		Cs-137		Gross Beta		Gross Alpha	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
2/7/2017	-7.89E-03	1.52E-02	-2.89E-03	1.35E-02	2.97E-02	1.38E-02	6.84E-04	4.46E-03
3/7/2017	5.32E-03	1.60E-02	-4.59E-03	1.88E-02	2.46E-02	1.63E-02	6.16E-03	7.71E-03
4/4/2017	-7.78E-03	1.86E-02	-3.16E-02	2.10E-02	2.64E-02	1.67E-02	1.66E-02	1.11E-02
5/2/2017	2.76E-03	1.91E-02	4.73E-03	1.86E-02	1.11E-02	1.39E-02	2.09E-02	1.12E-02
6/6/2017	2.76E-02	1.59E-02	-7.30E-03	1.44E-02	2.35E-02	9.28E-03	-1.23E-03	2.30E-03
7/4/2017	-1.90E-02	2.17E-02	-1.23E-02	1.89E-02	1.27E-02	1.28E-02	7.62E-03	7.46E-03
8/1/2017	-3.49E-03	1.38E-02	-1.39E-03	2.06E-02	2.76E-02	1.45E-02	-2.70E-03	2.08E-03
9/5/2017	2.18E-03	8.76E-03	8.05E-03	9.44E-03	1.13E-02	1.16E-02	7.05E-04	4.52E-03
10/3/2017	8.24E-04	1.34E-02	1.09E-02	1.23E-02	7.51E-03	1.50E-02	6.41E-03	7.71E-03
11/7/2017	-7.35E-04	1.04E-02	-8.22E-03	1.04E-02	1.06E-03	9.74E-03	-3.03E-03	2.10E-03
12/5/2017	-2.46E-03	1.17E-02	-2.06E-03	1.20E-02	5.32E-02	1.72E-02	6.30E-03	7.63E-03
1/2/2018	-3.22E-03	1.16E-02	7.00E-03	1.32E-02	1.82E-02	1.54E-02	-5.68E-03	2.22E-03

Location: 791-A Sandfilter Discharge

Sample Date	Co-60		Cs-137		I-129	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/10/2017	-3.16E-03	6.09E-03	-1.11E-03	6.74E-03	4.81E-03	5.62E-03
1/17/2017	-4.30E-03	5.76E-03	2.50E-04	6.49E-03	8.14E-03	3.96E-03
1/24/2017	4.62E-04	6.97E-03	3.11E-03	6.41E-03	3.03E-02	7.79E-03
1/31/2017	-7.32E-03	7.52E-03	-1.79E-03	4.85E-03	-8.57E-05	5.14E-03
2/7/2017	3.76E-03	7.81E-03	-4.92E-03	5.96E-03	7.05E-03	3.41E-03
2/14/2017	-4.38E-04	5.58E-03	-4.57E-05	6.41E-03	9.35E-03	3.61E-03
2/21/2017	-9.62E-04	5.68E-03	3.00E-03	6.59E-03	2.53E-03	2.94E-03
2/28/2017	2.86E-03	6.04E-03	-1.46E-03	6.84E-03	1.66E-02	6.47E-03
3/7/2017	7.89E-03	6.47E-03	-2.81E-03	4.89E-03	8.32E-03	3.75E-03
3/14/2017	-7.00E-03	6.76E-03	1.65E-03	5.92E-03	2.36E-03	3.63E-03
3/21/2017	4.05E-03	6.23E-03	4.62E-03	6.32E-03	2.04E-03	3.12E-03
3/28/2017	6.41E-03	5.62E-03	6.54E-03	6.82E-03	7.70E-03	4.65E-03
4/4/2017	3.86E-03	3.48E-03	4.97E-03	3.12E-03	7.89E-03	3.65E-03
4/11/2017	1.00E-02	7.35E-03	-5.70E-03	6.60E-03	-3.14E-03	3.79E-03
4/18/2017	1.02E-04	7.46E-03	-1.22E-02	5.88E-03	1.50E-02	5.24E-03
4/25/2017	9.46E-03	6.89E-03	-1.85E-03	6.66E-03	8.70E-03	4.77E-03
5/2/2017	-9.00E-03	5.71E-03	-7.49E-03	5.53E-03	1.34E-02	6.86E-03
5/9/2017	1.24E-02	7.57E-03	5.27E-03	7.47E-03	9.65E-03	3.79E-03
5/16/2017	2.33E-03	8.12E-03	-6.27E-03	8.16E-03	6.57E-03	3.42E-03
5/23/2017	3.65E-03	7.46E-03	3.59E-03	5.94E-03	8.68E-03	3.97E-03
5/30/2017	-7.41E-03	5.05E-03	-9.54E-03	7.20E-03	1.12E-02	4.10E-03

Data Tables Supporting the Radiological Environmental Monitoring Program

Sample Date	Co-60		Cs-137		I-129	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
6/6/2017	5.54E-03	7.21E-03	4.00E-04	6.44E-03	1.04E-02	4.70E-03
6/13/2017	-8.78E-03	6.17E-03	-1.39E-02	6.17E-03	1.06E-02	3.22E-03
6/20/2017	-1.18E-02	6.95E-03	5.54E-03	6.67E-03	4.38E-03	3.52E-03
6/27/2017	-5.86E-04	6.60E-03	4.22E-03	6.71E-03	3.24E-04	3.28E-03
7/4/2017	1.10E-02	6.82E-03	-2.48E-03	6.06E-03	8.76E-03	4.03E-03
7/11/2017	-5.30E-03	6.87E-03	-2.28E-03	7.65E-03	6.30E-03	3.12E-03
7/18/2017	-4.84E-03	6.77E-03	-6.49E-03	7.17E-03	7.57E-03	3.51E-03
7/25/2017	4.49E-03	7.37E-03	-2.10E-02	7.27E-03	1.07E-02	5.20E-03
8/1/2017	-1.56E-03	6.59E-03	8.68E-03	7.95E-03	1.12E-02	3.73E-03
8/8/2017	-1.48E-04	8.16E-03	-6.89E-03	6.66E-03	5.05E-03	3.09E-03
8/15/2017	-1.54E-02	8.07E-03	4.95E-03	7.25E-03	9.84E-03	4.06E-03
8/22/2017	9.97E-03	5.92E-03	-5.05E-04	7.17E-03	-1.93E-03	3.02E-03
8/29/2017	-4.41E-03	6.43E-03	-1.43E-02	7.65E-03	5.46E-03	3.05E-03
9/5/2017	9.59E-04	4.23E-03	-6.46E-03	4.19E-03	1.01E-02	3.38E-03
9/12/2017	3.41E-03	4.39E-03	3.49E-03	4.50E-03	9.81E-03	5.64E-03
9/19/2017	-1.56E-03	3.81E-03	8.46E-04	4.78E-03	1.28E-02	6.79E-03
9/26/2017	-9.03E-04	4.30E-03	4.11E-03	4.65E-03	5.41E-03	3.23E-03
10/3/2017	1.16E-03	4.41E-03	5.95E-03	4.83E-03	5.08E-03	2.91E-03
10/10/2017	-3.27E-04	4.42E-03	6.59E-03	4.67E-03	5.16E-03	2.15E-03
10/17/2017	-3.19E-03	3.97E-03	6.54E-03	4.80E-03	-6.84E-04	2.87E-03
10/24/2017	4.43E-04	3.67E-03	-1.20E-05	3.93E-03	7.19E-03	3.19E-03
10/31/2017	1.27E-03	4.68E-03	3.51E-03	4.63E-03	1.74E-04	3.19E-03
11/7/2017	4.43E-03	4.55E-03	-2.07E-04	4.56E-03	7.62E-03	4.13E-03
11/14/2017	3.84E-03	4.61E-03	-1.91E-03	4.37E-03	8.46E-03	3.00E-03
11/21/2017	-1.59E-03	4.07E-03	-4.92E-03	3.96E-03	3.73E-03	3.25E-03
11/28/2017	1.47E-03	3.74E-03	-3.03E-04	4.47E-03	-1.38E-03	2.90E-03
12/5/2017	2.54E-03	4.15E-03	5.14E-03	4.51E-03	-1.16E-05	2.78E-03
12/12/2017	-6.68E-04	4.34E-03	1.42E-03	4.13E-03	1.77E-03	3.63E-03
12/19/2017	1.19E-03	4.43E-03	-1.20E-02	4.56E-03	1.54E-03	3.29E-03
12/26/2017	3.24E-04	3.95E-03	5.05E-03	4.89E-03	2.11E-03	3.30E-03
1/2/2018	4.89E-03	3.94E-03	8.35E-03	4.53E-03	7.38E-03	2.94E-03

Table 11 Radioactivity in Air Emission Samples (continued)

Location: 791-A Sandfilter Discharge (continued)

Sample Date	Gross Beta		Gross Alpha	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/10/2017	4.22E-03	4.65E-03	-1.44E-03	2.95E-04
1/17/2017	3.38E-03	4.67E-03	-1.47E-03	3.02E-04
1/24/2017	5.38E-03	3.72E-03	-1.55E-03	3.17E-04
1/31/2017	3.35E-03	4.85E-03	-1.39E-03	6.09E-04
2/7/2017	8.86E-03	5.34E-03	-1.42E-03	6.17E-04
2/14/2017	7.14E-03	5.25E-03	-1.44E-03	6.26E-04
2/21/2017	8.70E-03	4.08E-03	2.06E-03	1.88E-03
2/28/2017	4.05E-03	5.18E-03	3.11E-04	1.93E-03
3/7/2017	-2.64E-03	4.34E-03	3.16E-04	1.89E-03
3/14/2017	-1.98E-03	3.17E-03	2.45E-03	1.82E-03
3/21/2017	4.54E-03	3.53E-03	6.81E-04	1.30E-03
3/28/2017	4.43E-04	4.32E-03	3.35E-04	1.73E-03
4/4/2017	4.03E-03	2.65E-03	3.81E-05	9.56E-04
4/11/2017	6.54E-03	5.43E-03	8.19E-05	1.97E-03
4/18/2017	2.13E-02	6.34E-03	2.50E-03	2.59E-03
4/25/2017	2.92E-03	4.74E-03	7.22E-04	1.88E-03
5/2/2017	4.51E-04	4.40E-03	3.38E-04	1.74E-03
5/9/2017	5.41E-03	5.11E-03	3.65E-04	1.90E-03
5/16/2017	7.92E-03	5.27E-03	5.11E-03	3.21E-03
5/23/2017	1.02E-02	5.45E-03	-1.40E-03	4.59E-04
5/30/2017	7.19E-03	5.23E-03	2.07E-03	2.48E-03
6/6/2017	2.49E-03	3.58E-03	-5.38E-04	1.01E-03
6/13/2017	8.22E-03	5.47E-03	-1.28E-03	7.71E-04
6/20/2017	1.26E-02	6.06E-03	2.29E-03	2.69E-03
6/27/2017	8.62E-03	4.98E-03	8.86E-04	1.91E-03
7/4/2017	9.49E-03	4.97E-03	-8.97E-04	6.87E-04
7/11/2017	5.81E-03	4.81E-03	9.65E-04	2.07E-03
7/18/2017	-8.76E-04	4.53E-03	3.00E-04	1.92E-03
7/25/2017	-2.89E-03	4.39E-03	3.08E-04	1.96E-03
8/1/2017	1.37E-02	5.57E-03	2.89E-03	2.83E-03
8/8/2017	2.95E-03	3.92E-03	5.16E-04	1.58E-03
8/15/2017	7.11E-03	4.09E-03	-4.30E-04	1.23E-03
8/22/2017	4.32E-03	5.18E-03	-1.34E-03	8.06E-04
8/29/2017	2.29E-05	4.96E-03	4.27E-03	3.35E-03
9/5/2017	9.76E-03	5.49E-03	2.97E-04	1.91E-03
9/12/2017	-8.70E-04	4.77E-03	4.08E-04	1.94E-03
9/19/2017	4.73E-03	5.58E-03	2.29E-03	2.76E-03
9/26/2017	5.38E-03	5.33E-03	-1.41E-03	7.09E-04
10/3/2017	8.59E-03	5.80E-03	2.25E-03	2.72E-03

Data Tables Supporting the Radiological Environmental Monitoring Program

Sample Date	Gross Beta		Gross Alpha	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
10/10/2017	4.59E-03	5.43E-03	2.22E-03	2.67E-03
10/17/2017	2.62E-02	6.54E-03	4.24E-04	1.95E-03
10/24/2017	1.21E-03	4.31E-03	2.16E-03	2.60E-03
10/31/2017	5.89E-03	5.38E-03	3.78E-04	1.86E-03
11/7/2017	6.76E-03	4.84E-03	3.84E-03	3.09E-03
11/14/2017	7.78E-03	4.88E-03	2.32E-03	2.63E-03
11/21/2017	3.16E-03	4.42E-03	4.95E-04	1.87E-03
11/28/2017	5.05E-03	4.60E-03	4.92E-04	1.87E-03
12/5/2017	2.42E-02	6.42E-03	4.51E-03	3.64E-03
12/12/2017	-3.05E-03	2.72E-03	-1.89E-03	6.96E-04
12/19/2017	2.26E-03	3.12E-03	-1.90E-03	6.99E-04
12/26/2017	6.05E-03	3.41E-03	-9.92E-04	1.18E-03
1/2/2018	5.59E-04	4.74E-03	-1.93E-03	7.55E-04

Location: K-Area Main Stack (148 ft)

Sample Date	Co-60		Cs-137		Gross Beta		Gross Alpha	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
3/13/2017	-4.14E-03	8.48E-03	4.16E-03	8.33E-03				
3/20/2017	-6.19E-03	8.80E-03	-6.27E-05	8.43E-03	1.85E-02	3.29E-03	1.87E-03	1.40E-03
5/1/2017	-6.51E-04	7.02E-03	3.46E-03	9.44E-03				
5/8/2017	-6.08E-03	8.96E-03	1.93E-03	8.30E-03	3.46E-02	5.29E-03	1.33E-03	1.61E-03
7/10/2017	-2.08E-02	8.92E-03	1.04E-02	9.86E-03				
7/17/2017	-1.29E-03	1.09E-02	1.15E-02	6.93E-03	5.32E-03	3.15E-03	3.00E-03	2.13E-03
9/4/2017	-1.37E-03	4.75E-03	-2.78E-03	4.73E-03				
9/11/2017	1.09E-02	4.51E-03	-4.89E-03	4.19E-03	2.54E-02	4.47E-03	2.46E-03	2.01E-03
11/6/2017	-5.11E-03	7.83E-03	2.46E-03	8.10E-03				
11/13/2017	4.08E-03	7.40E-03	-3.54E-03	8.54E-03	3.65E-02	6.60E-03	4.84E-04	1.93E-03
1/1/2018	4.35E-03	5.68E-03	8.57E-04	4.92E-03				

Table 11 Radioactivity in Air Emission Samples (continued)

Location: KIS Stack

Sample Date	Co-60		Cs-137		Sr-89/90		Th-228	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/9/2017	1.44E-03	4.64E-03	3.46E-03	4.11E-03	1.81E-03	1.02E-03	5.35E-05	4.43E-05
1/16/2017	2.51E-04	5.13E-03	-3.92E-03	4.57E-03	9.89E-04	9.86E-04	1.07E-04	6.17E-05
1/23/2017	4.35E-03	5.32E-03	-6.43E-04	5.25E-03	-2.81E-04	1.37E-03	1.19E-04	7.00E-05
1/30/2017	-7.54E-04	4.91E-03	2.22E-03	3.92E-03	3.86E-04	1.25E-03	4.24E-05	3.38E-05
2/6/2017	4.76E-03	5.60E-03	1.48E-04	5.14E-03				
2/13/2017	-1.29E-02	5.28E-03	-3.59E-03	5.08E-03	7.11E-05	1.31E-04	1.22E-05	5.18E-06
2/20/2017	-7.65E-03	6.30E-03	7.70E-03	5.53E-03				
2/27/2017	-6.14E-04	4.61E-03	-1.10E-03	4.48E-03	5.22E-04	7.72E-04	1.20E-04	3.30E-05
3/6/2017	1.80E-03	4.08E-03	2.22E-03	4.19E-03				
3/13/2017	-9.57E-04	4.71E-03	-1.75E-03	5.03E-03	1.31E-04	6.61E-04	7.11E-05	3.54E-05
3/20/2017	-2.73E-03	4.37E-03	9.51E-03	4.91E-03				
3/27/2017	5.62E-04	5.14E-03	-5.46E-03	4.42E-03	-2.03E-04	7.06E-04	9.08E-05	3.52E-05
4/3/2017	8.35E-03	5.01E-03	-3.57E-03	5.21E-03				
4/10/2017	8.05E-04	3.99E-03	-3.97E-03	3.75E-03	5.73E-04	7.28E-04	9.32E-05	3.15E-05
4/17/2017	-5.51E-04	4.51E-03	1.17E-03	4.42E-03				
4/24/2017	-6.92E-05	5.11E-04	3.35E-05	4.63E-04	-7.73E-04	5.78E-04	1.32E-04	3.55E-05
5/1/2017	-2.23E-03	4.41E-03	1.46E-03	5.39E-03				
5/8/2017	-1.22E-03	5.34E-03	-1.42E-03	5.03E-03	2.09E-03	9.09E-04	1.14E-04	3.99E-05
5/15/2017	-2.05E-03	5.47E-03	-1.75E-03	4.66E-03				
5/22/2017	-5.46E-03	4.77E-03	1.96E-03	5.59E-03	-6.19E-04	6.80E-04	9.46E-05	2.83E-05
5/29/2017	-6.78E-03	4.53E-03	1.49E-04	4.83E-03				
6/5/2017	-4.24E-03	4.47E-03	-4.27E-03	5.14E-03	1.48E-03	8.92E-04	1.27E-04	3.19E-05
6/12/2017	-1.09E-03	6.62E-03	-2.18E-03	5.01E-03				
6/19/2017	-4.19E-03	4.74E-03	-2.14E-03	4.01E-03	5.76E-04	7.13E-04	1.20E-04	3.31E-05
6/26/2017	1.41E-03	4.04E-03	3.86E-03	4.77E-03				
7/3/2017	-6.51E-03	4.95E-03	-2.54E-03	4.95E-03	1.30E-04	5.95E-04	1.48E-04	2.99E-05
7/10/2017	4.68E-03	3.28E-03	-2.78E-03	4.72E-03				
7/17/2017	3.30E-03	4.76E-03	1.15E-03	4.32E-03	-4.70E-04	5.88E-04	8.49E-05	3.82E-05
7/24/2017	2.92E-03	6.14E-03	6.54E-03	5.60E-03				
7/31/2017	-4.38E-03	4.27E-03	5.73E-03	5.40E-03	2.32E-04	6.81E-04	9.24E-05	3.50E-05
8/7/2017	3.11E-03	3.42E-03	4.16E-03	4.95E-03				
8/14/2017	-5.84E-03	5.23E-03	-9.38E-03	5.36E-03	2.58E-04	6.96E-04	6.11E-05	2.20E-05
8/21/2017	4.70E-04	4.41E-03	-1.02E-02	4.93E-03				
8/28/2017	8.86E-03	4.86E-03	1.97E-03	4.40E-03	-3.54E-04	5.48E-04	6.27E-05	2.39E-05
9/4/2017	-3.59E-03	2.97E-03	2.35E-03	3.09E-03				
9/11/2017	2.30E-04	3.13E-03	-1.35E-03	2.85E-03	1.24E-03	8.28E-04	8.89E-05	3.38E-05
9/18/2017	9.65E-05	3.38E-03	-3.70E-04	3.03E-03				
9/25/2017	-8.24E-04	2.86E-03	4.70E-03	3.22E-03	2.48E-04	6.41E-04	6.19E-05	4.18E-05
10/2/2017	-1.12E-04	2.99E-03	3.19E-03	3.44E-03				

Data Tables Supporting the Radiological Environmental Monitoring Program

Sample Date	Co-60		Cs-137		Sr-89/90		Th-228	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
10/9/2017	2.03E-03	3.09E-03	6.08E-03	3.52E-03	-5.22E-05	6.82E-04	1.35E-04	4.05E-05
10/16/2017	3.38E-03	2.96E-03	3.46E-04	2.92E-03				
10/23/2017	2.95E-03	2.81E-03	-2.22E-03	3.52E-03	8.57E-04	7.38E-04	1.02E-04	3.87E-05
10/30/2017	2.62E-04	2.96E-03	-6.03E-03	3.27E-03				
11/6/2017	2.76E-03	3.32E-03	1.34E-03	3.22E-03	7.05E-04	6.00E-04	3.62E-05	2.18E-05
11/13/2017	4.14E-03	3.03E-03	4.68E-03	3.28E-03				
11/20/2017	2.76E-03	3.43E-03	1.11E-02	3.79E-03	7.73E-04	6.58E-04	9.78E-05	2.62E-05
11/27/2017	7.59E-03	3.31E-03	1.31E-03	3.08E-03				
12/4/2017	1.27E-04	2.74E-03	-3.19E-03	3.15E-03	-4.46E-04	7.44E-04	8.03E-05	2.56E-05
12/11/2017	-4.62E-03	2.67E-03	4.78E-03	2.95E-03				
12/18/2017	-6.49E-03	3.15E-03	-2.03E-03	2.95E-03	-7.30E-04	6.90E-04	1.76E-04	3.46E-05
12/25/2017	4.00E-03	2.46E-03	-6.59E-04	3.23E-03				
1/1/2018	2.44E-03	3.08E-03	5.27E-03	3.46E-03	-5.00E-05	4.50E-04	7.73E-05	3.91E-05

Table 11 Radioactivity in Air Emission Samples (continued)

Location: KIS Stack (continued)

Sample Date	Th-230		Th-232		U-234		U-235	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/9/2017	1.32E-04	4.23E-05	9.73E-05	3.52E-05	1.01E-04	3.43E-05	-7.22E-07	8.06E-07
1/16/2017	2.17E-04	5.64E-05	1.21E-04	4.06E-05	1.88E-04	4.83E-05	1.37E-05	1.46E-05
1/23/2017	1.60E-04	5.09E-05	9.27E-05	3.55E-05	8.59E-05	3.90E-05	1.52E-05	1.61E-05
1/30/2017	1.06E-04	3.17E-05	8.95E-05	2.61E-05	1.13E-04	2.82E-05	1.42E-05	1.06E-05
2/13/2017	1.08E-05	3.57E-06	6.05E-06	2.53E-06	4.57E-06	2.59E-06	1.21E-06	1.21E-06
2/27/2017	1.45E-04	3.32E-05	1.00E-04	2.66E-05	1.25E-04	2.83E-05	1.38E-05	9.82E-06
3/13/2017	1.24E-04	2.99E-05	7.14E-05	2.17E-05	9.41E-05	2.42E-05	6.70E-06	6.72E-06
3/27/2017	2.03E-04	4.06E-05	6.19E-05	2.00E-05	8.81E-05	2.41E-05	-4.86E-06	4.75E-06
4/10/2017	2.40E-04	4.51E-05	7.46E-05	2.38E-05	5.65E-05	1.87E-05	2.36E-06	8.52E-06
4/24/2017	1.44E-04	3.33E-05	9.35E-05	2.41E-05	1.14E-04	2.57E-05	0.00E+00	6.55E-06
5/8/2017	2.58E-04	4.91E-05	1.31E-04	3.32E-05	1.22E-04	2.90E-05	-1.39E-07	1.55E-07
5/22/2017	1.68E-04	3.51E-05	6.76E-05	2.10E-05	7.41E-05	2.30E-05	-1.30E-07	1.45E-07
6/5/2017	1.84E-04	3.69E-05	1.08E-04	2.72E-05	1.28E-04	3.03E-05	1.76E-05	1.45E-05
6/19/2017	6.57E-05	2.18E-05	1.07E-04	2.59E-05	1.14E-04	2.77E-05	1.70E-05	1.36E-05
7/3/2017	1.72E-04	3.36E-05	9.70E-05	2.47E-05	1.24E-04	2.81E-05	-9.81E-06	6.49E-06
7/17/2017	1.57E-04	3.36E-05	9.51E-05	2.42E-05	6.46E-05	2.09E-05	0.00E+00	6.55E-06
7/31/2017	1.72E-04	3.62E-05	7.54E-05	2.13E-05	5.86E-05	2.05E-05	-5.14E-06	4.80E-06
8/14/2017	2.15E-04	4.06E-05	9.68E-05	2.50E-05	1.12E-04	2.82E-05	6.92E-06	6.94E-06
8/28/2017	1.89E-04	3.78E-05	8.16E-05	2.30E-05	6.27E-05	1.95E-05	6.05E-06	6.41E-06
9/11/2017	2.60E-04	4.30E-05	1.02E-04	2.54E-05	7.11E-05	2.10E-05	-4.86E-06	1.42E-05
9/25/2017	2.16E-04	4.01E-05	7.62E-05	2.17E-05	1.40E-04	3.02E-05	2.25E-06	8.11E-06
10/9/2017	1.68E-04	3.39E-05	1.08E-04	2.63E-05	8.84E-05	2.45E-05	1.62E-05	1.34E-05
10/23/2017	1.03E-04	2.76E-05	1.29E-04	3.05E-05	9.11E-05	2.45E-05	7.16E-06	7.59E-06
11/6/2017	9.19E-05	2.51E-05	9.19E-05	2.36E-05	8.54E-05	2.27E-05	2.01E-05	1.17E-05
11/20/2017	1.97E-04	3.90E-05	5.14E-05	1.85E-05	6.14E-05	2.12E-05	3.00E-05	1.51E-05
12/4/2017	1.25E-04	3.17E-05	1.02E-04	2.64E-05	8.27E-05	2.16E-05	5.76E-06	6.52E-06
12/18/2017	1.98E-04	3.93E-05	4.05E-05	1.59E-05	7.89E-05	2.20E-05	1.60E-05	1.31E-05
1/1/2018	1.04E-04	2.63E-05	8.92E-05	2.32E-05	1.27E-04	2.80E-05	1.56E-05	1.28E-05

Table 11 Radioactivity in Air Emission Samples (continued)

Location: KIS Stack (continued)

Sample Date	Np-237		U-238		Pu-238		Pu-239	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/9/2017	1.54E-05	1.81E-05	6.68E-05	2.80E-05	2.23E-05	1.64E-05	1.33E-05	1.84E-05
1/16/2017	-8.57E-06	8.59E-06	1.63E-04	4.50E-05	-6.41E-07	9.82E-07	6.59E-05	3.34E-05
1/23/2017	1.17E-05	1.36E-05	1.41E-04	4.39E-05	-1.09E-05	9.09E-06	-5.84E-06	1.80E-05
1/30/2017	-9.46E-06	5.83E-06	1.20E-04	2.77E-05	2.22E-05	1.26E-05	3.49E-05	1.52E-05
2/13/2017	1.02E-06	1.05E-06	1.34E-05	3.98E-06	-7.62E-07	6.90E-07	5.97E-06	2.65E-06
2/27/2017	-2.76E-07	3.46E-07	1.86E-04	3.46E-05	1.12E-05	8.80E-06	4.78E-05	1.77E-05
3/13/2017	1.56E-06	6.71E-06	8.62E-05	2.25E-05	-3.92E-07	5.81E-07	0.00E+00	6.79E-06
3/27/2017	1.02E-05	1.23E-05	5.73E-05	1.86E-05	2.05E-06	7.40E-06	1.19E-05	8.84E-06
4/10/2017	-4.19E-06	4.24E-06	6.22E-05	1.96E-05	1.18E-05	9.00E-06	5.59E-06	6.38E-06
4/24/2017	-4.00E-06	3.71E-06	8.05E-05	2.16E-05	-2.84E-07	4.23E-07	6.19E-05	2.02E-05
5/8/2017	-1.01E-07	1.49E-07	8.97E-05	2.46E-05	5.11E-06	6.01E-06	2.48E-05	1.38E-05
5/22/2017	-9.51E-08	1.41E-07	8.73E-05	2.32E-05	1.06E-05	8.20E-06	1.51E-06	6.82E-06
6/5/2017	7.14E-06	7.17E-06	6.27E-05	2.02E-05	9.08E-06	1.11E-05	2.36E-06	8.50E-06
6/19/2017	3.70E-06	1.03E-05	2.32E-04	4.02E-05	1.69E-05	1.07E-05	2.73E-04	4.61E-05
7/3/2017	1.15E-05	8.53E-06	6.78E-05	2.10E-05	-1.37E-06	2.11E-06	1.76E-05	1.49E-05
7/17/2017	7.62E-06	8.96E-06	8.03E-05	2.21E-05	1.66E-05	9.97E-06	-3.03E-07	4.65E-07
7/31/2017	0.00E+00	6.70E-06	7.49E-05	2.17E-05	1.02E-05	7.92E-06	7.27E-06	8.54E-06
8/14/2017	-3.92E-06	3.94E-06	7.46E-05	2.17E-05	-1.07E-07	1.62E-07	5.41E-06	5.93E-06
8/28/2017	3.24E-05	1.37E-05	7.32E-05	2.08E-05	1.97E-05	1.32E-05	2.14E-05	1.10E-05
9/11/2017	-2.95E-07	4.40E-07	7.65E-05	2.19E-05	-3.92E-06	3.39E-06	4.89E-06	5.03E-06
9/25/2017	1.30E-05	1.05E-05	1.00E-04	2.47E-05	-2.28E-06	7.66E-06	5.92E-05	2.05E-05
10/9/2017	6.19E-06	6.20E-06	1.04E-04	2.54E-05	5.41E-06	6.32E-06	5.81E-06	6.19E-06
10/23/2017	-3.43E-07	5.25E-07	1.54E-04	3.27E-05	-3.57E-06	8.04E-06	6.97E-06	8.80E-06
11/6/2017	6.16E-06	6.17E-06	1.30E-04	2.76E-05	1.82E-05	1.07E-05	1.36E-05	1.15E-05
11/20/2017	-7.00E-06	1.07E-05	7.49E-05	2.27E-05	2.76E-05	1.41E-05	-2.97E-06	9.56E-06
12/4/2017	-7.03E-06	5.04E-06	1.09E-04	2.48E-05	5.54E-06	8.59E-06	1.04E-05	7.39E-06
12/18/2017	-6.46E-07	1.08E-06	9.00E-05	2.35E-05	-3.59E-06	9.67E-06	1.02E-04	2.90E-05
1/1/2018	-2.86E-07	4.65E-07	9.57E-05	2.46E-05	8.49E-06	9.97E-06	5.03E-05	1.88E-05

Table 11 Radioactivity in Air Emission Samples (continued)

Location: KIS Stack (continued)

Sample Date	Am-241		Cm-244		Gross Beta		Gross Alpha	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/9/2017	0.00E+00	1.51E-05	1.20E-05	1.20E-05	1.77E-02	7.82E-03	2.44E-03	3.17E-03
1/16/2017	2.33E-05	1.65E-05	0.00E+00	1.40E-05	3.46E-03	6.46E-03	-1.98E-03	4.07E-04
1/23/2017	2.70E-05	2.05E-05	-1.58E-06	1.78E-06	-2.78E-03	5.07E-03	-2.28E-03	4.70E-04
1/30/2017	-1.33E-05	1.28E-05	1.03E-05	8.43E-06	1.31E-02	7.93E-03	2.69E-03	3.36E-03
2/13/2017	0.00E+00	1.26E-06	-6.73E-07	6.74E-07	-5.81E-06	4.58E-04	1.43E-04	1.99E-04
2/27/2017	1.44E-05	1.18E-05	-4.16E-06	4.16E-06	3.68E-03	4.20E-03	4.54E-03	2.90E-03
3/13/2017	0.00E+00	6.71E-06	-3.70E-06	3.72E-06	3.70E-03	2.62E-03	-1.32E-04	7.43E-04
3/27/2017	-9.14E-06	5.53E-06	-3.43E-07	3.79E-07	4.49E-03	3.71E-03	1.50E-03	1.80E-03
4/10/2017	-8.59E-06	6.10E-06	-4.24E-06	4.26E-06	1.48E-03	3.57E-03	-1.27E-03	4.67E-04
4/24/2017	1.88E-05	1.12E-05	1.72E-06	7.61E-06	1.27E-03	3.21E-03	1.75E-03	1.80E-03
5/8/2017	1.77E-05	1.45E-05	-5.24E-06	5.12E-06	1.29E-02	4.64E-03	1.48E-03	1.77E-03
5/22/2017	6.86E-06	7.26E-06	2.26E-06	8.55E-06	6.46E-03	3.92E-03	4.14E-03	2.60E-03
6/5/2017	0.00E+00	8.14E-06	0.00E+00	8.16E-06	3.35E-03	2.86E-03	9.70E-04	1.25E-03
6/19/2017	1.99E-05	1.27E-05	5.32E-06	6.01E-06	5.59E-03	3.94E-03	3.38E-04	1.38E-03
7/3/2017	6.05E-06	6.17E-06	-3.11E-07	3.48E-07	7.11E-03	3.50E-03	1.85E-03	1.81E-03
7/17/2017	-4.22E-06	4.21E-06	0.00E+00	7.33E-06	3.19E-03	3.46E-03	3.78E-03	2.45E-03
7/31/2017	6.32E-06	6.70E-06	0.00E+00	8.59E-06	1.79E-03	3.14E-03	3.41E-03	2.41E-03
8/14/2017	-4.38E-06	4.40E-06	-4.32E-06	4.34E-06	-4.43E-04	2.58E-03	3.70E-04	1.12E-03
8/28/2017	-2.95E-07	3.28E-07	-3.68E-06	3.68E-06	-7.95E-05	3.21E-03	3.46E-04	1.37E-03
9/11/2017	0.00E+00	6.44E-06	0.00E+00	6.45E-06	9.43E-03	4.03E-03	2.14E-04	1.38E-03
9/25/2017	5.57E-06	6.23E-06	6.05E-06	6.08E-06	6.97E-05	3.38E-03	2.84E-04	1.35E-03
10/9/2017	6.35E-06	6.37E-06	0.00E+00	8.02E-06	-4.95E-03	3.24E-03	-1.08E-03	5.53E-04
10/23/2017	-3.16E-07	3.58E-07	0.00E+00	7.20E-06	5.84E-03	3.70E-03	1.62E-03	1.96E-03
11/6/2017	5.43E-06	5.43E-06	5.35E-06	5.36E-06	1.57E-03	3.07E-03	2.97E-04	1.34E-03
11/20/2017	6.65E-06	6.66E-06	0.00E+00	8.22E-06	-5.24E-04	3.11E-03	3.95E-04	1.49E-03
12/4/2017	0.00E+00	6.30E-06	-3.92E-06	3.63E-06	8.65E-03	3.77E-03	3.95E-03	2.50E-03
12/18/2017	5.86E-06	5.88E-06	0.00E+00	7.27E-06	3.19E-03	2.36E-03	1.29E-03	1.42E-03
1/1/2018	-2.12E-07	2.36E-07	0.00E+00	6.85E-06	8.05E-03	4.17E-03	-1.44E-03	5.62E-04

Sample Date	Ru-103	
	Conc. (pCi/m ³)	Standard Dev.
8/14/2017	2.04E-02	6.55E-03

Table 11 Radioactivity in Air Emission Samples (continued)

Location: L-Area Disassembly

Sample Date	Co-60		Cs-137		Gross Beta		Gross Alpha	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/9/2017	2.56E-03	3.69E-02	1.04E-02	5.05E-02	2.73E-01	5.26E-02	2.45E-02	2.04E-02
4/10/2017	1.44E-02	4.38E-02	-5.70E-02	4.56E-02				
4/17/2017	-6.11E-03	4.72E-02	2.84E-01	7.43E-02	3.35E-01	3.70E-02	2.33E-02	1.40E-02
7/10/2017	8.84E-02	5.58E-02	1.17E-02	5.03E-02				
7/17/2017	1.87E-02	4.40E-02	-3.92E-02	5.27E-02	2.14E-01	3.12E-02	2.25E-02	1.46E-02
10/9/2017	-2.11E-02	3.02E-02	2.95E-02	3.28E-02				
10/16/2017	3.32E-02	3.02E-02	1.07E-02	3.11E-02	2.73E-01	3.44E-02	5.43E-02	2.16E-02

Location: L-Area Main Stack (148 ft)

Sample Date	Co-60		Cs-137		Gross Beta		Gross Alpha	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
1/9/2017	5.73E-03	1.64E-02	1.42E-02	1.70E-02	3.51E-02	1.49E-02	1.35E-02	8.72E-03
3/13/2017	1.75E-02	1.45E-02	4.81E-03	1.72E-02				
3/20/2017	8.73E-03	1.47E-02	-2.45E-02	1.72E-02	2.06E-02	7.73E-03	2.92E-03	3.51E-03
5/8/2017	4.19E-02	1.87E-02	2.84E-02	1.61E-02				
5/15/2017	1.95E-02	1.91E-02	-1.89E-02	1.44E-02	4.65E-02	9.59E-03	8.38E-03	5.28E-03
7/10/2017	2.53E-02	1.53E-02	2.55E-02	1.87E-02				
7/17/2017	-3.68E-02	1.59E-02	2.97E-02	1.67E-02	2.60E-02	8.26E-03	8.38E-03	5.44E-03
9/4/2017	5.32E-03	1.19E-02	-3.59E-04	1.26E-02				
9/12/2017	9.68E-03	7.52E-03	3.70E-03	9.63E-03	2.36E-02	8.12E-03	1.37E-02	6.51E-03
11/13/2017	-7.70E-03	1.00E-02	-1.33E-02	1.23E-02				
11/20/2017	3.05E-03	1.36E-02	1.42E-02	1.21E-02	2.43E-02	7.70E-03	6.92E-04	2.67E-03

Table 11 Radioactivity in Air Emission Samples (continued)

Location: Z201-SSRT

Sample Date	Co-60		Cs-137		Sr-89/90		U-234	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
2/13/2017	-1.48E-03	3.46E-03	-1.33E-03	3.82E-03	1.05E-03	1.04E-03	4.95E-05	2.26E-05
5/9/2017	4.84E-03	3.09E-03	5.81E-03	3.07E-03				
5/16/2017	-1.99E-03	2.94E-03	-9.54E-04	3.39E-03	1.27E-04	2.94E-04	3.19E-05	1.15E-05
8/15/2017	-2.43E-03	3.66E-03	4.19E-03	3.40E-03				
8/22/2017	3.30E-03	2.86E-03	-4.30E-03	3.43E-03	-3.00E-04	4.66E-04	5.08E-06	5.98E-06
11/8/2017	-6.59E-04	2.01E-03	1.32E-04	2.15E-03				
11/15/2017	3.00E-03	1.98E-03	-1.58E-03	1.88E-03	3.19E-04	4.47E-04	2.65E-05	1.15E-05

Sample Date	U-235		U-238		Pu-238		Pu-239	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
2/13/2017	-7.62E-07	8.59E-07	4.30E-05	2.34E-05	-1.33E-05	9.48E-06	1.95E-06	1.22E-05
5/16/2017	-3.30E-06	3.30E-06	1.65E-05	9.52E-06	-7.03E-08	8.80E-08	2.86E-05	1.11E-05
8/22/2017	4.46E-06	4.75E-06	2.26E-05	9.48E-06	-2.61E-06	2.62E-06	3.84E-06	3.93E-06
11/15/2017	-3.16E-06	2.92E-06	1.39E-05	7.19E-06	-2.26E-06	2.21E-06	6.38E-06	4.74E-06

Sample Date	Am-241		Cm-244		Gross Beta		Gross Alpha	
	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.	Conc. (pCi/m ³)	Standard Dev.
2/13/2017	6.95E-05	2.78E-05	0.00E+00	1.25E-05	4.62E-03	5.93E-03	3.11E-04	1.93E-03
5/16/2017	1.85E-05	9.21E-06	3.92E-06	3.92E-06	-7.54E-04	2.08E-03	9.08E-04	1.09E-03
8/22/2017	1.71E-05	9.52E-06	4.54E-06	4.54E-06	7.81E-03	3.01E-03	9.95E-04	1.17E-03
11/15/2017	1.26E-05	8.31E-06	0.00E+00	5.31E-06	9.14E-04	1.87E-03	9.03E-04	1.02E-03

Table 12 Comparison of Annual Average Air Effluent Radionuclide Concentrations to DOE Derived Concentration Technical Standards*

Stack/Facility	Radionuclide	Average Effluent Concentration (μCi/mL)	DOE DCSs (μCi/mL)	Fraction of DOE DCS
A Area				
791-A Sandfilter Discharge	I-129	1.41E-14	3.80E-11	3.71E-04
			Sum of Fractions	3.71E-04
C Area				
C-Area Main Stack (148')	H-3 (oxide)	3.64E-07	2.10E-07	1.73E+00
			Sum of Fractions	1.73E+00
F Area				
235-F Sandfilter Discharge	U-234	3.60E-17	4.00E-13	9.00E-05
	U-238	3.89E-17	4.70E-13	8.28E-05
	Pu-238	9.44E-18	3.70E-14	2.55E-04
	Pu-239	7.50E-18	3.40E-14	2.21E-04
	Am-241	2.03E-17	4.10E-14	4.95E-04
			Sum of Fractions	1.14E-03
291-F Stack Isokinetic	Sr-89/90	2.91E-14	2.50E-11	1.16E-03
	I-129	1.37E-13	3.80E-11	3.61E-03
	Cs-137	2.06E-14	9.80E-11	2.10E-04
	U-234	2.22E-14	4.00E-13	5.55E-02
	U-235	1.50E-15	4.50E-13	3.33E-03
	Np-237	2.77E-17	8.10E-14	3.42E-04
	U-238	3.33E-14	4.70E-13	7.09E-02
	Pu-238	3.16E-16	3.70E-14	8.54E-03
	Pu-239	1.35E-14	3.40E-14	3.97E-01
	Am-241	5.01E-15	4.10E-14	1.22E-01
	Cm-244	2.01E-16	6.90E-14	2.91E-03
			Sum of Fractions	6.66E-01
772-4F Stack	U-234	3.90E-17	4.00E-13	9.75E-05
	U-238	3.77E-17	4.70E-13	8.02E-05
	Pu-238	2.01E-17	3.70E-14	5.43E-04
	Pu-239	4.05E-18	3.40E-14	1.19E-04
	Am-241	2.42E-17	4.10E-14	5.90E-04
			Sum of Fractions	1.43E-03

Table 12 Comparison of Annual Average Air Effluent Radionuclide Concentrations to DOE Derived Concentration Technical Standards (continued)

Stack/Facility	Radionuclide	Average Effluent Concentration (μCi/mL)	DOE DCSs (μCi/mL)	Fraction of DOE DCS
H Area				
291-H Stack Isokinetic	H-3 (oxide)	9.29E-09	2.10E-07	4.42E-02
	C-14	4.16E-12	6.60E-10	6.31E-03
	Kr-85	1.01E-06	3.60E-06	2.79E-01
	Sr-89/90	5.97E-15	2.50E-11	2.39E-04
	I-129	4.04E-13	3.80E-11	1.06E-02
	Cs-137	8.34E-15	9.80E-11	8.51E-05
	U-234	2.80E-16	4.00E-13	7.00E-04
	U-235	1.46E-17	4.50E-13	3.24E-05
	Np-237	7.10E-18	8.10E-14	8.77E-05
	U-238	7.71E-17	4.70E-13	1.64E-04
	Pu-238	1.34E-15	3.70E-14	3.62E-02
	Pu-239	1.00E-15	3.40E-14	2.94E-02
	Am-241	1.70E-16	4.10E-14	4.15E-03
Sum of Fractions				4.11E-01
K Area				
K-Area Main Stack (148')	H-3(oxide)	2.72E-06	2.10E-07	1.30E+01
			Sum of Fractions	1.30E+01
KIS Facility	Sr-89/90	7.99E-16	2.50E-11	3.20E-05
	Th-228	1.16E-16	9.40E-14	1.23E-03
	Th-230	3.47E-16	2.80E-13	1.24E-03
	Th-232	1.14E-16	1.60E-13	7.13E-04
	U-234	1.27E-16	4.00E-13	3.18E-04
	U-238	1.07E-16	4.70E-13	2.28E-04
	Pu-238	4.76E-17	3.70E-14	1.29E-03
Sum of Fractions				5.05E-03
L Area				
L-Area Disassembly	H-3 (oxide)	4.85E-06	2.10E-07	2.31E+01
			Sum of Fractions	2.31E+01
L-Area Main Stack (148')	H-3 (oxide)	3.27E-06	2.10E-07	1.56E+01
			Sum of Fractions	1.56E+01

Table 12 Comparison of Annual Average Air Effluent Radionuclide Concentrations to DOE Derived Concentration Technical Standards (continued)

Stack/Facility	Radionuclide	Average Effluent Concentration (μCi/mL)	DOE DCSs (μCi/mL)	Fraction of DOE DCS
<i>Tritium</i>				
232-H (200ft)	H-3 (elemental)	6.91E-07	2.10E-03	3.29E-04
	H-3 (oxide)	4.82E-06	2.10E-07	2.30E+01
			Sum of Fractions	2.30E+01
233-H	H-3 (elemental)	6.03E-07	2.10E-03	2.87E-04
	H-3 (oxide)	4.03E-07	2.10E-07	1.92E+00
			Sum of Fractions	1.92E+00
234-H	H-3 (elemental)	3.39E-07	2.10E-03	1.62E-04
	H-3 (oxide)	4.62E-06	2.10E-07	2.20E+01
			Sum of Fractions	2.20E+01
238-H	H-3 (oxide)	6.78E-06	2.10E-07	3.23E+01
			Sum of Fractions	3.23E+01
264-H	H-3 (elemental)	2.14E-07	2.10E-03	1.02E-04
	H-3 (oxide)	1.36E-06	2.10E-07	6.48E+00
	Se-75	7.43E-16	2.80E-09	2.65E-07
			Sum of Fractions	6.48E+00

NOTE: * DOE-STD-1196-2011, Derived Concentration Technical Standard

Table 13 Tritium in Environmental Air

All samples are collected on Silica Gel. Significant results are identified by cell boxes highlighted in blue.

Onsite Location: Burial Ground North

Sample Date	Result (pCi/m ³)	Standard Dev. (pCi/m ³)
1/18/2017	2.16E+02	7.49E+00
2/1/2017	5.00E+01	4.58E+00
2/15/2017	7.32E+01	4.88E+00
3/1/2017	2.19E+02	7.82E+00
3/15/2017	1.39E+02	6.65E+00
3/29/2017	9.22E+01	5.45E+00
4/11/2017	6.49E+01	5.40E+00
4/26/2017	1.29E+02	7.45E+00
5/10/2017	4.89E+01	5.94E+00
5/24/2017	6.97E+01	6.98E+00
6/7/2017	4.81E+01	5.75E+00
6/21/2017	2.06E+02	1.04E+01
7/5/2017	1.19E+02	9.09E+00
7/19/2017	4.65E+01	8.48E+00
8/2/2017	1.36E+02	9.00E+00
8/16/2017	2.02E+02	1.42E+01
8/30/2017	1.35E+02	8.76E+00
9/13/2017	1.81E+02	8.96E+00
9/27/2017	3.89E+02	1.23E+01
10/11/2017	1.95E+02	1.00E+01
10/25/2017	2.29E+02	9.32E+00
11/8/2017	3.08E+02	9.63E+00
11/21/2017	2.34E+02	8.20E+00
12/6/2017	3.51E+02	8.67E+00
12/20/2017	8.00E+01	5.08E+00
1/3/2018	1.16E+02	5.47E+00

Site Perimeter: Allendale Gate

Sample Date	Result (pCi/m ³)	Standard Dev. (pCi/m ³)
1/18/2017	3.51E+00	2.76E+00
2/1/2017	1.21E+00	2.55E+00
2/15/2017	-3.70E-02	2.53E+00
3/1/2017	2.64E+00	2.73E+00
3/15/2017	3.14E+00	2.89E+00
3/29/2017	1.12E+00	2.77E+00
4/11/2017	-6.30E+00	2.69E+00
4/26/2017	-1.74E+00	3.58E+00
5/10/2017	-2.35E+00	2.02E+00
5/24/2017	-6.03E+00	3.68E+00
6/7/2017	2.81E+00	3.43E+00
6/21/2017	-3.51E+00	4.38E+00
7/5/2017	2.78E+00	3.74E+00
7/19/2017	-6.68E+00	3.61E+00
8/2/2017	-5.14E+00	3.65E+00
8/16/2017	-4.05E+00	4.74E+00
8/30/2017	9.54E+00	5.34E+00
9/13/2017	2.44E+00	4.66E+00
9/27/2017	-3.32E+00	4.74E+00
10/11/2017	1.34E+01	5.28E+00
10/25/2017	2.21E+00	3.58E+00
11/8/2017	-6.35E-01	3.16E+00
11/21/2017	1.45E+01	2.04E+00
12/6/2017	2.52E-01	3.06E+00
12/20/2017	2.32E+00	2.92E+00
1/3/2018	7.65E+00	2.85E+00

Table 13 Tritium in Environmental Air (continued)

Site Perimeter: Barnwell Gate

Sample Date	Result (pCi/m ³)	Standard Dev. (pCi/m ³)
1/18/2017	6.03E+00	3.63E+00
2/1/2017	6.41E+00	3.66E+00
2/15/2017	1.11E+00	3.33E+00
3/1/2017	3.57E+00	3.47E+00
3/15/2017	-4.11E-02	2.81E+00
3/29/2017	2.95E+00	3.38E+00
4/11/2017	3.68E-01	3.83E+00
4/26/2017	-4.92E+00	4.22E+00
5/10/2017	-1.96E+00	4.14E+00
5/24/2017	3.16E+00	5.17E+00
6/7/2017	7.43E+00	4.83E+00
6/21/2017	7.65E-01	5.83E+00
7/5/2017	-5.68E+00	5.40E+00
7/19/2017	-2.78E+00	5.25E+00
8/2/2017	3.97E+00	5.83E+00
8/16/2017	-1.43E+00	5.64E+00
8/30/2017	6.68E+00	5.33E+00
9/13/2017	4.41E+00	4.58E+00
9/27/2017	-3.76E+00	4.90E+00
10/11/2017	-1.72E+00	5.31E+00
10/25/2017	3.84E+00	3.78E+00
11/8/2017	1.34E+00	3.42E+00
11/21/2017	1.08E+00	3.35E+00
12/6/2017	1.27E+01	3.45E+00
12/20/2017	5.32E-03	6.31E-03
1/3/2018	1.58E-02	5.60E-03

Site Perimeter: D Area

Sample Date	Result (pCi/m ³)	Standard Dev. (pCi/m ³)
1/18/2017	1.99E-01	3.52E+00
2/1/2017	1.00E+01	4.16E+00
2/15/2017	2.97E+00	2.86E+00
3/1/2017	5.62E+00	3.11E+00
3/15/2017	4.59E+00	3.60E+00
3/29/2017	2.50E+00	2.38E+00
4/11/2017	-4.89E+00	3.77E+00
4/26/2017	6.73E+00	4.22E+00
5/10/2017	-5.62E-03	8.63E-03
5/24/2017	-6.22E+00	4.97E+00
6/7/2017	1.86E+01	6.41E+00
6/21/2017	2.62E+00	6.29E+00
7/5/2017	-1.90E+00	5.41E+00
7/19/2017	-5.41E+00	5.47E+00
8/2/2017	-7.27E+00	5.16E+00
8/16/2017	6.16E+00	5.49E+00
8/30/2017	6.49E+00	5.39E+00
9/13/2017	8.05E+00	5.14E+00
9/27/2017	4.59E+00	4.65E+00
10/11/2017	4.08E+00	5.15E+00
10/25/2017	6.08E+00	5.14E+00
11/8/2017	9.11E-01	3.08E+00
11/21/2017	3.35E+01	6.22E+00
12/6/2017	8.27E+00	3.35E+00
12/20/2017	4.86E+00	4.02E+00
1/3/2018	9.59E+00	4.21E+00

Table 13 Tritium in Environmental Air (continued)

Site Perimeter: Darkhorse @ Williston Gate

Sample Date	Result (pCi/m ³)	Standard Dev. (pCi/m ³)
1/18/2017	-7.68E-02	2.70E+00
2/1/2017	3.84E+00	3.00E+00
2/15/2017	5.59E+00	3.12E+00
3/1/2017	2.56E+00	3.09E+00
3/15/2017	1.68E+00	2.80E+00
3/29/2017	3.19E+00	3.20E+00
4/11/2017	3.14E+00	3.80E+00
4/26/2017	2.81E-01	4.13E+00
5/10/2017	1.74E+00	4.31E+00
5/24/2017	-5.08E+00	4.98E+00
6/7/2017	1.17E+01	4.81E+00
6/21/2017	1.40E+01	6.53E+00
7/5/2017	3.70E+00	5.36E+00
7/19/2017	1.21E+01	5.60E+00
8/2/2017	1.47E+00	5.38E+00
8/16/2017	-3.49E+00	5.60E+00
8/30/2017	1.28E+01	5.18E+00
9/13/2017	-6.78E-01	4.36E+00
9/27/2017	-1.43E+00	4.80E+00
10/12/2017	-1.18E+00	5.01E+00
10/25/2017	8.11E+00	4.18E+00
11/8/2017	4.92E-01	3.15E+00
11/21/2017	3.59E+00	3.01E+00
12/6/2017	6.54E+00	2.97E+00
12/20/2017	1.30E+01	3.33E+00
1/3/2018	4.86E+00	2.39E+00

Site Perimeter: East Talatha

Sample Date	Result (pCi/m ³)	Standard Dev. (pCi/m ³)
1/18/2017	3.19E+00	3.19E+00
2/1/2017	7.35E+00	4.06E+00
2/15/2017	3.54E+00	2.91E+00
3/1/2017	5.38E+00	3.32E+00
3/15/2017	1.47E+00	2.64E+00
3/29/2017	-1.38E+00	3.11E+00
4/11/2017	-3.14E-01	3.78E+00
4/26/2017	1.70E-01	4.14E+00
5/10/2017	2.84E+00	4.55E+00
5/24/2017	-7.11E+00	4.90E+00
6/7/2017	1.35E+01	5.03E+00
6/21/2017	1.09E+01	6.51E+00
7/5/2017	2.89E+00	5.64E+00
7/19/2017	9.14E+00	5.55E+00
8/2/2017	1.66E+00	5.39E+00
8/16/2017	2.54E+00	5.47E+00
8/30/2017	1.08E+00	5.02E+00
9/13/2017	8.24E+00	4.52E+00
9/27/2017	3.92E+00	4.95E+00
10/12/2017	-4.68E+00	4.84E+00
10/25/2017	4.19E+00	4.01E+00
11/8/2017	3.03E+00	3.53E+00
11/21/2017	8.16E+00	3.53E+00
12/6/2017	1.47E+00	3.11E+00
12/20/2017	5.95E+00	3.03E+00
1/3/2018	3.05E+00	2.68E+00

Table 13 Tritium in Environmental Air (continued)

Site Perimeter: Green Pond

Sample Date	Result (pCi/m ³)	Standard Dev. (pCi/m ³)
1/18/2017	1.65E+00	2.96E+00
2/1/2017	3.92E+00	3.35E+00
2/15/2017	6.00E+00	3.13E+00
3/1/2017	1.46E+00	2.89E+00
3/15/2017	8.46E+00	2.78E+00
3/29/2017	-2.69E+00	2.74E+00
4/11/2017	-2.22E+00	3.60E+00
4/26/2017	3.32E-01	4.07E+00
5/10/2017	1.34E+00	4.56E+00
5/24/2017	-2.54E+00	4.93E+00
6/7/2017	1.01E+01	4.78E+00
6/21/2017	9.14E+00	6.65E+00
7/5/2017	2.73E+00	5.47E+00
7/19/2017	2.76E+00	5.26E+00
8/2/2017	-2.43E+00	5.57E+00
8/16/2017	5.78E+00	6.22E+00
8/30/2017	4.89E+00	4.89E+00
9/13/2017	6.27E+00	4.55E+00
9/27/2017	2.97E+00	5.02E+00
10/12/2017	-2.31E+00	4.85E+00
10/25/2017	8.65E+00	4.40E+00
11/8/2017	2.95E+00	3.28E+00
11/21/2017	8.49E-01	3.01E+00
12/6/2017	-2.56E+00	2.87E+00
12/20/2017	8.22E+00	3.64E+00
1/3/2018	6.16E+00	2.33E+00

Site Perimeter: Highway 21/167

Sample Date	Result (pCi/m ³)	Standard Dev. (pCi/m ³)
1/18/2017	4.24E+00	3.25E+00
2/1/2017	5.08E+00	3.50E+00
2/15/2017	6.14E+00	3.22E+00
3/1/2017	5.46E+00	3.14E+00
3/15/2017	4.35E-01	2.72E+00
3/29/2017	2.58E+00	3.14E+00
4/11/2017	2.49E+00	4.11E+00
4/26/2017	-1.22E+00	4.41E+00
5/10/2017	-3.73E-01	4.38E+00
5/24/2017	4.81E+00	5.48E+00
6/7/2017	1.23E+01	4.95E+00
6/21/2017	-1.80E+00	6.45E+00
7/5/2017	1.46E+00	5.38E+00
7/19/2017	3.46E+00	5.43E+00
8/2/2017	-3.73E+00	5.47E+00
8/16/2017	-3.78E+00	5.41E+00
8/30/2017	8.95E+00	4.71E+00
9/13/2017	1.89E+00	4.26E+00
9/27/2017	2.43E+00	4.79E+00
10/12/2017	-4.92E-01	4.96E+00
10/25/2017	4.51E+00	4.37E+00
11/8/2017	4.84E+00	3.29E+00
11/21/2017	1.02E+00	2.95E+00
12/6/2017	7.46E+00	3.03E+00
12/20/2017	8.11E+00	3.53E+00
1/3/2018	5.16E+00	2.44E+00

Table 13 Tritium in Environmental Air (continued)

Site Perimeter: Jackson

Sample Date	Result (pCi/m ³)	Standard Dev. (pCi/m ³)
1/18/2017	6.57E+00	3.33E+00
2/1/2017	1.39E+00	3.44E+00
2/15/2017	-5.41E-01	2.83E+00
3/1/2017	5.38E+00	3.30E+00
3/15/2017	5.76E+00	2.92E+00
3/29/2017	3.41E+00	3.42E+00
4/11/2017	-7.81E-01	4.04E+00
4/26/2017	-3.19E+00	3.91E+00
5/10/2017	3.08E+00	4.57E+00
5/24/2017	2.48E+00	5.12E+00
6/7/2017	5.24E+00	4.53E+00
6/21/2017	4.89E+00	6.68E+00
7/5/2017	1.11E+00	5.53E+00
7/19/2017	3.51E+00	5.77E+00
8/2/2017	-5.30E+00	5.84E+00
8/16/2017	1.11E+01	6.26E+00
8/30/2017	8.81E+00	4.83E+00
9/13/2017	1.16E+00	4.40E+00
9/27/2017	1.46E+00	4.99E+00
10/12/2017	-3.41E+00	5.41E+00
10/25/2017	4.16E+00	3.99E+00
11/8/2017	-9.41E-02	3.30E+00
11/21/2017	-1.31E+00	2.90E+00
12/6/2017	3.43E+00	3.08E+00
12/20/2017	2.12E+00	2.95E+00
1/3/2018	1.80E+00	3.30E+00

Site Perimeter: Patterson Mill Road

Sample Date	Result (pCi/m ³)	Standard Dev. (pCi/m ³)
1/18/2017	2.47E-01	2.91E+00
2/1/2017	1.62E+00	3.19E+00
2/15/2017	9.81E+00	2.82E+00
3/1/2017	3.11E+00	3.20E+00
3/15/2017	9.08E-01	2.73E+00
3/29/2017	-1.77E+00	2.96E+00
4/11/2017	4.24E-01	3.32E+00
4/26/2017	1.50E+00	4.81E+00
5/10/2017	-5.92E-02	4.19E+00
5/24/2017	-4.16E+00	5.25E+00
6/7/2017	1.09E+01	4.67E+00
6/21/2017	-5.24E+00	6.13E+00
7/5/2017	-1.61E+00	5.52E+00
7/19/2017	-9.24E-01	5.29E+00
8/2/2017	5.03E+00	6.17E+00
8/16/2017	-1.89E+00	5.75E+00
8/30/2017	-4.97E-01	4.28E+00
9/13/2017	-2.43E-01	4.32E+00
9/27/2017	2.33E+00	5.06E+00
10/11/2017	-2.73E+00	4.85E+00
10/25/2017	8.78E+00	4.01E+00
11/8/2017	3.65E+00	3.32E+00
11/21/2017	1.97E+00	2.76E+00
12/6/2017	8.68E+00	4.04E+00
12/20/2017	4.08E+00	2.96E+00
1/3/2018	4.11E+00	2.70E+00

Table 13 Tritium in Environmental Air (continued)

Site Perimeter: Talatha Gate

Sample Date	Result (pCi/m ³)	Standard Dev. (pCi/m ³)
1/18/2017	4.22E+00	2.90E+00
2/1/2017	-5.03E-01	2.99E+00
2/15/2017	-9.97E-01	2.69E+00
3/1/2017	3.49E+00	2.82E+00
3/15/2017	1.18E+01	3.39E+00
3/29/2017	3.30E+00	3.03E+00
4/11/2017	-1.03E+00	3.91E+00
4/26/2017	-2.73E+00	3.88E+00
5/10/2017	7.95E+00	4.41E+00
5/24/2017	-3.76E+00	4.67E+00
6/7/2017	1.42E+01	4.77E+00
6/21/2017	1.01E+01	6.56E+00
7/5/2017	5.51E+00	5.43E+00
7/19/2017	5.43E+00	5.26E+00
8/2/2017	5.00E+00	4.69E+00
8/16/2017	-7.08E-01	5.31E+00
8/30/2017	4.35E+00	4.89E+00
9/13/2017	3.89E+00	4.32E+00
9/27/2017	4.97E+00	4.91E+00
10/12/2017	-4.14E+00	4.73E+00
10/25/2017	-6.73E-01	3.79E+00
11/8/2017	4.41E+00	3.47E+00
11/21/2017	2.25E+00	3.22E+00
12/6/2017	-7.32E-01	3.11E+00
12/20/2017	3.49E+00	3.21E+00
1/3/2018	2.16E+00	2.39E+00

25-Mile Radius: Aiken Airport

Sample Date	Result (pCi/m ³)	Standard Dev. (pCi/m ³)
1/19/2017	5.46E-01	3.22E+00
2/2/2017	-9.00E-02	3.74E+00
2/16/2017	-8.86E-01	3.34E+00
3/2/2017	4.57E+00	3.54E+00
3/6/2017	-4.11E-02	2.81E+00
3/30/2017	-1.87E-01	3.21E+00
4/11/2017	-5.03E+00	3.89E+00
4/27/2017	9.86E-01	4.55E+00
5/11/2017	-2.35E+00	4.55E+00
5/25/2017	4.08E+00	5.60E+00
6/8/2017	1.45E+01	5.16E+00
6/22/2017	-6.03E+00	6.71E+00
7/6/2017	-1.25E+00	5.70E+00
7/20/2017	-7.19E+00	5.46E+00
8/3/2017	4.32E+00	5.88E+00
8/17/2017	7.05E+00	6.09E+00
8/31/2017	1.56E+00	5.48E+00
9/14/2017	-1.29E-01	4.59E+00
9/28/2017	-1.10E+00	5.23E+00
10/12/2017	1.72E+00	5.41E+00
10/26/2017	8.41E+00	4.12E+00
11/9/2017	2.92E+00	3.77E+00
11/20/2017	5.57E+00	3.59E+00
12/7/2017	-7.51E-01	2.70E+00
12/20/2017	3.46E+00	3.11E+00
1/4/2018	4.27E+00	2.46E+00

Table 13 Tritium in Environmental Air (continued)

25-Mile Radius: Augusta Lock and Dam 614

Sample Date	Result (pCi/m ³)	Standard Dev. (pCi/m ³)
1/19/2017	1.23E+00	2.94E+00
2/2/2017	4.35E+00	3.25E+00
2/16/2017	1.47E+00	2.92E+00
3/2/2017	4.08E+00	2.89E+00
3/6/2017	-7.14E-01	2.30E+00
3/30/2017	4.32E+00	4.95E+00
4/11/2017	-5.38E-02	3.92E+00
4/27/2017	-5.54E-01	4.03E+00
5/11/2017	1.27E+00	4.13E+00
5/25/2017	-4.57E+00	5.13E+00
6/8/2017	8.35E+00	4.59E+00
6/22/2017	-1.32E+00	6.22E+00
7/6/2017	-4.84E+00	5.39E+00
7/20/2017	-7.35E+00	5.25E+00
8/3/2017	6.62E-02	5.55E+00
8/17/2017	5.38E+00	5.78E+00
8/31/2017	8.89E-01	5.64E+00
9/14/2017	5.49E+00	4.25E+00
9/28/2017	6.11E-02	4.98E+00
10/12/2017	-1.42E+00	4.96E+00
10/26/2017	5.54E+00	3.17E+00
11/9/2017	5.32E-01	3.42E+00
11/20/2017	-6.84E-01	2.94E+00
12/7/2017	6.65E-01	2.70E+00
12/20/2017	-1.98E+00	2.53E+00
1/4/2018	6.62E+00	2.28E+00

**25-Mile Radius: Highway 301 @ State Line
(control location)**

Sample Date	Result (pCi/m ³)	Standard Dev. (pCi/m ³)
1/19/2017	6.11E+00	3.76E+00
2/2/2017	5.46E+00	3.95E+00
2/16/2017	5.03E+00	3.52E+00
3/2/2017	1.93E+00	3.16E+00
3/6/2017	3.11E+00	2.37E+00
3/30/2017	-1.94E-01	1.01E+00
4/11/2017	1.18E+00	4.13E+00
4/27/2017	-1.75E+00	4.36E+00
5/11/2017	-1.99E-01	4.69E+00
5/25/2017	-4.05E+00	5.12E+00
6/8/2017	6.57E+00	4.92E+00
6/22/2017	-5.62E+00	6.57E+00
7/6/2017	-4.14E+00	5.67E+00
7/20/2017	-5.59E-01	5.50E+00
8/3/2017	-2.05E-01	5.71E+00
8/17/2017	8.68E+00	6.25E+00
8/31/2017	2.59E+00	5.37E+00
9/14/2017	-3.43E-01	4.86E+00
9/28/2017	8.54E+00	5.60E+00
10/12/2017	-3.11E+00	5.49E+00
10/26/2017	-3.78E-01	4.27E+00
11/9/2017	-1.61E+00	3.38E+00
11/20/2017	4.24E-01	3.49E+00
12/7/2017	4.57E+00	3.35E+00
12/20/2017	-1.06E+00	3.20E+00
1/4/2018	3.78E+00	2.49E+00

Data Tables Supporting the Radiological Environmental Monitoring Program

Table 14 Tritium in Rainwater

Significant results are identified by cell boxes highlighted in blue.

Onsite: Burial Ground North

Sample Date	Result (pCi/L)	Standard Dev. (pCi/L)
2/1/2017	1.42E+03	1.84E+02
3/1/2017	1.22E+03	1.57E+02
3/29/2017	8.59E+02	1.78E+02
4/26/2017	1.17E+03	1.59E+02
5/24/2017	3.54E+02	1.54E+02
6/21/2017	7.49E+01	1.43E+02
7/19/2017	5.70E+02	1.57E+02
8/16/2017	8.00E+02	1.54E+02
9/13/2017	9.27E+02	1.73E+02
10/11/2017	1.57E+03	1.82E+02
11/8/2017	3.35E+03	2.12E+02
12/6/2017	3.86E+03	2.19E+02
1/3/2018	2.97E+03	1.98E+02

Site Perimeter: Allendale Gate

Sample Date	Result (pCi/L)	Standard Dev. (pCi/L)
2/1/2017	2.10E+01	1.51E+02
3/1/2017	2.29E+02	1.26E+02
3/29/2017	2.68E+02	1.66E+02
4/26/2017	1.63E+02	1.29E+02
5/24/2017	-9.24E+01	1.39E+02
6/21/2017	-1.86E+02	1.39E+02
7/19/2017	-5.08E+01	1.41E+02
8/16/2017	8.32E+01	1.30E+02
9/13/2017	3.54E+02	1.59E+02
10/11/2017	-2.62E+01	1.40E+02
11/8/2017	-2.60E+01	1.19E+02
12/6/2017	6.46E+00	1.24E+02
1/3/2018	-8.51E+01	1.17E+02

Site Perimeter: Barnwell Gate

Sample Date	Result (pCi/L)	Standard Dev. (pCi/L)
2/1/2017	-6.35E+01	1.50E+02
3/1/2017	2.31E+02	1.24E+02
3/29/2017	3.49E+02	1.66E+02
4/26/2017	1.39E+01	1.23E+02
5/24/2017	-1.09E+02	1.40E+02
6/21/2017	-7.81E+01	1.40E+02
7/19/2017	3.78E+01	1.45E+02
8/16/2017	1.18E+02	1.32E+02
9/13/2017	2.84E+02	1.56E+02
10/11/2017	-9.65E+01	1.35E+02
11/8/2017	9.86E+00	1.21E+02
12/6/2017	-3.38E+01	1.22E+02
1/3/2018	-2.15E+02	1.12E+02

Site Perimeter: D Area

Sample Date	Result (pCi/L)	Standard Dev. (pCi/L)
2/1/2017	-2.81E+02	1.43E+02
3/1/2017	3.65E+02	1.30E+02
3/29/2017	1.91E+02	1.62E+02
4/26/2017	-1.90E+01	1.21E+02
5/24/2017	-1.20E+02	1.36E+02
6/21/2017	6.24E+01	1.44E+02
7/19/2017	7.38E+01	1.45E+02
8/16/2017	-1.63E+02	1.37E+02
9/13/2017	6.22E+02	1.66E+02
10/11/2017	-9.78E+01	1.39E+02
11/8/2017	2.32E+01	1.32E+02
12/6/2017	2.29E+02	1.37E+02
1/3/2018	2.02E+02	1.30E+02

Table 14 Tritium in Rainwater (continued)

Site Perimeter: Darkhorse @ Williston Gate

Sample Date	Result (pCi/L)	Standard Dev. (pCi/L)
2/1/2017	-2.65E+02	1.43E+02
3/1/2017	2.78E+02	1.26E+02
3/29/2017	2.84E+02	1.66E+02
4/26/2017	1.21E+01	1.23E+02
5/24/2017	-2.04E+02	1.38E+02
6/21/2017	1.92E+00	1.44E+02
7/19/2017	-8.27E+01	1.39E+02
8/16/2017	5.84E+01	1.32E+02
9/13/2017	2.15E+02	1.56E+02
10/12/2017	-1.35E+02	1.36E+02
11/8/2017	-1.94E+01	1.18E+02
12/6/2017	-2.51E+01	1.27E+02
1/3/2018	7.70E+01	1.25E+02

Site Perimeter: East Talatha

Sample Date	Result (pCi/L)	Standard Dev. (pCi/L)
2/1/2017	-1.53E+02	1.46E+02
3/1/2017	2.09E+02	1.28E+02
3/29/2017	2.84E+02	1.66E+02
4/26/2017	2.25E+02	1.30E+02
5/24/2017	-1.95E+02	1.37E+02
6/21/2017	9.76E+01	1.47E+02
7/19/2017	2.02E+02	1.49E+02
8/16/2017	1.18E+02	1.39E+02
9/13/2017	2.31E+02	1.57E+02
10/12/2017	-5.54E+01	1.38E+02
11/8/2017	2.16E+02	1.31E+02
12/6/2017	-2.03E+02	1.20E+02
1/3/2018	-3.84E+01	1.19E+02

Site Perimeter: Green Pond

Sample Date	Result (pCi/L)	Standard Dev. (pCi/L)
2/1/2017	1.79E+01	1.51E+02
3/1/2017	5.00E+01	1.19E+02
3/29/2017	1.54E+02	1.63E+02
4/26/2017	7.00E+00	1.24E+02
5/24/2017	-6.19E+01	1.42E+02
6/21/2017	2.81E+01	1.42E+02
7/19/2017	8.19E+01	1.45E+02
8/16/2017	-1.76E+00	1.26E+02
9/13/2017	1.67E+02	1.55E+02
10/12/2017	4.22E+01	1.40E+02
11/8/2017	-1.35E+01	1.24E+02
12/6/2017	-1.22E+02	1.18E+02
1/3/2018	-9.22E+01	1.18E+02

Site Perimeter: Highway 21/167

Sample Date	Result (pCi/L)	Standard Dev. (pCi/L)
2/1/2017	-1.95E+02	1.46E+02
3/1/2017	4.11E+02	1.32E+02
3/29/2017	2.73E+01	1.59E+02
4/26/2017	-7.00E+00	1.23E+02
5/24/2017	1.28E+01	1.40E+02
6/21/2017	-6.78E+01	1.39E+02
7/19/2017	-2.06E+02	1.36E+02
8/16/2017	4.24E+01	1.28E+02
9/13/2017	3.05E+02	1.57E+02
10/12/2017	2.38E+02	1.53E+02
11/8/2017	-6.11E+01	1.17E+02
12/6/2017	-9.68E+01	1.22E+02
1/3/2018	1.28E+02	1.26E+02

Table 14 Tritium in Rainwater (continued)

Site Perimeter: Jackson

Sample Date	Result (pCi/L)	Standard Dev. (pCi/L)
2/1/2017	-1.99E+02	1.46E+02
3/1/2017	1.03E+02	1.20E+02
3/29/2017	-6.41E+01	1.58E+02
4/26/2017	9.43E+01	1.26E+02
5/24/2017	6.43E+01	1.47E+02
6/21/2017	-1.85E+02	1.33E+02
7/19/2017	7.92E+01	1.46E+02
8/16/2017	-3.08E+01	1.29E+02
9/13/2017	2.09E+02	1.55E+02
10/12/2017	-3.43E+01	1.39E+02
11/8/2017	9.73E+01	1.25E+02
12/6/2017	-1.10E+02	1.23E+02
1/3/2018	-1.28E+02	1.21E+02

Site Perimeter: Patterson Mill Road

Sample Date	Result (pCi/L)	Standard Dev. (pCi/L)
2/1/2017	1.52E+02	1.55E+02
3/1/2017	2.28E+02	1.26E+02
3/29/2017	3.92E+02	1.68E+02
4/26/2017	1.19E+02	1.28E+02
5/24/2017	1.33E+01	1.46E+02
6/21/2017	-2.62E+02	1.34E+02
7/19/2017	-6.57E+01	1.41E+02
8/16/2017	-1.22E+02	1.32E+02
9/13/2017	2.55E+02	1.58E+02
10/11/2017	1.82E+01	1.42E+02
11/8/2017	-8.59E+01	1.19E+02
12/6/2017	-1.06E+02	1.23E+02
1/3/2018	2.64E+01	1.24E+02

Site Perimeter: Talatha Gate

Sample Date	Result (pCi/L)	Standard Dev. (pCi/L)
2/1/2017	-1.77E+01	1.49E+02
3/1/2017	2.26E+02	1.26E+02
3/29/2017	3.68E+01	1.60E+02
4/26/2017	9.05E+01	1.26E+02
5/24/2017	-1.09E+02	1.40E+02
6/21/2017	-1.96E+01	1.47E+02
7/19/2017	2.38E+02	1.49E+02
8/16/2017	8.38E+01	1.36E+02
9/13/2017	2.04E+02	1.55E+02
10/12/2017	1.23E+02	1.44E+02
11/8/2017	4.08E+02	1.35E+02
12/6/2017	2.70E-04	1.24E+02
1/3/2018	4.05E+01	1.23E+02

25-Mile Radius: Aiken Airport

Sample Date	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2017	1.10E+02	1.53E+02
3/2/2017	1.47E+02	1.21E+02
3/30/2017	9.86E+01	1.60E+02
4/27/2017	2.44E+01	1.24E+02
5/25/2017	9.16E+00	1.41E+02
6/22/2017	-1.15E+02	1.38E+02
7/20/2017	1.18E+02	1.46E+02
8/17/2017	6.32E+01	1.32E+02
9/14/2017	-1.06E+01	1.51E+02
10/12/2017	4.30E+01	1.43E+02
11/9/2017	2.11E+01	1.20E+02
12/7/2017	-4.22E+01	1.22E+02
1/4/2018	1.01E+01	1.26E+02

Table 14 Tritium in Rainwater (continued)

25-Mile Radius: Augusta Lock and Dam 614

Sample Date	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2017	-1.28E+02	1.49E+02
3/2/2017	2.61E+02	1.29E+02
3/30/2017	5.49E+01	1.61E+02
4/27/2017	1.92E+02	1.46E+02
5/25/2017	-9.05E+01	1.45E+02
6/22/2017	-8.62E+01	1.41E+02
7/20/2017	7.35E+01	1.44E+02
8/17/2017	2.69E+01	1.30E+02
9/14/2017	1.68E+02	1.55E+02
10/12/2017	-2.08E+02	1.35E+02
11/9/2017	-4.49E+01	1.21E+02
12/7/2017	1.70E+00	1.30E+02
1/4/2018	-2.28E+02	1.13E+02

**25-Mile Radius: Highway 301 @ State Line
(Control Location)**

Sample Date	Result (pCi/L)	Standard Dev. (pCi/L)
2/2/2017	-1.42E+02	1.47E+02
3/2/2017	1.22E+02	1.24E+02
3/30/2017	7.65E+01	1.65E+02
4/27/2017	2.07E+02	1.36E+02
5/25/2017	-2.11E+02	1.38E+02
6/22/2017	-1.13E+02	1.38E+02
7/20/2017	-1.27E+02	1.40E+02
8/17/2017	3.68E+00	1.32E+02
9/14/2017	4.86E+01	1.52E+02
10/12/2017	-1.43E+02	1.36E+02
11/9/2017	-1.61E+01	1.18E+02
12/7/2017	-1.32E+01	1.26E+02
1/4/2018	6.16E+01	1.27E+02

Table 15 Thermoluminescent Dosimeter (TLD) Data

Location	Quarter 1 mR/day	Quarter 2 mR/day	Quarter 3 mR/day	Quarter 4 mR/day	Annual Total mR/year
Barnwell	0.30	0.26	0.30	0.31	107
Beech Island	0.36	0.41	0.35	0.35	135
Girard	0.36	0.31	0.35	0.34	124
Jackson	0.31	0.25	0.30	0.27	102.6
Martin	0.33	0.25	0.32	0.32	110.1
McBean	0.31	0.24	0.27	0.28	99.5
New Ellenton	0.31	0.28	0.30	0.33	111
Williston	0.39	0.33	0.37	0.36	131
Windsor	0.28		0.28	0.27	71.8
PP_15	0.29	0.23	0.29	0.26	96.9
PP_42	0.25	0.22	0.28	0.25	90.4
PP_48	0.24	0.20	0.26	0.21	83.3
PP_51	0.26	0.23	0.28	0.22	89.3
PP_57D	Environmental TLDs for TLD Site PP_57D could not be deployed due to road conditions				
PP_61B	0.24	0.21	0.26	0.23	84.8
PP_65D	0.29	0.25	0.30	0.27	100.4
PP_72B	0.23	0.20	0.28	0.22	84.3
PP_75D	0.23	0.17	0.23	0.18	73.8
BGN	0.35	0.33	0.35	0.34	125
Allendale Gate	0.22	0.18	0.23	0.19	73.6
Barnwell Gate	0.27	0.23	0.28	0.23	91.4
D-Area	0.24	0.22	0.25	0.22	84.8
Dark Horse	0.25	0.21	0.26	0.22	84.9
East Talatha	0.23	0.20	0.26	0.21	80.5
Green Pond	0.33	0.26	0.32	0.28	108
Hwy 21/167	0.31	0.27	0.33	0.29	109
Jackson	0.30	0.27	0.31	0.27	105.3
Patterson Mill Rd	0.23	0.19	0.23	0.19	76.3
Talatha Gate	0.26	0.23	0.30	0.25	94.6
Aiken Airport	0.25	0.25	0.25	0.26	86.2
Augusta Lock & Dam	0.31	0.19	0.29	0.29	104.7
Hwy 301	0.28	0.26	0.27	0.27	97.7

Table 15 Thermoluminescent Dosimeter (TLD) Data (continued)

Location	Quarter 1 mR/day	Quarter 2 mR/day	Quarter 3 mR/day	Quarter 4 mR/day	Annual Total mR/year
GAP_1H	0.24	0.39	0.24	0.20	99.8
GAP_1L	0.24	0.37	0.23	0.22	98.1
GAP_2H	0.24	0.39	0.24	0.22	101.2
GAP_2L	0.24	0.42	0.23	0.23	105.0
GAP_3H	0.28	0.61	0.29	0.25	134.3
GAP_3L	0.29	0.47	0.25	0.26	118.9
GAP_4H	0.32	0.42	0.31	0.29	123
GAP_4L	0.29	0.56	0.30	0.30	135.3
GAP_5H	0.23	0.31	0.23	0.22	91.1
GAP_5L	0.24	0.39	0.24	0.22	100.6
NRC_1	0.34	0.27	0.34	0.29	113
NRC_2	0.20	0.15		0.16	48.6
NRC_3	0.21	0.17	0.22	0.19	70.5
NRC_4	0.28	0.22	0.27	0.22	90.4
NRC_5	0.31	0.27	0.33	0.29	109
NRC_6	0.25	0.20	0.26	0.21	81.8
NRC_7	0.21	0.20	0.27	0.21	80.1
NRC_8	0.24	0.19	0.27	0.21	81.7

Notes: 1. mR = milliRoentgen, exposure unit for gamma radiation
 2. Although the TLD is an integrating device, the derived unit mR/day is used to facilitate comparison between locations or through time at a single location
 3. An 18% uncertainty is associated with each result
 4. Blank spaces indicate missing TLD results

KEY	
	Population Centers
	Site Perimeter
	Stations
	Air Surveillance
	Stations
	Plant Vogtle Vicinity

Table 16 Radionuclides in Soil

Location	Sample Date	Co-60		Cs-137	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
F Area					
2000 Feet West	2/13/2017	7.14E-03	7.70E-03	3.27E-01	3.47E-02
H Area					
2000 Feet East	2/13/2017	1.16E-02	9.89E-03	2.27E-01	2.61E-02
Z Area					
#3	2/13/2017	-1.16E-03	9.97E-03	1.39E-01	2.08E-02
Burial Ground					
643-26E-2	2/13/2017	1.31E-03	1.13E-02	-2.92E-02	1.51E-02
Burial Ground North	2/9/2017	2.76E-02	1.10E-02	6.68E-02	1.92E-02
Plant Perimeter					
Allendale Gate	2/9/2017	-1.62E-03	7.93E-03	1.94E-01	2.04E-02
Barnwell Gate	2/8/2017	-4.08E-03	9.44E-03	2.76E-01	2.76E-02
D Area	2/9/2017	5.84E-04	9.93E-03	3.59E-01	3.36E-02
Darkhorse @ Williston Gate	2/8/2017	3.73E-04	7.97E-03	1.70E-01	2.20E-02
East Talatha	2/8/2017	-1.57E-02	8.30E-03	1.71E-01	2.28E-02
Green Pond	2/8/2017	3.49E-03	9.74E-03	1.10E-01	1.88E-02
Highway 21/167	2/8/2017	2.78E-03	7.59E-03	1.55E-01	2.36E-02
Jackson	2/8/2017	-1.45E-03	7.81E-03	1.84E-01	2.07E-02
Patterson Mill Road	2/9/2017	-9.73E-03	8.48E-03	3.19E-01	3.40E-02
Talatha Gate	2/8/2017	2.86E-03	8.24E-03	8.54E-02	1.27E-02
25-Mile Radius					
Aiken Airport	2/9/2017	-2.73E-03	7.45E-03	1.48E-01	1.77E-02
Augusta Lock and Dam 614	2/9/2017	-1.11E-02	1.23E-02	1.90E-01	2.29E-02
Highway 301 @ State Line	2/9/2017	1.01E-02	1.12E-02	4.86E-02	2.99E-02

Table 16 Radionuclides in Soil (continued)

Location	Sample Date	Sr-89/90		U-234	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
F Area					
2000 Feet West	2/13/2017	1.83E-02	5.12E-02	7.62E-01	6.86E-02
H Area					
2000 Feet East	2/13/2017	4.24E-02	4.93E-02	1.04E+00	8.46E-02
Z Area					
#3	2/13/2017	-3.49E-02	3.79E-02	9.43E-01	7.92E-02
Burial Ground					
643-26E-2	2/13/2017	5.84E-02	4.40E-02	1.46E+00	1.12E-01
Burial Ground North	2/9/2017	3.84E-02	4.86E-02	1.09E+00	8.84E-02
Plant Perimeter					
Allendale Gate	2/9/2017	2.42E-02	4.89E-02	3.95E-01	3.96E-02
Barnwell Gate	2/8/2017	5.51E-02	5.18E-02	9.22E-01	7.46E-02
D Area	2/9/2017	3.08E-02	6.03E-02	9.86E-01	8.18E-02
Darkhorse @ Williston Gate	2/8/2017	2.41E-02	4.84E-02	6.16E-01	5.75E-02
East Talatha	2/8/2017	-4.27E-02	4.64E-02	8.89E-01	7.99E-02
Green Pond	2/8/2017	-3.14E-02	4.35E-02	7.68E-01	6.42E-02
Highway 21/167	2/8/2017	5.92E-02	5.57E-02	2.32E+00	1.67E-01
Jackson	2/8/2017	1.46E-01	5.69E-02	6.11E-01	8.12E-02
Patterson Mill Road	2/9/2017	1.00E-01	5.64E-02	4.35E-01	4.07E-02
Talatha Gate	2/8/2017	5.27E-02	4.82E-02	6.05E-01	5.63E-02
25-Mile Radius					
Aiken Airport	2/9/2017	5.51E-02	4.61E-02	5.05E-01	4.80E-02
Augusta Lock and Dam 614	2/9/2017	4.35E-02	5.53E-02	1.36E+00	1.03E-01
Highway 301 @ State Line	2/9/2017	1.06E-01	4.67E-02	1.87E+00	1.38E-01

Table 16 Radionuclides in Soil (continued)

Location	Sample Date	U-235		Np-237	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
F Area					
2000 Feet West	2/13/2017	3.43E-02	1.07E-02	7.43E-05	3.20E-04
H Area					
2000 Feet East	2/13/2017	3.24E-02	9.67E-03	3.59E-04	4.41E-04
Z Area					
#3	2/13/2017	4.05E-02	1.15E-02	0.00E+00	3.16E-04
Burial Ground					
643-26E-2	2/13/2017	6.43E-02	1.39E-02	0.00E+00	3.53E-01
Burial Ground North	2/9/2017	8.16E-02	1.61E-02	2.26E-04	2.43E-04
Plant Perimeter					
Allendale Gate	2/9/2017	2.60E-02	8.76E-03	9.14E-05	3.81E-04
Barnwell Gate	2/8/2017	4.41E-02	1.13E-02	1.05E-04	3.77E-04
D Area	2/9/2017	5.57E-02	1.31E-02	-3.38E-04	4.95E-04
Darkhorse @ Williston Gate	2/8/2017	2.12E-02	8.17E-03	9.68E-04	6.93E-04
East Talatha	2/8/2017	4.24E-02	1.27E-02	3.24E-04	3.27E-04
Green Pond	2/8/2017	2.45E-02	7.95E-03	-1.74E-04	1.75E-04
Highway 21/167	2/8/2017	7.81E-02	1.51E-02	2.73E-04	2.91E-04
Jackson	2/8/2017	3.14E-02	1.59E-02	2.76E-04	2.94E-04
Patterson Mill Road	2/9/2017	3.03E-02	8.67E-03	-2.51E-04	2.52E-04
Talatha Gate	2/8/2017	2.97E-02	9.63E-03	0.00E+00	5.14E-04
25-Mile Radius					
Aiken Airport	2/9/2017	1.57E-02	6.55E-03	8.16E-04	4.88E-04
Augusta Lock and Dam 614	2/9/2017	4.86E-02	1.16E-02	0.00E+00	3.61E-04
Highway 301 @ State Line	2/9/2017	7.78E-02	1.53E-02	2.52E-01	2.52E-01

Table 16 Radionuclides in Soil (continued)

Location	Sample Date	U-238		Pu-238	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
F Area					
2000 Feet West	2/13/2017	6.92E-01	6.14E-02	2.53E-02	3.42E-03
H Area					
2000 Feet East	2/13/2017	1.21E+00	9.21E-02	5.84E-03	1.38E-03
Z Area					
#3	2/13/2017	1.04E+00	8.18E-02	3.84E-03	1.15E-03
Burial Ground					
643-26E-2	2/13/2017	1.49E+00	1.10E-01	1.01E+00	6.43E-01
Burial Ground North	2/9/2017	1.09E+00	8.45E-02	1.66E-03	6.49E-04
Plant Perimeter					
Allendale Gate	2/9/2017	3.62E-01	3.58E-02	9.32E-04	5.53E-04
Barnwell Gate	2/8/2017	8.57E-01	6.80E-02	6.27E-04	4.47E-04
D Area	2/9/2017	1.21E+00	9.28E-02	2.24E-03	8.80E-04
Darkhorse @ Williston Gate	2/8/2017	7.30E-01	6.35E-02	6.43E-04	7.57E-04
East Talatha	2/8/2017	8.14E-01	7.23E-02	2.15E-04	5.50E-04
Green Pond	2/8/2017	6.84E-01	5.67E-02	2.86E-03	9.00E-04
Highway 21/167	2/8/2017	5.57E-01	4.86E-02	8.62E-05	3.44E-04
Jackson	2/8/2017	6.11E-01	7.93E-02	8.70E-05	3.47E-04
Patterson Mill Road	2/9/2017	4.70E-01	4.19E-02	6.35E-03	1.67E-03
Talatha Gate	2/8/2017	6.11E-01	5.51E-02	4.35E-04	1.11E-03
25-Mile Radius					
Aiken Airport	2/9/2017	5.38E-01	4.82E-02	3.57E-04	4.32E-04
Augusta Lock and Dam 614	2/9/2017	1.41E+00	1.02E-01	-1.99E-04	2.00E-04
Highway 301 @ State Line	2/9/2017	1.75E+00	1.26E-01	8.38E-02	3.02E-01

Table 16 Radionuclides in Soil (continued)

Location	Sample Date	Pu-239		Am-241	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
F Area					
2000 Feet West	2/13/2017	3.89E-02	4.70E-03	8.14E-03	1.72E-03
H Area					
2000 Feet East	2/13/2017	2.92E-02	3.85E-03	3.92E-03	1.05E-03
Z Area					
#3	2/13/2017	1.58E-02	2.63E-03	1.26E-02	1.90E-03
Burial Ground					
643-26E-2	2/13/2017	4.00E-01	4.71E-01	8.84E-04	4.82E-04
Burial Ground North	2/9/2017	1.71E-02	2.49E-03	1.24E-03	6.16E-04
Plant Perimeter					
Allendale Gate	2/9/2017	6.35E-03	1.57E-03	4.19E-03	1.17E-03
Barnwell Gate	2/8/2017	5.35E-03	1.45E-03	8.97E-03	1.69E-03
D Area	2/9/2017	1.13E-02	2.21E-03	2.63E-03	8.12E-04
Darkhorse @ Williston Gate	2/8/2017	4.92E-03	1.73E-03	2.47E-03	7.62E-04
East Talatha	2/8/2017	5.11E-03	1.39E-03	3.62E-03	9.63E-04
Green Pond	2/8/2017	7.46E-03	1.56E-03	1.75E-02	2.32E-03
Highway 21/167	2/8/2017	3.70E-03	1.08E-03	1.55E-04	4.75E-04
Jackson	2/8/2017	8.92E-03	1.79E-03	2.29E-03	8.37E-04
Patterson Mill Road	2/9/2017	1.12E-02	2.40E-03	1.30E-02	2.05E-03
Talatha Gate	2/8/2017	3.41E-04	4.83E-04	3.70E-03	1.12E-03
25-Mile Radius					
Aiken Airport	2/9/2017	3.30E-03	9.97E-04	1.75E-03	7.40E-04
Augusta Lock and Dam 614	2/9/2017	8.59E-03	1.81E-03	1.87E-03	6.33E-04
Highway 301 @ State Line	2/9/2017	4.24E+00	1.10E+00	2.12E-03	7.09E-04

Table 16 Radionuclides in Soil (continued)

Location	Sample Date	Cm-244		Gross Beta	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
F Area					
2000 Feet West	2/13/2017	1.22E-03	6.27E-04	7.86E+00	1.21E+00
H Area					
2000 Feet East	2/13/2017	-1.54E-05	1.30E-05	8.62E+00	1.28E+00
Z Area					
#3	2/13/2017	3.22E-04	3.78E-04	7.62E+00	1.21E+00
Burial Ground					
643-26E-2	2/13/2017	1.52E-03	6.10E-04	9.89E+00	1.32E+00
Burial Ground North	2/9/2017	2.24E-04	2.41E-04	8.49E+00	1.26E+00
Plant Perimeter					
Allendale Gate	2/9/2017	5.89E-04	4.30E-04	4.76E+00	1.11E+00
Barnwell Gate	2/8/2017	1.99E-03	7.62E-04	5.05E+00	1.12E+00
D Area	2/9/2017	-1.54E-05	1.27E-05	9.14E+00	1.27E+00
Darkhorse @ Williston Gate	2/8/2017	5.32E-04	4.24E-04	6.38E+00	1.17E+00
East Talatha	2/8/2017	4.89E-04	3.48E-04	4.14E+00	1.07E+00
Green Pond	2/8/2017	3.19E-03	9.09E-04	5.76E+00	1.14E+00
Highway 21/167	2/8/2017	2.63E-04	2.81E-04	3.16E+00	1.03E+00
Jackson	2/8/2017	5.78E-03	1.35E-03	2.32E+00	9.93E-01
Patterson Mill Road	2/9/2017	1.65E-03	6.79E-04	4.70E+00	1.09E+00
Talatha Gate	2/8/2017	2.24E+00	8.99E-01	6.65E+00	1.19E+00
25-Mile Radius					
Aiken Airport	2/9/2017	-1.54E-05	1.33E-05	6.22E+00	1.17E+00
Augusta Lock and Dam 614	2/9/2017	-1.50E-05	1.24E-05	9.30E+00	1.28E+00
Highway 301 @ State Line	2/9/2017	6.24E-04	3.63E-04	7.27E+00	1.21E+00

Table 16 Radionuclides in Soil (continued)

Location	Sample Date	Gross Alpha	
		Result (pCi/g)	Standard Dev. (pCi/g)
F Area			
2000 Feet West	2/13/2017	3.62E+00	8.27E-01
H Area			
2000 Feet East	2/13/2017	1.04E+01	1.55E+00
Z Area			
#3	2/13/2017	7.46E+00	1.14E+00
Burial Ground			
643-26E-2	2/13/2017	1.49E+01	1.76E+00
Burial Ground North	2/9/2017	1.07E+01	1.40E+00
Plant Perimeter			
Allendale Gate	2/9/2017	2.89E+00	8.84E-01
Barnwell Gate	2/8/2017	3.38E+00	8.88E-01
D Area	2/9/2017	9.65E+00	1.32E+00
Darkhorse @ Williston Gate	2/8/2017	5.84E+00	1.03E+00
East Talatha	2/8/2017	4.92E+00	9.63E-01
Green Pond	2/8/2017	6.05E+00	1.04E+00
Highway 21/167	2/8/2017	2.63E+00	7.17E-01
Jackson	2/8/2017	3.81E+00	8.45E-01
Patterson Mill Road	2/9/2017	2.36E+00	7.23E-01
Talatha Gate	2/8/2017	4.49E+00	1.05E+00
25-Mile Radius			
Aiken Airport	2/9/2017	5.11E+00	1.04E+00
Augusta Lock and Dam 614	2/9/2017	1.34E+01	1.51E+00
Highway 301 @ State Line	2/9/2017	8.00E+00	1.22E+00

Table 17 Radionuclides in Grassy Vegetation

Location	Sample Date	Tritium (H-3)		Co-60	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Onsite					
Burial Ground North	5/3/2017	-1.34E-03	1.26E-02	1.52E-04	1.63E-02
Site Perimeter					
Allendale Gate	5/3/2017	-7.89E-03	1.45E-02	-1.37E-02	1.82E-02
Barnwell Gate	5/3/2017	1.74E-02	1.66E-02	-4.27E-03	1.39E-02
D Area	5/3/2017	2.11E-02	1.91E-02	-1.92E-02	1.52E-02
Darkhorse @ Williston Gate	5/3/2017	4.43E-03	1.88E-02	-1.62E-02	2.63E-02
East Talatha	5/3/2017	-3.35E-02	1.36E-02	1.62E-02	1.31E-02
Green Pond	5/3/2017	1.96E-02	1.75E-02	-1.73E-02	1.58E-02
Highway 21/167	5/3/2017	-7.32E-03	1.54E-02	-6.11E-03	1.13E-02
Jackson	5/3/2017	-1.34E-03	1.88E-02	1.18E-02	1.71E-02
Patterson Mill Road	5/3/2017	5.24E-02	1.78E-02	1.11E-02	1.22E-02
Talatha Gate	5/3/2017	-1.16E-02	1.63E-02	-2.52E-02	1.32E-02
25-Mile Radius					
Aiken Airport	5/3/2017	1.09E-02	1.73E-02	-1.70E-02	1.94E-02
Augusta Lock and Dam 614	5/3/2017	-3.32E-03	1.56E-02	-1.21E-04	2.27E-02
Highway 301 @ State Line	5/3/2017	1.38E+00	2.65E-02	-7.57E-03	1.83E-02

Table 17 Radionuclides in Grassy Vegetation (continued)

Location	Sample Date	Cs-137		Sr-89/90	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Onsite					
Burial Ground North	5/3/2017	1.21E-03	1.40E-02	1.26E-01	2.13E-02
Site Perimeter					
Allendale Gate	5/3/2017	2.53E-01	3.34E-02	8.24E-02	2.27E-02
Barnwell Gate	5/3/2017	3.03E-01	3.21E-02	1.30E-01	2.09E-02
D Area	5/3/2017	1.16E-02	1.31E-02	1.59E-01	2.36E-02
Darkhorse @ Williston Gate	5/3/2017	4.84E-02	2.24E-02	2.15E-01	2.52E-02
East Talatha	5/3/2017	2.52E-01	3.21E-02	4.62E-01	4.19E-02
Green Pond	5/3/2017	3.51E-03	1.22E-02	2.92E-01	2.82E-02
Highway 21/167	5/3/2017	8.46E-02	1.82E-02	2.64E-01	2.90E-02
Jackson	5/3/2017	2.70E-02	1.42E-02	2.34E-01	2.67E-02
Patterson Mill Road	5/3/2017	5.76E-02	1.71E-02	2.19E-01	2.76E-02
Talatha Gate	5/3/2017	3.57E-02	1.49E-02	1.31E-01	2.23E-02
25-Mile Radius					
Aiken Airport	5/3/2017	8.05E-02	2.34E-02	2.11E-01	2.52E-02
Augusta Lock and Dam 614	5/3/2017	1.56E-01	3.27E-02	1.20E-01	2.00E-02
Highway 301 @ State Line	5/3/2017	2.51E-02	1.74E-02	8.54E-02	1.85E-02

Table 17 Radionuclides in Grassy Vegetation (continued)

Location	Sample Date	U-234		U-235	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Onsite					
Burial Ground North	5/3/2017	1.25E-02	1.52E-03	4.49E-04	2.61E-04
Site Perimeter					
Allendale Gate	5/3/2017	2.31E-03	6.06E-04	5.32E-05	1.91E-04
Barnwell Gate	5/3/2017	1.09E-03	3.84E-04	3.30E-04	2.64E-04
D Area	5/3/2017	2.78E-03	6.32E-04	2.76E-04	1.95E-04
Darkhorse @ Williston Gate	5/3/2017	2.41E-03	6.20E-04	2.25E-04	2.64E-04
East Talatha	5/3/2017	4.27E-03	8.18E-04	-1.05E-04	1.06E-04
Green Pond	5/3/2017	1.16E-02	1.49E-03	4.78E-04	4.01E-04
Highway 21/167	5/3/2017	1.44E-03	4.70E-04	0.00E+00	1.38E-04
Jackson	5/3/2017	1.89E-03	5.47E-04	1.57E-04	1.57E-04
Patterson Mill Road	5/3/2017	4.41E-03	9.44E-04	2.02E-04	2.02E-04
Talatha Gate	5/3/2017	2.65E-03	6.49E-04	1.67E-04	1.67E-04
25-Mile Radius					
Aiken Airport	5/3/2017	5.70E-03	1.03E-03	8.65E-04	3.92E-04
Augusta Lock and Dam 614	5/3/2017	3.62E-03	7.22E-04	1.88E-04	2.20E-04
Highway 301 @ State Line	5/3/2017	1.00E-02	1.44E-03	5.57E-04	3.23E-04

Table 17 Radionuclides in Grassy Vegetation (continued)

Location	Sample Date	Np-237		U-238	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Onsite					
Burial Ground North	5/3/2017	-6.51E-05	6.54E-05	1.28E-02	1.51E-03
Site Perimeter					
Allendale Gate	5/3/2017	0.00E+00	1.10E-04	2.44E-03	6.17E-04
Barnwell Gate	5/3/2017	-3.73E-05	1.54E-04	1.02E-03	3.87E-04
D-Area	5/3/2017	-6.05E-05	6.06E-05	3.27E-03	6.57E-04
Darkhorse @ Williston Gate	5/3/2017	2.08E-04	1.66E-04	8.59E-04	4.20E-04
East Talatha	5/3/2017	1.11E-04	1.11E-04	6.03E-03	9.97E-04
Green Pond	5/3/2017	0.00E+00	2.15E-04	9.76E-03	1.32E-03
Highway 21/167	5/3/2017	0.00E+00	1.30E-04	5.57E-04	2.83E-04
Jackson	5/3/2017	3.73E-05	1.35E-04	1.65E-03	5.07E-04
Patterson Mill Road	5/3/2017	1.12E-04	1.32E-04	5.84E-03	1.07E-03
Talatha Gate	5/3/2017	0.00E+00	1.44E-04	2.25E-03	6.40E-04
25-Mile Radius					
Aiken Airport	5/3/2017	8.81E-05	8.84E-05	7.08E-03	1.12E-03
Augusta Lock and Dam 614	5/3/2017	1.86E-04	1.32E-04	3.41E-03	6.90E-04
Highway 301 @ State Line	5/3/2017	0.00E+00	1.26E-04	1.16E-02	1.55E-03

Table 17 Radionuclides in Grassy Vegetation (continued)

Location	Sample Date	Pu-238		Pu-239	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Onsite					
Burial Ground North	5/3/2017	9.68E-05	9.71E-05	-3.84E-05	1.33E-04
Site Perimeter					
Allendale Gate	5/3/2017	3.14E-05	1.13E-04	-6.24E-06	7.36E-06
Barnwell Gate	5/3/2017	1.11E-04	1.11E-04	1.05E-04	1.12E-04
D Area	5/3/2017	9.00E-05	9.00E-05	8.35E-05	9.09E-05
Darkhorse @ Williston Gate	5/3/2017	0.00E+00	9.89E-05	-6.24E-06	7.22E-06
East Talatha	5/3/2017	2.20E-04	1.56E-04	3.59E-04	2.35E-04
Green Pond	5/3/2017	1.75E-04	1.76E-04	-1.23E-04	1.17E-04
Highway 21/167	5/3/2017	3.70E-05	1.34E-04	1.05E-04	1.12E-04
Jackson	5/3/2017	0.00E+00	1.31E-04	1.05E-04	1.12E-04
Patterson Mill Road	5/3/2017	1.66E-04	1.18E-04	1.88E-04	1.56E-04
Talatha Gate	5/3/2017	3.57E-04	2.08E-04	2.31E-04	1.71E-04
25-Mile Radius					
Aiken Airport	5/3/2017	2.92E-05	1.05E-04	5.19E-05	1.49E-04
Augusta Lock and Dam 614	5/3/2017	1.84E-04	1.31E-04	-1.90E-04	1.07E-04
Highway 301 @ State Line	5/3/2017	-7.24E-05	7.34E-05	1.02E-04	2.26E-04

Table 17 Radionuclides in Grassy Vegetation (continued)

Location	Sample Date	Am-241		Cm-244	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Onsite					
Burial Ground North	5/3/2017	1.26E-04	1.26E-04	0.00E+00	1.54E-04
Site Perimeter					
Allendale Gate	5/3/2017	-5.65E-05	5.68E-05	0.00E+00	1.01E-04
Barnwell Gate	5/3/2017	0.00E+00	1.02E-04	0.00E+00	1.03E-04
D Area	5/3/2017	-8.43E-05	1.29E-04	0.00E+00	1.00E-04
Darkhorse @ Williston Gate	5/3/2017	0.00E+00	1.09E-04	0.00E+00	1.10E-04
East Talatha	5/3/2017	8.00E-05	8.01E-05	0.00E+00	9.09E-05
Green Pond	5/3/2017	1.71E-04	1.21E-04	0.00E+00	1.03E-04
Highway 21/167	5/3/2017	0.00E+00	9.28E-05	0.00E+00	9.36E-05
Jackson	5/3/2017	-5.78E-05	5.83E-05	0.00E+00	9.86E-05
Patterson Mill Road	5/3/2017	1.64E-04	1.17E-04	0.00E+00	1.01E-04
Talatha Gate	5/3/2017	0.00E+00	1.14E-04	0.00E+00	1.15E-04
25-Mile Radius					
Aiken Airport	5/3/2017	2.89E-05	1.04E-04	0.00E+00	1.04E-04
Augusta Lock and Dam 614	5/3/2017	0.00E+00	1.06E-04	0.00E+00	1.07E-04
Highway 301 @ State Line	5/3/2017	0.00E+00	1.10E-04	9.76E-05	9.78E-05

Table 17 Radionuclides in Grassy Vegetation (continued)

Location	Sample Date	Tc-99		Gross Beta	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Onsite					
Burial Ground North	5/3/2017	2.92E-01	6.22E-02	1.68E+01	1.37E+00
Site Perimeter					
Allendale Gate	5/3/2017	2.26E-01	6.13E-02	4.38E+00	8.14E-01
Barnwell Gate	5/3/2017	1.43E-01	6.01E-02	8.57E+00	9.97E-01
D Area	5/3/2017	1.36E-01	6.59E-02	1.18E+01	1.16E+00
Darkhorse @ Williston Gate	5/3/2017	2.46E-01	6.16E-02	1.31E+01	1.21E+00
East Talatha	5/3/2017	2.63E-01	6.77E-02	8.24E+00	1.00E+00
Green Pond	5/3/2017	3.84E-01	6.34E-02	1.31E+01	1.22E+00
Highway 21/167	5/3/2017	1.30E-01	6.59E-02	6.54E+00	8.96E-01
Jackson	5/3/2017	2.14E-01	6.10E-02	9.57E+00	1.05E+00
Patterson Mill Road	5/3/2017	2.81E-01	6.20E-02	7.22E+00	9.40E-01
Talatha Gate	5/3/2017	2.18E-01	6.12E-02	1.18E+01	1.15E+00
25-Mile Radius					
Aiken Airport	5/3/2017	3.05E-01	6.24E-02	2.10E+01	1.50E+00
Augusta Lock and Dam 614	5/3/2017	3.27E-01	6.26E-02	1.92E+01	1.45E+00
Highway 301 @ State Line	5/3/2017	2.89E-01	6.22E-02	1.25E+01	1.18E+00

Table 17 Radionuclides in Grassy Vegetation (continued)

Location	Sample Date	Gross Alpha	
		Result (pCi/g)	Standard Dev. (pCi/g)
Onsite			
Burial Ground North	5/3/2017	4.81E-01	4.05E-01
Site Perimeter			
Allendale Gate	5/3/2017	1.31E+00	5.20E-01
Barnwell Gate	5/3/2017	3.46E-02	1.96E-01
D Area	5/3/2017	3.35E-02	2.19E-01
Darkhorse @ Williston Gate	5/3/2017	2.20E-01	2.82E-01
East Talatha	5/3/2017	4.16E-01	3.39E-01
Green Pond	5/3/2017	-1.85E-01	9.71E-02
Highway 21/167	5/3/2017	-1.37E-01	7.63E-02
Jackson	5/3/2017	-1.52E-01	8.21E-02
Patterson Mill Road	5/3/2017	3.89E-02	2.06E-01
Talatha Gate	5/3/2017	-1.65E-01	8.72E-02
25-Mile Radius			
Aiken Airport	5/3/2017	2.05E-02	2.42E-01
Augusta Lock and Dam 614	5/3/2017	2.54E-01	3.39E-01
Highway 301 @ State Line	5/3/2017	4.35E-01	3.61E-01

Table 18 Radionuclides in Terrestrial Food

Terrestrial food samples are provided by members of the public. Samples are provided from locations surrounding SRS within designated quadrants from 0 to 10 miles from the SRS boundary and a control quadrant located from 10 to 25 miles from the SRS boundary to the southeast.

Radionuclide: H-3 (tritium)

Location	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Greens			
NE Quadrant 0-10 Miles	1/19/2017	-1.08E-02	2.06E-02
NW Quadrant 0-10 Miles	1/18/2017	-5.46E-02	1.82E-02
SE Quadrant 0-10 Miles	1/17/2017	-2.09E-02	1.86E-02
SE Quadrant 25 Miles	1/17/2017	-3.03E-02	2.02E-02
SW Quadrant 0-10 Miles	1/17/2017	-3.43E-02	2.07E-02
Fruit			
Plant Perimeter: NE Quadrant	6/29/2017	-1.71E-02	1.46E-02
Plant Perimeter: NW Quadrant	7/13/2017	-1.36E-02	1.82E-02
Plant Perimeter: SE Quadrant	7/6/2017	1.46E-02	1.56E-02
Plant Perimeter: SW Quadrant	7/31/2017	3.57E-03	1.75E-02
SE Quadrant 25 Miles	6/28/2017	1.68E-03	1.37E-02
Beef			
NE Quadrant 0-10 Miles	3/13/2017	6.24E-02	2.11E-02
NW Quadrant 0-10 Miles	2/1/2017	3.57E-02	1.97E-02
SE Quadrant 0-10 Miles	6/7/2017	4.81E-02	1.96E-02
SE Quadrant 25 Miles	12/6/2017	5.14E-03	2.44E-02
SW Quadrant 0-10 Miles	3/9/2017	3.73E-02	1.85E-02
Peanuts			
NE Quadrant 0-10 Miles	10/2/2017	-7.89E-03	1.61E-02
NW Quadrant 0-10 Miles	10/16/2017	4.84E-03	1.17E-02
SE Quadrant 0-10 Miles	10/26/2017	6.27E-03	1.65E-02
SE Quadrant 25 Miles	10/2/2017	-1.03E-03	1.48E-02
SW Quadrant 0-10 Miles	10/26/2017	8.24E-03	1.40E-02
Soybeans			
NE Quadrant 0-10 Miles	11/20/2017	9.78E-04	1.39E-02
NW Quadrant 0-10 Miles	11/20/2017	4.35E-03	1.24E-02
SE Quadrant 0-10 Miles	12/5/2017	1.47E-02	1.41E-02
SE Quadrant 25 Miles	10/31/2017	-9.73E-03	1.45E-02
SW Quadrant 0-10 Miles	12/19/2017	1.19E-02	1.64E-02

Table 18 Radionuclides in Terrestrial Food (continued)

Radionuclide: Co-60

Location	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Greens			
NE Quadrant 0-10 Miles	1/19/2017	2.76E-03	5.19E-03
NW Quadrant 0-10 Miles	1/18/2017	-5.30E-03	5.75E-03
SE Quadrant 0-10 Miles	1/17/2017	-2.53E-04	5.22E-03
SE Quadrant 25 Miles	1/17/2017	4.68E-03	5.59E-03
SW Quadrant 0-10 Miles	1/17/2017	3.08E-03	5.03E-03
Fruit			
Plant Perimeter: NE Quadrant	6/29/2017	5.97E-04	1.15E-03
Plant Perimeter: NW Quadrant	7/13/2017	1.45E-03	1.17E-03
Plant Perimeter: SE Quadrant	7/6/2017	-1.25E-03	1.15E-03
Plant Perimeter: SW Quadrant	7/31/2017	1.04E-03	1.13E-03
SE Quadrant 25 Miles	6/28/2017	5.89E-04	1.31E-03
Beef			
NE Quadrant 0-10 Miles	3/13/2017	4.92E-03	5.11E-03
NW Quadrant 0-10 Miles	2/1/2017	-4.05E-03	5.53E-03
SE Quadrant 0-10 Miles	6/7/2017	3.57E-03	5.37E-03
SE Quadrant 25 Miles	12/6/2017	-4.73E-03	5.00E-03
SW Quadrant 0-10 Miles	3/9/2017	-1.81E-03	5.47E-03
Peanuts			
NE Quadrant 0-10 Miles	3/13/2017	4.92E-03	5.11E-03
NW Quadrant 0-10 Miles	10/16/2017	8.81E-04	2.64E-03
SE Quadrant 0-10 Miles	10/26/2017	-3.38E-03	2.80E-03
SE Quadrant 25 Miles	10/2/2017	-1.21E-03	2.92E-03
SW Quadrant 0-10 Miles	10/26/2017	6.76E-03	2.89E-03
Soybeans			
NE Quadrant 0-10 Miles	11/20/2017	2.39E-03	3.39E-03
NW Quadrant 0-10 Miles	11/20/2017	3.30E-03	3.46E-03
SE Quadrant 0-10 Miles	12/5/2017	-2.38E-04	3.24E-03
SE Quadrant 25 Miles	10/31/2017	-6.14E-03	3.55E-03
SW Quadrant 0-10 Miles	12/19/2017	3.05E-03	3.40E-03

Table 18 Radionuclides in Terrestrial Food (continued)

Radionuclide: Cs-137

Location	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Greens			
NE Quadrant 0-10 Miles	1/19/2017	-7.24E-04	3.55E-03
NW Quadrant 0-10 Miles	1/18/2017	7.05E-02	8.14E-03
SE Quadrant 0-10 Miles	1/17/2017	1.45E-02	4.07E-03
SE Quadrant 25 Miles	1/17/2017	1.03E-02	5.03E-03
SW Quadrant 0-10 Miles	1/17/2017	8.14E-03	3.14E-03
Fruit			
Plant Perimeter: NE Quadrant	6/29/2017	1.18E-03	1.11E-03
Plant Perimeter: NW Quadrant	7/13/2017	2.32E-03	1.18E-03
Plant Perimeter: SE Quadrant	7/6/2017	3.24E-03	1.33E-03
Plant Perimeter: SW Quadrant	7/31/2017	7.76E-04	1.11E-03
SE Quadrant 25 Miles	6/28/2017	8.86E-04	1.13E-03
Beef			
NE Quadrant 0-10 Miles	3/13/2017	9.43E-03	5.30E-03
NW Quadrant 0-10 Miles	2/1/2017	1.13E-02	5.39E-03
SE Quadrant 0-10 Miles	6/7/2017	-3.08E-04	5.64E-03
SE Quadrant 25 Miles	12/6/2017	8.68E-03	5.66E-03
SW Quadrant 0-10 Miles	3/9/2017	-1.44E-03	5.64E-03
Peanuts			
NE Quadrant 0-10 Miles	10/2/2017	4.62E-03	2.09E-03
NW Quadrant 0-10 Miles	10/16/2017	9.89E-03	3.66E-03
SE Quadrant 0-10 Miles	10/26/2017	5.41E-03	2.76E-03
SE Quadrant 25 Miles	10/2/2017	3.08E-04	2.24E-03
SW Quadrant 0-10 Miles	10/26/2017	8.30E-03	3.09E-03
Soybeans			
NE Quadrant 0-10 Miles	11/20/2017	1.17E-03	2.23E-03
NW Quadrant 0-10 Miles	11/20/2017	9.65E-03	2.85E-03
SE Quadrant 0-10 Miles	12/5/2017	7.70E-04	2.12E-03
SE Quadrant 25 Miles	10/31/2017	6.38E-03	3.44E-03
SW Quadrant 0-10 Miles	12/19/2017	6.97E-03	2.81E-03

Table 18 Radionuclides in Terrestrial Food (continued)

Radionuclide: Sr-89/90

Location	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Greens			
NE Quadrant 0-10 Miles	1/19/2017	1.04E-01	1.55E-02
NW Quadrant 0-10 Miles	1/18/2017	3.84E-01	3.08E-02
SE Quadrant 0-10 Miles	1/17/2017	2.35E-02	1.08E-02
SE Quadrant 25 Miles	1/17/2017	7.16E-02	1.39E-02
SW Quadrant 0-10 Miles	1/17/2017	2.31E-01	2.23E-02
Fruit			
Plant Perimeter: NE Quadrant	6/29/2017	-7.43E-04	2.39E-03
Plant Perimeter: NW Quadrant	7/13/2017	2.54E-03	2.72E-03
Plant Perimeter: SE Quadrant	7/6/2017	2.86E-03	2.55E-03
Plant Perimeter: SW Quadrant	7/31/2017	9.73E-04	2.17E-03
SE Quadrant 25 Miles	6/28/2017	-7.57E-04	2.43E-03
Beef			
NE Quadrant 0-10 Miles	3/13/2017	1.02E-03	6.59E-04
NW Quadrant 0-10 Miles	2/1/2017	-1.92E-04	5.48E-04
SE Quadrant 0-10 Miles	6/7/2017	4.11E-04	8.84E-04
SE Quadrant 25 Miles	12/6/2017	-9.43E-05	6.32E-04
SW Quadrant 0-10 Miles	3/9/2017	-3.95E-04	5.53E-04
Peanuts			
NE Quadrant 0-10 Miles	10/2/2017	4.38E-03	2.95E-02
NW Quadrant 0-10 Miles	10/16/2017	2.11E-02	2.03E-02
SE Quadrant 0-10 Miles	10/26/2017	-1.85E-02	2.15E-02
SE Quadrant 25 Miles	10/2/2017	3.32E-02	3.67E-02
SW Quadrant 0-10 Miles	10/26/2017	3.54E-02	3.21E-02
Soybeans			
NE Quadrant 0-10 Miles	11/20/2017	3.51E-02	2.05E-02
NW Quadrant 0-10 Miles	11/20/2017	5.11E-02	2.11E-02
SE Quadrant 0-10 Miles	12/5/2017	4.08E-02	2.11E-02
SE Quadrant 25 Miles	10/31/2017	3.38E-02	2.05E-02
SW Quadrant 0-10 Miles	12/19/2017	1.41E-02	1.82E-02

Table 18 Radionuclides in Terrestrial Food (continued)

Radionuclide: U-234

Location	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Greens			
NE Quadrant 0-10 Miles	1/19/2017	1.02E-02	1.18E-03
NW Quadrant 0-10 Miles	1/18/2017	2.10E-02	2.15E-03
SE Quadrant 0-10 Miles	1/17/2017	5.65E-03	8.63E-04
SE Quadrant 25 Miles	1/17/2017	7.57E-03	1.01E-03
SW Quadrant 0-10 Miles	1/17/2017	2.81E-03	6.23E-04
Fruit			
Plant Perimeter: NE Quadrant	6/29/2017	6.43E-05	5.34E-05
Plant Perimeter: NW Quadrant	7/13/2017	3.95E-05	4.63E-05
Plant Perimeter: SE Quadrant	7/6/2017	1.47E-04	6.42E-05
Plant Perimeter: SW Quadrant	7/31/2017	4.05E-05	2.87E-05
SE Quadrant 25 Miles	6/28/2017	4.97E-05	3.53E-05
Beef			
NE Quadrant 0-10 Miles	3/13/2017	9.03E-06	9.04E-06
NW Quadrant 0-10 Miles	2/1/2017	6.19E-05	2.36E-05
SE Quadrant 0-10 Miles	6/7/2017	3.35E-05	1.68E-05
SE Quadrant 25 Miles	12/6/2017	3.14E-05	1.99E-05
SW Quadrant 0-10 Miles	3/9/2017	3.46E-05	1.73E-05
Peanuts			
NE Quadrant 0-10 Miles	10/2/2017	2.24E-03	7.71E-04
NW Quadrant 0-10 Miles	10/16/2017	2.84E-03	7.56E-04
SE Quadrant 0-10 Miles	10/26/2017	1.31E-03	7.32E-04
SE Quadrant 25 Miles	10/2/2017	1.37E-03	5.99E-04
SW Quadrant 0-10 Miles	10/26/2017	1.55E-03	6.30E-04
Soybeans			
NE Quadrant 0-10 Miles	11/20/2017	1.11E-03	4.71E-04
NW Quadrant 0-10 Miles	11/20/2017	8.24E-03	1.32E-03
SE Quadrant 0-10 Miles	12/5/2017	8.59E-04	5.57E-04
SE Quadrant 25 Miles	10/31/2017	1.89E-03	6.16E-04
SW Quadrant 0-10 Miles	12/19/2017	9.27E-04	5.58E-04

Table 18 Radionuclides in Terrestrial Food (continued)

Radionuclide: U-235

Location	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Greens			
NE Quadrant 0-10 Miles	1/19/2017	5.73E-04	2.82E-04
NW Quadrant 0-10 Miles	1/18/2017	1.33E-03	4.60E-04
SE Quadrant 0-10 Miles	1/17/2017	-1.12E-05	9.52E-06
SE Quadrant 25 Miles	1/17/2017	1.45E-04	1.84E-04
SW Quadrant 0-10 Miles	1/17/2017	-1.12E-05	9.78E-06
Fruit			
Plant Perimeter: NE Quadrant	6/29/2017	0.00E+00	2.87E-05
Plant Perimeter: NW Quadrant	7/13/2017	-2.43E-05	2.44E-05
Plant Perimeter: SE Quadrant	7/6/2017	-3.84E-05	2.72E-05
Plant Perimeter: SW Quadrant	7/31/2017	2.49E-05	2.50E-05
SE Quadrant 25 Miles	6/28/2017	0.00E+00	3.12E-05
Beef			
NE Quadrant 0-10 Miles	3/13/2017	-7.43E-06	7.51E-06
NW Quadrant 0-10 Miles	2/1/2017	-7.27E-06	7.36E-06
SE Quadrant 0-10 Miles	6/7/2017	0.00E+00	9.93E-06
SE Quadrant 25 Miles	12/6/2017	0.00E+00	1.17E-05
SW Quadrant 0-10 Miles	3/9/2017	1.06E-05	1.07E-05
Peanuts			
NE Quadrant 0-10 Miles	10/2/2017	-5.32E-06	4.97E-06
NW Quadrant 0-10 Miles	10/16/2017	2.76E-04	3.32E-04
SE Quadrant 0-10 Miles	10/26/2017	2.81E-04	2.89E-04
SE Quadrant 25 Miles	10/2/2017	-5.32E-06	4.80E-06
SW Quadrant 0-10 Miles	10/26/2017	2.37E-04	2.43E-04
Soybeans			
NE Quadrant 0-10 Miles	11/20/2017	2.09E-04	2.09E-04
NW Quadrant 0-10 Miles	11/20/2017	6.70E-05	2.42E-04
SE Quadrant 0-10 Miles	12/5/2017	2.31E-04	2.32E-04
SE Quadrant 25 Miles	10/31/2017	0.00E+00	1.91E-04
SW Quadrant 0-10 Miles	12/19/2017	0.00E+00	2.73E-04

Table 18 Radionuclides in Terrestrial Food (continued)

Radionuclide: Np-237

Location	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Greens			
NE Quadrant 0-10 Miles	1/19/2017	5.19E-04	4.24E-04
NW Quadrant 0-10 Miles	1/18/2017	-1.41E-04	2.06E-04
SE Quadrant 0-10 Miles	1/17/2017	-8.16E-05	7.49E-05
SE Quadrant 25 Miles	1/17/2017	2.29E-04	1.69E-04
SW Quadrant 0-10 Miles	1/17/2017	-4.43E-05	1.55E-04
Fruit			
Plant Perimeter: NE Quadrant	6/29/2017	3.65E-05	3.82E-05
Plant Perimeter: NW Quadrant	7/13/2017	-1.14E-06	1.53E-06
Plant Perimeter: SE Quadrant	7/6/2017	-1.57E-05	1.46E-05
Plant Perimeter: SW Quadrant	7/31/2017	-1.14E-06	1.37E-06
SE Quadrant 25 Miles	6/28/2017	-1.93E-05	1.81E-05
Beef			
NE Quadrant 0-10 Miles	3/13/2017	-6.08E-06	6.25E-06
NW Quadrant 0-10 Miles	2/1/2017	0.00E+00	8.88E-06
SE Quadrant 0-10 Miles	6/7/2017	0.00E+00	1.19E-05
SE Quadrant 25 Miles	12/6/2017	0.00E+00	1.07E-05
SW Quadrant 0-10 Miles	3/9/2017	0.00E+00	1.05E-05
Peanuts			
NE Quadrant 0-10 Miles	10/2/2017	2.27E-04	1.69E-04
NW Quadrant 0-10 Miles	10/16/2017	-9.30E-05	8.47E-05
SE Quadrant 0-10 Miles	10/26/2017	-2.52E-04	1.41E-04
SE Quadrant 25 Miles	10/2/2017	-8.30E-06	1.00E-05
SW Quadrant 0-10 Miles	10/26/2017	1.41E-04	1.77E-04
Soybeans			
NE Quadrant 0-10 Miles	11/20/2017	-2.12E-04	1.58E-04
NW Quadrant 0-10 Miles	11/20/2017	-1.01E-04	1.07E-04
SE Quadrant 0-10 Miles	12/5/2017	0.00E+00	1.73E-04
SE Quadrant 25 Miles	10/31/2017	1.95E-04	1.96E-04
SW Quadrant 0-10 Miles	12/19/2017	0.00E+00	1.28E-04

Table 18 Radionuclides in Terrestrial Food (continued)

Radionuclide: U-238

Location	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Greens			
NE Quadrant 0-10 Miles	1/19/2017	7.78E-03	9.86E-04
NW Quadrant 0-10 Miles	1/18/2017	2.35E-02	2.28E-03
SE Quadrant 0-10 Miles	1/17/2017	2.73E-03	5.90E-04
SE Quadrant 25 Miles	1/17/2017	8.81E-03	1.10E-03
SW Quadrant 0-10 Miles	1/17/2017	1.85E-03	5.00E-04
Fruit			
Plant Perimeter: NE Quadrant	6/29/2017	5.62E-05	4.47E-05
Plant Perimeter: NW Quadrant	7/13/2017	8.86E-05	5.14E-05
Plant Perimeter: SE Quadrant	7/6/2017	-1.55E-05	1.55E-05
Plant Perimeter: SW Quadrant	7/31/2017	-6.73E-06	2.77E-05
SE Quadrant 25 Miles	6/28/2017	9.95E-05	5.01E-05
Beef			
NE Quadrant 0-10 Miles	3/13/2017	9.00E-06	9.04E-06
NW Quadrant 0-10 Miles	2/1/2017	5.30E-05	2.18E-05
SE Quadrant 0-10 Miles	6/7/2017	2.78E-06	1.00E-05
SE Quadrant 25 Miles	12/6/2017	5.65E-05	2.33E-05
SW Quadrant 0-10 Miles	3/9/2017	4.30E-05	1.95E-05
Peanuts			
NE Quadrant 0-10 Miles	10/2/2017	6.54E-04	5.14E-04
NW Quadrant 0-10 Miles	10/16/2017	3.65E-03	8.72E-04
SE Quadrant 0-10 Miles	10/26/2017	1.51E-03	7.78E-04
SE Quadrant 25 Miles	10/2/2017	8.70E-04	4.73E-04
SW Quadrant 0-10 Miles	10/26/2017	1.06E-03	5.13E-04
Soybeans			
NE Quadrant 0-10 Miles	11/20/2017	1.02E-03	4.74E-04
NW Quadrant 0-10 Miles	11/20/2017	6.30E-03	1.11E-03
SE Quadrant 0-10 Miles	12/5/2017	1.08E-03	5.83E-04
SE Quadrant 25 Miles	10/31/2017	1.54E-03	5.22E-04
SW Quadrant 0-10 Miles	12/19/2017	2.95E-03	8.67E-04

Table 18 Radionuclides in Terrestrial Food (continued)

Radionuclide: Pu-238

Location	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Greens			
NE Quadrant 0-10 Miles	1/19/2017	-3.05E-04	2.13E-04
NW Quadrant 0-10 Miles	1/18/2017	1.73E-04	2.12E-04
SE Quadrant 0-10 Miles	1/17/2017	1.05E-04	1.14E-04
SE Quadrant 25 Miles	1/17/2017	1.11E-04	1.19E-04
SW Quadrant 0-10 Miles	1/17/2017	1.44E-04	1.78E-04
Fruit			
Plant Perimeter: NE Quadrant	6/29/2017	9.11E-06	4.55E-05
Plant Perimeter: NW Quadrant	7/13/2017	2.14E-05	2.57E-05
Plant Perimeter: SE Quadrant	7/6/2017	3.86E-06	2.66E-05
Plant Perimeter: SW Quadrant	7/31/2017	5.65E-05	3.89E-05
SE Quadrant 25 Miles	6/28/2017	2.36E-05	2.80E-05
Beef			
NE Quadrant 0-10 Miles	3/13/2017	9.49E-06	1.49E-05
NW Quadrant 0-10 Miles	2/1/2017	-2.66E-06	3.05E-06
SE Quadrant 0-10 Miles	6/7/2017	7.86E-06	1.14E-05
SE Quadrant 25 Miles	12/6/2017	3.22E-05	1.85E-05
SW Quadrant 0-10 Miles	3/9/2017	-2.66E-06	3.25E-06
Peanuts			
NE Quadrant 0-10 Miles	10/2/2017	3.89E-05	1.40E-04
NW Quadrant 0-10 Miles	10/16/2017	0.00E+00	1.52E-04
SE Quadrant 0-10 Miles	10/26/2017	2.42E-04	1.72E-04
SE Quadrant 25 Miles	10/2/2017	4.81E-04	2.44E-04
SW Quadrant 0-10 Miles	10/26/2017	3.70E-05	1.34E-04
Soybeans			
NE Quadrant 0-10 Miles	11/20/2017	-1.33E-05	1.77E-05
NW Quadrant 0-10 Miles	11/20/2017	1.86E-04	2.36E-04
SE Quadrant 0-10 Miles	12/5/2017	-1.01E-04	8.84E-05
SE Quadrant 25 Miles	10/31/2017	-1.33E-05	1.91E-05
SW Quadrant 0-10 Miles	12/19/2017	-1.33E-05	1.58E-05

Table 18 Radionuclides in Terrestrial Food (continued)

Radionuclide: Pu-239

Location	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Greens			
NE Quadrant 0-10 Miles	1/19/2017	6.54E-05	2.68E-04
NW Quadrant 0-10 Miles	1/18/2017	2.58E-04	1.93E-04
SE Quadrant 0-10 Miles	1/17/2017	2.14E-04	1.61E-04
SE Quadrant 25 Miles	1/17/2017	-4.76E-05	1.60E-04
SW Quadrant 0-10 Miles	1/17/2017	1.03E-04	1.14E-04
Fruit			
Plant Perimeter: NE Quadrant	6/29/2017	3.51E-05	3.81E-05
Plant Perimeter: NW Quadrant	7/13/2017	-2.25E-06	3.02E-06
Plant Perimeter: SE Quadrant	7/6/2017	-2.25E-06	2.89E-06
Plant Perimeter: SW Quadrant	7/31/2017	-1.42E-05	1.20E-05
SE Quadrant 25 Miles	6/28/2017	3.35E-05	4.26E-05
Beef			
NE Quadrant 0-10 Miles	3/13/2017	3.00E-06	1.09E-05
NW Quadrant 0-10 Miles	2/1/2017	1.52E-05	1.08E-05
SE Quadrant 0-10 Miles	6/7/2017	0.00E+00	1.19E-05
SE Quadrant 25 Miles	12/6/2017	1.74E-05	1.24E-05
SW Quadrant 0-10 Miles	3/9/2017	2.21E-05	1.76E-05
Peanuts			
NE Quadrant 0-10 Miles	10/2/2017	3.86E-05	1.40E-04
NW Quadrant 0-10 Miles	10/16/2017	4.19E-05	1.51E-04
SE Quadrant 0-10 Miles	10/26/2017	7.24E-04	3.02E-04
SE Quadrant 25 Miles	10/2/2017	2.81E-04	2.25E-04
SW Quadrant 0-10 Miles	10/26/2017	3.32E-04	1.94E-04
Soybeans			
NE Quadrant 0-10 Miles	11/20/2017	1.54E-04	1.59E-04
NW Quadrant 0-10 Miles	11/20/2017	1.46E-04	1.50E-04
SE Quadrant 0-10 Miles	12/5/2017	4.05E-05	1.59E-04
SE Quadrant 25 Miles	10/31/2017	-1.32E-04	1.29E-04
SW Quadrant 0-10 Miles	12/19/2017	1.45E-04	1.75E-04

Table 18 Radionuclides in Terrestrial Food (continued)

Radionuclide: Am-241

Location	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Greens			
NE Quadrant 0-10 Miles	1/19/2017	-5.81E-05	5.96E-05
NW Quadrant 0-10 Miles	1/18/2017	1.72E-04	1.22E-04
SE Quadrant 0-10 Miles	1/17/2017	4.22E-04	2.02E-04
SE Quadrant 25 Miles	1/17/2017	0.00E+00	1.11E-04
SW Quadrant 0-10 Miles	1/17/2017	2.66E-04	1.54E-04
Fruit			
Plant Perimeter: NE Quadrant	6/29/2017	2.37E-05	2.37E-05
Plant Perimeter: NW Quadrant	7/13/2017	0.00E+00	3.55E-05
Plant Perimeter: SE Quadrant	7/6/2017	-1.50E-05	1.51E-05
Plant Perimeter: SW Quadrant	7/31/2017	0.00E+00	2.32E-05
SE Quadrant 25 Miles	6/28/2017	0.00E+00	3.33E-05
Beef			
NE Quadrant 0-10 Miles	3/13/2017	-7.78E-07	6.47E-07
NW Quadrant 0-10 Miles	2/1/2017	-7.78E-07	6.40E-07
SE Quadrant 0-10 Miles	6/7/2017	-7.78E-07	6.46E-07
SE Quadrant 25 Miles	12/6/2017	7.95E-06	8.80E-06
SW Quadrant 0-10 Miles	3/9/2017	7.97E-06	8.84E-06
Peanuts			
NE Quadrant 0-10 Miles	10/2/2017	-2.73E-06	2.31E-06
NW Quadrant 0-10 Miles	10/16/2017	1.61E-04	1.92E-04
SE Quadrant 0-10 Miles	10/26/2017	-2.73E-06	2.26E-06
SE Quadrant 25 Miles	10/2/2017	-1.83E-04	1.28E-04
SW Quadrant 0-10 Miles	10/26/2017	1.21E-04	1.24E-04
Soybeans			
NE Quadrant 0-10 Miles	11/20/2017	0.00E+00	1.27E-04
NW Quadrant 0-10 Miles	11/20/2017	0.00E+00	1.31E-04
SE Quadrant 0-10 Miles	12/5/2017	0.00E+00	1.38E-04
SE Quadrant 25 Miles	10/31/2017	1.21E-04	1.21E-04
SW Quadrant 0-10 Miles	12/19/2017	1.12E-04	1.12E-04

Table 18 Radionuclides in Terrestrial Food (continued)

Radionuclide: Cm-244

Location	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Greens			
NE Quadrant 0-10 Miles	1/19/2017	0.00E+00	1.08E-04
NW Quadrant 0-10 Miles	1/18/2017	0.00E+00	1.03E-04
SE Quadrant 0-10 Miles	1/17/2017	0.00E+00	9.24E-05
SE Quadrant 25 Miles	1/17/2017	0.00E+00	1.15E-04
SW Quadrant 0-10 Miles	1/17/2017	9.05E-05	9.04E-05
Fruit			
Plant Perimeter: NE Quadrant	6/29/2017	0.00E+00	2.96E-05
Plant Perimeter: NW Quadrant	7/13/2017	9.92E-06	3.58E-05
Plant Perimeter: SE Quadrant	7/6/2017	-1.51E-05	1.51E-05
Plant Perimeter: SW Quadrant	7/31/2017	0.00E+00	2.36E-05
SE Quadrant 25 Miles	6/28/2017	0.00E+00	3.40E-05
Beef			
NE Quadrant 0-10 Miles	3/13/2017	0.00E+00	1.07E-05
NW Quadrant 0-10 Miles	2/1/2017	0.00E+00	1.03E-05
SE Quadrant 0-10 Miles	6/7/2017	-5.86E-06	5.89E-06
SE Quadrant 25 Miles	12/6/2017	0.00E+00	1.01E-05
SW Quadrant 0-10 Miles	3/9/2017	8.89E-06	8.88E-06
Peanuts			
NE Quadrant 0-10 Miles	10/2/2017	-9.05E-05	9.17E-05
NW Quadrant 0-10 Miles	10/16/2017	-1.63E-04	1.17E-04
SE Quadrant 0-10 Miles	10/26/2017	-7.95E-05	8.07E-05
SE Quadrant 25 Miles	10/2/2017	-2.69E-04	1.58E-04
SW Quadrant 0-10 Miles	10/26/2017	1.65E-04	1.93E-04
Soybeans			
NE Quadrant 0-10 Miles	11/20/2017	0.00E+00	1.28E-04
NW Quadrant 0-10 Miles	11/20/2017	0.00E+00	1.32E-04
SE Quadrant 0-10 Miles	12/5/2017	-1.40E-04	9.93E-05
SE Quadrant 25 Miles	10/31/2017	0.00E+00	1.47E-04
SW Quadrant 0-10 Miles	12/19/2017	0.00E+00	1.39E-04

Table 18 Radionuclides in Terrestrial Food (continued)

Radionuclide: Tc-99

Location	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Greens			
NE Quadrant 0-10 Miles	1/19/2017	3.95E-01	5.86E-02
NW Quadrant 0-10 Miles	1/18/2017	3.81E-01	5.84E-02
SE Quadrant 0-10 Miles	1/17/2017	2.47E-01	5.66E-02
SE Quadrant 25 Miles	1/17/2017	5.03E-01	6.00E-02
SW Quadrant 0-10 Miles	1/17/2017	3.16E-01	5.76E-02
Fruit			
Plant Perimeter: NE Quadrant	6/29/2017	2.01E-02	1.24E-02
Plant Perimeter: NW Quadrant	7/13/2017	6.03E-03	1.21E-02
Plant Perimeter: SE Quadrant	7/6/2017	-2.58E-03	1.20E-02
Plant Perimeter: SW Quadrant	7/31/2017	1.22E-02	1.22E-02
SE Quadrant 25 Miles	6/28/2017	1.89E-02	1.23E-02
Beef			
NE Quadrant 0-10 Miles	3/13/2017	2.97E-02	2.26E-02
NW Quadrant 0-10 Miles	2/1/2017	6.76E-02	2.31E-02
SE Quadrant 0-10 Miles	6/7/2017	4.73E-02	2.28E-02
SE Quadrant 25 Miles	12/6/2017	4.54E-02	2.31E-02
SW Quadrant 0-10 Miles	3/9/2017	3.59E-02	2.27E-02
Peanuts			
NE Quadrant 0-10 Miles	10/2/2017	-1.48E-01	5.22E-02
NW Quadrant 0-10 Miles	10/16/2017	-9.43E-03	5.42E-02
SE Quadrant 0-10 Miles	10/26/2017	-8.68E-02	5.30E-02
SE Quadrant 25 Miles	10/2/2017	-2.84E-03	5.43E-02
SW Quadrant 0-10 Miles	10/26/2017	-5.95E-02	5.34E-02
Soybeans			
NE Quadrant 0-10 Miles	11/20/2017	1.33E-01	5.34E-02
NW Quadrant 0-10 Miles	11/20/2017	1.08E-01	5.30E-02
SE Quadrant 0-10 Miles	12/5/2017	1.31E-01	5.35E-02
SE Quadrant 25 Miles	10/31/2017	1.17E-01	5.34E-02
SW Quadrant 0-10 Miles	12/19/2017	1.43E-01	5.37E-02

Table 18 Radionuclides in Terrestrial Food (continued)

Radionuclide: Gross Beta

Location	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Greens			
NE Quadrant 0-10 Miles	1/19/2017	1.88E+01	1.41E+00
NW Quadrant 0-10 Miles	1/18/2017	2.84E+01	1.72E+00
SE Quadrant 0-10 Miles	1/17/2017	1.75E+01	1.36E+00
SE Quadrant 25 Miles	1/17/2017	2.00E+01	1.45E+00
SW Quadrant 0-10 Miles	1/17/2017	1.98E+01	1.46E+00
Fruit			
Plant Perimeter: NE Quadrant	6/29/2017	1.03E+00	5.95E-02
Plant Perimeter: NW Quadrant	7/13/2017	5.51E-01	4.45E-02
Plant Perimeter: SE Quadrant	7/6/2017	5.76E-01	4.55E-02
Plant Perimeter: SW Quadrant	7/31/2017	6.16E-01	4.68E-02
SE Quadrant 25 Miles	6/28/2017	6.00E-01	4.63E-02
Beef			
NE Quadrant 0-10 Miles	3/13/2017	2.51E+00	1.75E-01
NW Quadrant 0-10 Miles	2/1/2017	2.68E+00	1.79E-01
SE Quadrant 0-10 Miles	6/7/2017	1.61E+00	1.43E-01
SE Quadrant 25 Miles	12/6/2017	2.53E+00	1.75E-01
SW Quadrant 0-10 Miles	3/9/2017	1.91E+00	1.55E-01
Peanuts			
NE Quadrant 0-10 Miles	10/2/2017	7.08E+00	4.27E-01
NW Quadrant 0-10 Miles	10/16/2017	5.22E+00	3.71E-01
SE Quadrant 0-10 Miles	10/26/2017	5.24E+00	3.71E-01
SE Quadrant 25 Miles	10/2/2017	5.78E+00	3.88E-01
SW Quadrant 0-10 Miles	10/26/2017	5.57E+00	3.82E-01
Soybeans			
NE Quadrant 0-10 Miles	11/20/2017	2.13E+01	7.42E-01
NW Quadrant 0-10 Miles	11/20/2017	1.56E+01	6.59E-01
SE Quadrant 0-10 Miles	12/5/2017	1.79E+01	9.59E-01
SE Quadrant 25 Miles	10/31/2017	1.49E+01	6.44E-01
SW Quadrant 0-10 Miles	12/19/2017	1.73E+01	6.95E-01

Table 18 Radionuclides in Terrestrial Food (continued)

Radionuclide: Gross Alpha

Location	Sample Date	Result (pCi/g)	Standard Deviation (pCi/g)
Greens			
NE Quadrant 0-10 Miles	1/19/2017	4.76E-01	4.01E-01
NW Quadrant 0-10 Miles	1/18/2017	4.49E-01	3.80E-01
SE Quadrant 0-10 Miles	1/17/2017	-2.08E-01	4.15E-02
SE Quadrant 25 Miles	1/17/2017	1.69E-02	2.55E-01
SW Quadrant 0-10 Miles	1/17/2017	2.53E-01	3.38E-01
Fruit			
Plant Perimeter: NE Quadrant	6/29/2017	-6.14E-03	3.47E-03
Plant Perimeter: NW Quadrant	7/13/2017	1.34E-02	1.12E-02
Plant Perimeter: SE Quadrant	7/6/2017	1.35E-02	1.13E-02
Plant Perimeter: SW Quadrant	7/31/2017	-5.46E-03	3.16E-03
SE Quadrant 25 Miles	6/28/2017	-5.49E-03	3.17E-03
Beef			
NE Quadrant 0-10 Miles	3/13/2017	7.43E-02	5.01E-02
NW Quadrant 0-10 Miles	2/1/2017	3.59E-04	2.59E-02
SE Quadrant 0-10 Miles	6/7/2017	2.51E-02	3.36E-02
SE Quadrant 25 Miles	12/6/2017	6.57E-04	2.60E-02
SW Quadrant 0-10 Miles	3/9/2017	7.16E-02	4.75E-02
Peanuts			
NE Quadrant 0-10 Miles	10/2/2017	1.09E-02	6.03E-02
NW Quadrant 0-10 Miles	10/16/2017	6.16E-02	7.63E-02
SE Quadrant 0-10 Miles	10/26/2017	-4.05E-02	2.70E-02
SE Quadrant 25 Miles	10/2/2017	6.24E-02	7.77E-02
SW Quadrant 0-10 Miles	10/26/2017	1.11E-02	5.85E-02
Soybeans			
NE Quadrant 0-10 Miles	11/20/2017	-2.19E-02	1.05E-01
NW Quadrant 0-10 Miles	11/20/2017	2.24E-01	1.54E-01
SE Quadrant 0-10 Miles	12/5/2017	-1.40E-01	4.63E-02
SE Quadrant 25 Miles	10/31/2017	2.32E-02	9.74E-02
SW Quadrant 0-10 Miles	12/19/2017	2.29E-02	1.05E-01

Table 19 Radionuclides in Cow's Milk

The dairies are located in communities surrounding SRS in both South Carolina and Georgia.

Location	Sample Date	H-3 (tritium)		Co-60	
		Result (pCi/L)	Standard Deviation (pCi/L)	Result (pCi/L)	Standard Deviation (pCi/L)
SC Dairy 1	1/25/2017	-5.32E+00	7.72E+01	5.92E-01	1.04E+00
	4/17/2017	-1.04E+02	7.87E+01	1.08E+00	1.01E+00
	7/10/2017	9.81E+01	7.09E+01	-1.07E+00	9.24E-01
	10/9/2017	2.17E+01	8.09E+01	-1.02E-01	8.92E-01
SC Dairy 2	1/25/2017	5.30E+01	7.74E+01	-1.10E+00	1.07E+00
	4/18/2017	2.40E+01	8.01E+01	-7.73E-01	1.05E+00
	7/18/2017	2.19E+02	7.26E+01	1.49E+00	9.86E-01
	10/9/2017	1.03E+02	8.15E+01	-7.03E-01	9.44E-01
SC Dairy 3	1/25/2017	2.65E+01	7.72E+01	-7.65E-01	9.82E-01
	4/17/2017	-7.73E+01	7.90E+01	-1.52E+00	9.82E-01
	7/10/2017	1.71E+02	7.24E+01	-4.73E-01	9.86E-01
	10/11/2017	-7.59E+01	7.97E+01	-1.45E-01	9.63E-01
SC Dairy 4	1/26/2017	-3.70E+01	7.66E+01	1.58E+00	1.04E+00
	4/17/2017	-1.15E+02	7.87E+01	-2.55E-01	1.04E+00
	7/10/2017	1.89E+02	7.25E+01	-2.28E+00	1.02E+00
	10/9/2017	3.54E+01	8.13E+01	2.22E-01	1.05E+00
GA Dairy 1	1/24/2017	1.44E+02	7.88E+01	-3.70E-01	9.86E-01
	4/17/2017	-1.06E+02	7.85E+01	7.11E-01	1.01E+00
	7/12/2017	1.64E+02	7.26E+01	1.28E+00	9.52E-01
	10/12/2017	-3.24E+01	8.00E+01	2.00E-01	9.13E-01
GA Dairy 2	1/24/2017	1.53E+02	7.85E+01	1.89E-01	1.06E+00
	4/17/2017	-6.14E+01	7.93E+01	3.97E-01	1.05E+00
	7/12/2017	1.43E+02	7.22E+01	2.02E+00	1.16E+00
	10/12/2017	4.86E+01	8.07E+01	-8.62E-02	9.67E-01
GA Dairy 3	1/24/2017	2.40E+01	7.77E+01	1.54E+00	1.04E+00
	4/17/2017	-1.47E+02	7.84E+01	-9.46E-01	9.74E-01
	7/11/2017	1.37E+02	7.21E+01	-3.08E-01	9.44E-01
	10/11/2017	9.24E+01	8.16E+01	1.15E+00	9.86E-01
GA Dairy 4	10/9/2017	3.54E+01	8.13E+01	-1.91E-01	1.05E+00
	1/24/2017	-1.47E+02	7.60E+01	-1.57E+00	1.03E+00
	4/17/2017	-1.22E+02	7.80E+01	1.06E+00	9.86E-01
	7/12/2017	1.71E+02	7.20E+01	6.05E-01	1.00E+00

Table 19 Radionuclides in Cow's Milk (continued)

Location	Sample Date	Cs-137		Sr-90	
		Result (pCi/L)	Standard Deviation (pCi/L)	Result (pCi/L)	Standard Deviation (pCi/L)
SC Dairy 1	1/25/2017	1.74E+00	9.28E-01	1.41E+00	1.19E+00
	4/17/2017	-8.81E-01	9.24E-01	5.08E-01	4.74E-01
	7/10/2017	1.85E+00	8.84E-01	7.51E-01	5.28E+00
	10/9/2017	1.66E+00	9.21E-01	3.03E-01	2.94E-01
SC Dairy 2	1/25/2017	4.95E-01	9.24E-01	-5.05E-01	6.42E-01
	4/18/2017	-1.12E+00	8.96E-01	9.89E-01	1.40E+00
	7/18/2017	1.30E+00	8.88E-01	2.66E-01	2.30E-01
	10/9/2017	2.22E+00	1.37E+00	2.10E-01	1.86E-01
SC Dairy 3	1/25/2017	1.07E+00	9.32E-01	-1.02E-01	1.71E+00
	4/17/2017	8.16E-01	9.28E-01	6.62E-01	4.84E-01
	7/10/2017	8.05E-01	9.17E-01	1.88E-01	7.57E-02
	10/11/2017	9.03E-01	9.09E-01	1.86E-01	4.44E-01
SC Dairy 4	1/26/2017	1.82E+00	9.74E-01	-1.66E-01	4.09E-01
	4/17/2017	1.22E+00	9.48E-01	6.95E-01	3.96E-01
	7/10/2017	4.54E-01	8.96E-01	3.89E-01	1.92E-01
	10/9/2017	7.92E-01	9.21E-01	3.51E-01	1.34E-01
GA Dairy 1	1/24/2017	6.41E-01	8.92E-01	5.68E-01	3.98E-01
	4/17/2017	7.41E-01	9.32E-01	5.35E-01	7.06E-01
	7/12/2017	1.46E+00	9.17E-01	4.46E-01	6.22E-01
	10/12/2017	1.42E+00	9.00E-01	1.71E-01	1.56E-01
GA Dairy 2	1/24/2017	7.81E-01	9.09E-01	9.51E-01	1.03E+00
	4/17/2017	-2.84E-02	8.92E-01	2.54E-01	2.86E-01
	7/12/2017	8.49E-01	9.13E-01	1.42E-01	1.02E-01
	10/12/2017	-5.27E-01	8.72E-01	9.03E-01	7.25E-01
GA Dairy 3	1/24/2017	-1.18E+00	8.92E-01	3.65E-01	3.51E-01
	4/17/2017	1.05E+00	9.32E-01	-3.51E-01	5.56E-01
	7/11/2017	2.52E-01	8.92E-01	-1.62E-01	9.82E-01
	10/11/2017	6.70E-01	8.63E-01	6.43E-01	1.36E+00
GA Dairy 4	1/24/2017	6.57E-01	9.28E-01	-2.81E-01	8.67E-01
	4/17/2017	-1.15E+00	9.13E-01	4.57E-01	3.64E-01
	7/12/2017	-3.95E-01	9.17E-01	1.62E-01	1.80E-01
	10/12/2017	-2.65E-01	1.02E+00	3.84E-01	8.18E-01

Table 20 Radionuclides in Liquid Effluent Samples

Location: F-012 281-8F Retention Basin

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
1/8/2017	1.42E+03	1.76E+02	2.84E+00	2.40E+00	4.16E+00	2.35E+00
1/28/2017	8.59E+02	1.50E+02	1.94E+00	1.76E+00	2.55E+00	2.15E+00
4/10/2017	8.78E+02	1.59E+02	1.40E+00	2.03E+00	4.14E+00	2.30E+00
5/6/2017	4.65E+02	1.44E+02	1.11E+00	2.03E+00	1.23E+01	4.54E+00
7/17/2017	1.18E+02	1.34E+02	-2.76E+00	1.83E+00	6.03E+00	3.31E+00
7/26/2017	3.78E+02	1.44E+02	3.57E+00	2.07E+00	4.00E+00	2.40E+00
8/15/2017	6.30E+02	1.40E+02	-2.26E+00	2.01E+00	3.81E+00	2.08E+00
9/15/2017	9.92E+02	1.81E+02	5.35E-01	1.82E+00	4.92E+00	2.32E+00

Sample Date	Sr-89/90		I-129		U-234	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
1/8/2017	-6.27E-01	8.33E-01	-6.24E-02	2.80E-01	6.81E-02	2.65E-02
1/28/2017	2.20E+00	1.03E+00	4.11E-01	2.54E-01	2.32E-02	1.48E-02
4/10/2017	1.99E+00	7.59E-01	1.90E-01	2.97E-01	1.39E-01	3.75E-02
5/6/2017	2.26E+00	1.26E+00	3.16E-01	2.76E-01	8.81E-02	2.80E-02
7/17/2017	3.05E+00	1.16E+00	8.54E-02	2.52E-01	8.19E-02	2.73E-02
7/26/2017	3.24E-01	8.72E-01	5.89E-01	3.61E-01	7.22E-02	2.73E-02
8/15/2017	1.53E+00	9.44E-01	-3.32E-01	2.97E-01	5.62E-02	2.15E-02
9/15/2017	8.57E-01	1.20E+00	1.87E-01	2.48E-01	3.76E-02	2.27E-02

Sample Date	U-235		Np-237		U-238	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
1/8/2017	0.00E+00	9.59E-03	0.00E+00	9.00E-03	1.15E-01	3.22E-02
1/28/2017	9.70E-03	9.74E-03	8.08E-03	8.09E-03	8.59E-02	2.77E-02
4/10/2017	2.92E-02	1.70E-02	-1.15E-02	8.26E-03	1.49E-01	3.70E-02
5/6/2017	9.81E-03	1.00E-02	8.00E-03	8.03E-03	5.05E-02	2.28E-02
7/17/2017	1.78E-02	1.29E-02	8.24E-03	8.24E-03	8.68E-02	2.61E-02
7/26/2017	-3.22E-03	1.28E-02	0.00E+00	1.01E-02	7.46E-02	2.45E-02
8/15/2017	8.59E-03	9.00E-03	1.68E-02	1.19E-02	9.16E-02	2.66E-02
9/15/2017	9.30E-03	9.44E-03	9.68E-03	9.89E-03	1.31E-01	3.49E-02

Table 20 Radionuclides in Liquid Effluent Samples (continued)

Location: F-012 281-8F Retention Basin (continued)

Sample Date	Pu-238		Pu-239		Am-241	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
1/8/2017	4.54E-02	1.88E-02	1.51E-02	1.08E-02	-4.11E-05	4.81E-04
1/28/2017	1.58E-02	1.21E-02	1.60E-02	1.15E-02	0.00E+00	9.63E-03
4/10/2017	3.35E-02	1.71E-02	5.46E-03	1.44E-02	1.53E-02	1.09E-02
5/6/2017	4.22E-02	2.06E-02	1.58E-02	1.13E-02	0.00E+00	1.27E-02
7/17/2017	-5.43E-03	5.51E-03	0.00E+00	8.72E-03	-5.97E-03	6.04E-03
7/26/2017	4.32E-02	1.96E-02	-5.76E-03	5.77E-03	3.46E-02	1.74E-02
8/15/2017	8.32E-03	8.33E-03	2.49E-02	1.46E-02	0.00E+00	1.04E-02
9/15/2017	6.76E-02	2.63E-02	1.93E-02	1.37E-02	0.00E+00	9.67E-03

Sample Date	Cm-244		Tc-99		Gross Beta	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
1/8/2017	0.00E+00	9.82E-03	-1.01E+00	7.52E-01	3.08E+00	1.21E+00
1/28/2017	-5.27E-03	5.30E-03	1.42E+00	7.97E-01	4.43E+00	1.26E+00
4/10/2017	0.00E+00	8.92E-03	1.45E+00	7.47E-01	8.22E+00	1.56E+00
5/6/2017	-4.27E-05	5.14E-04	-6.78E-01	7.62E-01	9.24E+00	1.58E+00
7/17/2017	2.92E-03	1.07E-02	5.27E-01	7.34E-01	6.76E+00	1.43E+00
7/26/2017	1.71E-02	1.22E-02	5.30E-01	7.51E-01	6.43E+00	1.43E+00
8/15/2017	-4.11E-05	4.78E-04	5.51E+00	8.76E-01	2.84E+00	1.17E+00
9/15/2017	7.84E-03	7.98E-03	3.97E+00	8.04E-01	7.57E+00	1.51E+00

Sample Date	Gross Alpha	
	Results (pCi/L)	Standard Dev. (pCi/L)
1/8/2017	4.97E-02	3.32E-01
1/28/2017	-2.76E-01	5.68E-02
4/10/2017	3.22E-01	4.66E-01
5/6/2017	3.68E-01	4.42E-01
7/17/2017	5.22E-02	3.44E-01
7/26/2017	7.59E-02	3.42E-01
8/15/2017	8.16E-02	3.42E-01
9/15/2017	7.38E-02	3.40E-01

Table 20 Radionuclides in Liquid Effluent Samples (continued)

Location: F-013 200-F Cooling Basin

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/14/2017	7.32E+02	1.44E+02	2.28E+00	2.09E+00	9.35E-02	2.29E+00
5/2/2017	7.38E+02	1.51E+02	-1.24E+00	2.07E+00	-8.24E-02	2.08E+00
6/23/2017	7.86E+02	1.60E+02	-1.90E+00	1.82E+00	4.92E+00	2.19E+00
8/16/2017	6.46E+02	1.35E+02	4.49E+00	2.00E+00	4.03E+00	2.13E+00
10/19/2017	9.92E+02	1.46E+02	1.43E+00	1.68E+00	-8.05E-01	2.07E+00

Sample Date	Sr-89/90		I-129		U-234	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/14/2017	-9.16E-01	7.66E-01	-9.97E-02	2.70E-01	1.38E-01	3.44E-02
5/2/2017	-5.08E-01	9.71E-01	4.65E-01	2.62E-01	9.57E-02	2.91E-02
6/23/2017	1.50E+00	1.12E+00	2.73E-01	3.03E-01	1.68E-01	3.85E-02
8/16/2017	4.49E-01	9.04E-01	2.76E-01	6.09E-01	7.97E-02	2.70E-02
10/19/2017	1.27E+00	7.38E-01	5.51E-01	5.98E-01	1.67E-01	4.43E-02

Sample Date	U-235		Np-237		U-238	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/14/2017	3.00E-03	1.08E-02	0.00E+00	9.89E-03	1.02E-01	2.92E-02
5/2/2017	-6.68E-03	6.61E-03	8.62E-03	8.67E-03	1.06E-01	3.19E-02
6/23/2017	2.95E-03	1.13E-02	8.43E-03	8.72E-03	8.24E-02	2.66E-02
8/16/2017	-1.35E-04	1.58E-03	0.00E+00	1.06E-02	4.24E-02	2.08E-02
10/19/2017	4.30E-03	1.55E-02	2.47E-02	1.57E-02	9.35E-02	3.32E-02

Table 20 Radionuclides in Liquid Effluent Samples (continued)

Location: F-013 200-F Cooling Basin (continued)

Sample Date	Pu-238		Pu-239		Am-241	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/14/2017	2.63E-02	1.61E-02	-3.14E-05	5.04E-04	2.43E-02	1.41E-02
5/2/2017	8.51E-03	8.67E-03	2.56E-02	1.50E-02	1.22E-02	1.44E-02
6/23/2017	2.81E-02	1.80E-02	7.59E-02	3.03E-02	3.19E-02	1.61E-02
8/16/2017	3.05E-02	1.94E-02	1.22E-02	1.43E-02	1.74E-02	1.23E-02
10/19/2017	2.20E-02	1.28E-02	6.35E-02	2.47E-02	2.68E-03	1.00E-02

Sample Date	Cm-244		Tc-99		Gross Beta	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/14/2017	2.40E-02	1.39E-02	5.65E-01	7.72E-01	2.00E+00	8.45E-01
5/2/2017	-6.08E-03	6.05E-03	-6.95E-02	7.58E-01	1.41E+00	1.01E+00
6/23/2017	2.36E-02	1.37E-02	1.10E+01	8.92E-01	3.57E+00	1.13E+00
8/16/2017	6.00E-02	2.30E-02	8.03E-01	7.45E-01	4.00E+00	1.28E+00
10/19/2017	2.46E-02	1.43E-02	-2.92E-01	7.09E-01	4.78E+00	1.25E+00

Sample Date	Gross Alpha	
	Results (pCi/L)	Standard Dev. (pCi/L)
2/14/2017	5.43E-01	3.84E-01
5/2/2017	6.30E-02	3.28E-01
6/23/2017	1.66E-01	3.61E-01
8/16/2017	7.38E-01	5.85E-01
10/19/2017	7.78E-01	6.02E-01

Table 20 Radionuclides in Liquid Effluent Samples (continued)

Location: F-05

Sample Date	H-3 (tritium)		C-14		Co-60	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	2.64E+02	1.35E+02	-2.76E+00	4.03E+00	4.30E+00	2.19E+00
3/6/2017	3.92E+02	1.26E+02	8.73E+00	4.05E+00	9.00E-01	1.83E+00
5/1/2017	-1.08E+01	1.34E+02	6.22E+01	4.86E+00	-8.16E-01	2.02E+00
7/3/2017	-9.16E+01	1.41E+02	-9.73E-01	4.05E+00	-8.41E-01	1.65E+00
8/7/2017	1.01E+02	1.39E+02	3.27E+00	4.20E+00	3.14E+00	1.99E+00
9/5/2017	4.22E+02	1.48E+02	3.24E+01	5.68E+00	3.24E+00	1.71E+00
10/2/2017	6.86E+02	1.67E+02	-6.27E+00	4.33E+00	-2.92E-01	1.90E+00
1/2/2018	4.32E+02	1.52E+02	-6.89E+00	8.72E+00	8.49E-01	1.72E+00

Sample Date	Cs-137		Sr-89/90		I-129	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	8.19E-01	2.14E+00	2.47E-01	2.01E-01	1.57E-01	2.68E-01
3/6/2017	-2.78E-01	2.11E+00	1.91E+00	3.28E-01	-1.07E+00	7.07E-01
5/1/2017	3.41E+00	2.19E+00	4.27E-01	1.56E-01	-3.43E-01	3.29E-01
7/3/2017	2.70E+00	2.15E+00	9.11E+00	7.24E-01	7.16E-02	2.49E-01
8/7/2017	-1.51E+00	2.08E+00	-1.90E-02	1.63E-01	-6.19E-01	6.96E-01
9/5/2017	3.70E+00	2.08E+00	9.95E-01	3.05E-01	6.65E-01	5.99E-01
10/2/2017	3.08E+00	2.20E+00	2.13E-01	1.81E-01	3.73E-01	2.99E-01
1/2/2018	2.28E+00	1.97E+00	9.73E+00	7.16E-01	1.44E-01	2.70E-01

Sample Date	U-234		U-235		Np-237	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	1.41E-01	2.08E-02	9.68E-03	5.28E-03	1.35E-03	3.46E-03
3/6/2017	7.97E-02	1.25E-02	5.57E-03	3.23E-03	6.00E-03	1.93E-03
5/1/2017	1.12E-01	1.76E-02	6.68E-03	4.33E-03	-3.59E-03	3.49E-03
7/3/2017	7.65E-02	1.31E-02	8.05E-03	4.60E-03	1.62E-03	2.11E-03
8/7/2017	7.03E-02	1.41E-02	6.97E-03	4.86E-03	3.24E-03	2.30E-03
9/5/2017	5.70E-02	1.17E-02	7.59E-03	3.94E-03	6.97E-04	2.77E-03
10/2/2017	6.54E-02	1.28E-02	6.22E-03	3.82E-03	1.98E-03	3.06E-03
1/2/2018	6.19E-02	1.23E-02	1.82E-03	2.15E-03	-2.58E-06	2.26E-04

Table 20 Radionuclides in Liquid Effluent Samples (continued)

Location: F-05 (continued)

Sample Date	U-238		Pu-238		Pu-239	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	1.75E-01	2.34E-02	8.65E-03	6.08E-03	2.60E-02	7.72E-03
3/6/2017	8.70E-02	1.40E-02	8.92E-03	4.16E-03	1.04E-02	4.82E-03
5/1/2017	9.84E-02	1.67E-02	2.33E-03	2.92E-03	2.89E-03	4.05E-03
7/3/2017	8.65E-02	1.52E-02	3.76E-03	4.31E-03	5.38E-03	3.47E-03
8/7/2017	9.32E-02	1.51E-02	1.61E-03	1.63E-03	3.22E-03	2.29E-03
9/5/2017	6.46E-02	1.33E-02	1.26E-02	5.34E-03	1.05E-02	4.73E-03
10/2/2017	6.76E-02	1.31E-02	2.65E-03	2.26E-03	1.19E-02	5.48E-03
1/2/2018	8.92E-02	1.37E-02	8.00E-03	4.32E-03	1.11E-02	4.62E-03

Sample Date	Am-241		Cm-244		Tc-99	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	1.09E-01	1.54E-02	2.12E-02	6.19E-03	3.38E+00	8.63E-01
3/6/2017	3.00E-02	7.42E-03	0.00E+00	2.03E-03	1.76E+00	7.23E-01
5/1/2017	1.25E-02	5.01E-03	3.92E-03	3.13E-03	3.30E+00	8.18E-01
7/3/2017	2.34E-02	6.84E-03	3.46E-03	2.45E-03	7.16E-01	7.65E-01
8/7/2017	4.27E-02	8.76E-03	-8.22E-06	4.82E-04	7.62E-01	7.45E-01
9/5/2017	2.01E-02	6.16E-03	7.24E-03	3.78E-03	2.44E+00	8.53E-01
10/2/2017	1.02E-02	4.24E-03	5.05E-03	2.94E-03	-9.62E-01	7.31E-01
1/2/2018	2.11E-02	6.66E-03	1.64E-03	1.74E-03	9.89E-01	8.27E-01

Sample Date	Gross Beta		Gross Alpha	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	3.11E+00	6.96E-01	6.22E-01	3.41E-01
3/6/2017	3.22E+00	6.83E-01	1.18E-01	2.00E-01
5/1/2017	4.24E+00	7.66E-01	3.38E-01	2.70E-01
7/3/2017	1.57E+01	1.28E+00	7.54E-01	3.84E-01
8/7/2017	4.19E+00	7.69E-01	6.41E-01	3.51E-01
9/5/2017	2.73E+00	6.71E-01	2.61E-02	1.71E-01
10/2/2017	3.11E+00	6.79E-01	5.00E-01	3.19E-01
1/2/2018	1.45E+01	1.24E+00	-1.25E-02	1.77E-01

Table 20 Radionuclides in Liquid Effluent Samples (continued)

Location: FM-1C H-Area Effluent

Sample Date	H-3 (tritium)		C-14		Co-60	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	2.62E+03	1.93E+02	-1.45E+00	4.07E+00	9.05E-01	2.13E+00
3/6/2017	1.74E+03	1.68E+02	2.78E+00	4.04E+00	3.76E+00	1.95E+00
4/3/2017	1.69E+03	1.75E+02	2.03E+00	3.95E+00	-1.12E+00	2.33E+00
5/1/2017	1.83E+03	1.80E+02	-7.30E-01	4.35E+00	1.77E-01	2.21E+00
6/5/2017	3.11E+03	2.21E+02	6.51E+00	4.27E+00	-2.69E+00	2.00E+00
7/3/2017	2.04E+03	1.99E+02	-3.14E+00	3.90E+00	-4.65E+00	2.35E+00
8/7/2017	4.16E+03	2.25E+02	1.09E+01	4.37E+00	3.27E+00	1.95E+00
9/5/2017	6.78E+03	2.80E+02	-2.65E+00	4.20E+00	-1.89E+00	1.91E+00
10/2/2017	6.11E+03	2.55E+02	1.57E+00	4.42E+00	-4.19E+00	2.00E+00
11/6/2017	1.60E+03	1.70E+02	-6.84E+00	4.19E+00	-2.11E+00	1.91E+00
12/4/2017	1.30E+03	1.71E+02	-5.16E+00	4.30E+00	2.11E+00	1.98E+00
1/2/2018	1.58E+03	1.79E+02	-7.05E+00	4.82E+00	3.03E+00	2.08E+00

Sample Date	Cs-137		Sr-89/90		U-234	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	3.54E+00	2.36E+00	1.12E+00	2.48E-01	2.56E-02	8.88E-03
3/6/2017	5.59E+00	3.47E+00	1.87E+00	3.63E-01	2.17E-02	6.67E-03
4/3/2017	-2.39E+00	2.13E+00	7.32E-01	2.46E-01	1.92E-02	6.04E-03
5/1/2017	1.71E+00	2.22E+00	5.70E-01	1.61E-01	1.94E-02	8.07E-03
6/5/2017	-1.79E+00	2.09E+00	9.30E-01	2.34E-01	1.52E-02	6.70E-03
7/3/2017	3.27E+00	2.09E+00	6.92E-01	2.42E-01	1.31E-02	5.18E-03
8/7/2017	-7.62E-01	2.13E+00	8.35E-01	2.35E-01	2.26E-02	8.40E-03
9/5/2017	2.36E+00	2.28E+00	1.70E+00	3.33E-01	2.09E-02	7.86E-03
10/2/2017	6.14E+00	3.39E+00	2.92E+00	3.58E-01	2.11E-02	7.57E-03
11/6/2017	-9.57E-01	2.25E+00	9.43E-01	1.87E-01	1.49E-02	7.04E-03
12/4/2017	7.97E+00	2.30E+00	7.70E-01	2.14E-01	1.02E-02	4.51E-03
1/2/2018	1.96E-01	2.08E+00	1.25E+00	2.55E-01	1.06E-02	5.87E-03

Table 20 Radionuclides in Liquid Effluent Samples (continued)

Location: FM-1C H-Area Effluent (continued)

Sample Date	U-235		Np-237		U-238	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	1.94E-03	1.97E-03	1.48E-02	5.51E-03	3.76E-02	1.02E-02
3/6/2017	4.03E-03	2.85E-03	3.41E-03	2.41E-03	3.19E-03	3.97E-03
4/3/2017	1.98E-03	1.99E-03	2.78E-03	3.29E-03	1.44E-02	6.19E-03
5/1/2017	3.89E-03	2.87E-03	6.59E-04	4.20E-03	1.31E-02	7.46E-03
6/5/2017	6.24E-04	2.28E-03	4.00E-03	4.20E-03	2.89E-02	8.02E-03
7/3/2017	6.43E-04	3.00E-03	1.08E-02	4.92E-03	1.68E-02	7.66E-03
8/7/2017	5.97E-03	3.98E-03	5.89E-03	2.11E-03	1.18E-02	5.50E-03
9/5/2017	2.15E-03	2.27E-03	8.68E-03	5.17E-03	2.09E-02	8.80E-03
10/2/2017	6.51E-03	4.34E-03	2.76E-03	5.00E-03	3.59E-02	9.59E-03
11/6/2017	6.62E-04	1.93E-03	7.65E-03	3.82E-03	1.60E-02	7.91E-03
12/4/2017	6.65E-04	2.40E-03	7.46E-03	3.83E-03	8.59E-03	4.24E-03
1/2/2018	6.05E-04	2.48E-03	3.49E-03	2.52E-03	1.96E-02	6.39E-03

Sample Date	Pu-238		Pu-239		Am-241	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	3.00E-01	3.57E-02	2.70E-02	7.63E-03	2.68E-02	7.42E-03
3/6/2017	8.92E-02	1.49E-02	5.03E-03	3.81E-03	2.45E-02	7.06E-03
4/3/2017	1.25E-01	1.83E-02	2.46E-02	7.53E-03	3.49E-02	8.20E-03
5/1/2017	9.76E-02	1.70E-02	3.43E-03	4.67E-03	2.51E-02	6.89E-03
6/5/2017	1.20E-01	1.82E-02	8.54E-03	3.97E-03	2.03E-02	6.37E-03
7/3/2017	5.78E-02	1.17E-02	5.35E-03	3.16E-03	2.49E-03	2.51E-03
8/7/2017	3.86E-02	8.67E-03	5.24E-03	3.07E-03	1.86E-02	5.62E-03
9/5/2017	1.09E-01	1.71E-02	1.29E-02	4.92E-03	3.84E-02	8.88E-03
10/2/2017	3.81E+00	3.29E-01	3.73E-01	4.08E-02	3.35E-01	3.17E-02
11/6/2017	1.56E-01	2.19E-02	7.57E-03	3.78E-03	5.16E-02	1.09E-02
12/4/2017	1.63E-01	2.25E-02	2.09E-02	6.81E-03	3.57E-02	8.49E-03
1/2/2018	1.37E-01	1.92E-02	9.19E-03	4.45E-03	3.43E-02	8.08E-03

Table 20 Radionuclides in Liquid Effluent Samples (continued)

Location: FM-1C H-Area Effluent (continued)

Sample Date	Cm-244		Gross Beta		Gross Alpha	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	1.69E-02	5.40E-03	3.38E+00	5.62E-01	1.56E+00	4.00E-01
3/6/2017	9.08E-03	4.10E-03	3.59E+00	7.36E-01	8.86E-01	4.27E-01
4/3/2017	7.27E-03	3.66E-03	2.57E+00	7.19E-01	1.59E+00	5.62E-01
5/1/2017	7.68E-03	4.17E-03	4.49E+00	8.63E-01	2.84E+00	7.34E-01
6/5/2017	9.14E-03	4.10E-03	3.49E+00	7.74E-01	1.44E+00	5.41E-01
7/3/2017	8.19E-04	2.97E-03	3.84E+00	7.52E-01	8.76E-01	4.23E-01
8/7/2017	3.32E-03	2.46E-03	5.46E+00	8.54E-01	2.25E+00	6.44E-01
9/5/2017	5.70E-03	3.45E-03	3.30E+00	7.52E-01	1.14E+00	4.91E-01
10/2/2017	7.97E-02	1.27E-02	1.04E+01	1.09E+00	3.73E+00	8.47E-01
11/6/2017	0.00E+00	2.18E-03	3.95E+00	7.38E-01	4.22E-01	3.27E-01
12/4/2017	6.22E-04	2.01E-03	5.00E+00	8.07E-01	9.11E-01	4.36E-01
1/2/2018	5.65E-03	3.67E-03	4.11E+00	8.34E-01	1.74E+00	5.98E-01

Table 20 Radionuclides in Liquid Effluent Samples (continued)

Location: FM-3 F-Area Effluent

Sample Date	H-3 (tritium)		C-14		Co-60	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	6.08E+02	1.46E+02	2.00E+00	4.13E+00	-2.14E-01	1.91E+00
3/6/2017	4.84E+02	1.36E+02	-1.06E-01	3.95E+00	1.54E+00	2.08E+00
4/3/2017	1.81E+02	1.35E+02	-1.20E+00	4.32E+00	-2.38E-01	1.82E+00
5/1/2017	1.14E+02	1.40E+02	1.66E+00	4.32E+00	1.47E+00	2.02E+00
6/5/2017	8.51E+01	1.48E+02	-8.38E+00	4.11E+00	-2.65E+00	2.15E+00
7/3/2017	1.34E+02	1.49E+02	-1.92E+00	3.99E+00	-1.25E+00	1.89E+00
8/7/2017	-2.49E+01	1.38E+02	6.59E+00	4.33E+00	1.78E+00	2.01E+00
9/5/2017	5.78E+02	1.56E+02	1.36E+00	4.13E+00	6.30E-01	2.18E+00
10/2/2017	7.57E+02	1.72E+02	-3.97E+00	4.28E+00	9.78E-02	1.92E+00
11/6/2017	4.97E+01	1.30E+02	-6.08E+00	4.21E+00	1.20E-01	2.02E+00
12/4/2017	3.05E+02	1.47E+02	4.24E+00	4.43E+00	-1.12E+00	2.08E+00
1/2/2018	4.38E+02	1.53E+02	-1.12E+01	5.29E+00	6.54E-01	1.96E+00

Sample Date	Cs-137		Sr-89/90		I-129	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	-1.63E+00	2.16E+00	2.42E-01	1.87E-01	-3.70E-01	2.78E-01
3/6/2017	1.22E+00	2.13E+00	2.12E-01	2.13E-01	1.45E+00	5.32E-01
4/3/2017	5.41E+00	2.16E+00	3.46E-01	2.18E-01	-2.10E-01	2.78E-01
5/1/2017	-1.72E+00	1.95E+00	1.35E-01	1.35E-01	1.64E-01	2.94E-01
6/5/2017	8.70E-01	2.22E+00	2.53E-01	1.78E-01	9.11E-02	2.62E-01
7/3/2017	2.65E+00	2.07E+00	6.57E-01	2.46E-01	9.70E-01	3.53E-01
8/7/2017	-3.27E+00	2.16E+00	3.49E-01	2.01E-01	4.73E-01	6.10E-01
9/5/2017	-1.91E+00	2.09E+00	4.24E-01	2.43E-01	9.03E-01	6.03E-01
10/2/2017	6.32E-01	1.94E+00	5.00E-01	1.94E-01	5.89E-02	2.55E-01
11/6/2017	1.08E-02	2.14E+00	8.73E-02	1.35E-01	-5.84E-01	3.09E-01
12/4/2017	-6.68E-01	2.04E+00	-1.18E-01	1.56E-01	-7.00E-02	2.85E-01
1/2/2018	2.97E+00	2.05E+00	6.19E-01	2.15E-01	1.92E-01	2.69E-01

Table 20 Radionuclides in Liquid Effluent Samples (continued)

Location: FM-3 F-Area Effluent (continued)

Sample Date	U-234		U-235		Np-237	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	7.11E-02	1.41E-02	1.25E-02	5.23E-03	1.92E-03	1.96E-03
3/6/2017	2.11E-01	2.30E-02	1.30E-02	5.00E-03	-1.17E-03	1.30E-03
4/3/2017	4.46E-02	9.44E-03	6.11E-03	3.55E-03	4.14E-03	2.92E-03
5/1/2017	2.00E-01	2.47E-02	1.38E-02	5.41E-03	4.46E-03	5.06E-03
6/5/2017	9.38E-02	1.52E-02	1.35E-03	3.46E-03	5.51E-03	4.32E-03
7/3/2017	6.24E-02	1.12E-02	4.95E-03	4.58E-03	-2.35E-03	1.95E-03
8/7/2017	1.38E-01	1.98E-02	7.24E-03	5.22E-03	1.71E-03	1.73E-03
9/5/2017	1.90E-01	2.37E-02	1.03E-02	4.77E-03	1.68E-03	2.00E-03
10/2/2017	7.76E-02	1.38E-02	-1.55E-05	9.09E-04	5.24E-04	2.86E-03
11/6/2017	6.65E-02	1.38E-02	2.26E-03	2.26E-03	2.86E-03	3.36E-03
12/4/2017	4.54E-02	8.96E-03	8.35E-03	4.55E-03	2.21E-03	2.62E-03
1/2/2018	4.32E-02	9.93E-03	5.14E-03	3.25E-03	5.22E-03	4.38E-03

Sample Date	U-238		Pu-238		Pu-239	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	5.08E-02	1.19E-02	1.01E-02	6.24E-03	3.81E-03	2.82E-03
3/6/2017	1.92E-01	2.23E-02	-1.72E-05	1.39E-03	8.70E-03	4.79E-03
4/3/2017	3.62E-02	9.32E-03	2.39E-02	8.39E-03	6.11E-03	4.46E-03
5/1/2017	2.04E-01	2.49E-02	9.51E-03	4.57E-03	3.78E-03	3.49E-03
6/5/2017	9.35E-02	1.50E-02	7.32E-03	4.19E-03	7.92E-03	4.41E-03
7/3/2017	5.03E-02	1.14E-02	4.62E-03	3.97E-03	5.78E-03	3.73E-03
8/7/2017	1.35E-01	1.79E-02	8.46E-03	3.80E-03	6.78E-03	3.43E-03
9/5/2017	2.24E-01	2.68E-02	6.70E-03	3.44E-03	1.17E-02	4.46E-03
10/2/2017	7.00E-02	1.31E-02	1.09E-03	2.78E-03	1.62E-03	2.24E-03
11/6/2017	6.22E-02	1.39E-02	4.24E-03	3.01E-03	1.06E-02	4.77E-03
12/4/2017	2.03E-02	5.89E-03	-5.46E-04	2.26E-03	8.19E-03	3.76E-03
1/2/2018	8.19E-02	1.27E-02	1.36E-02	5.18E-03	3.81E-03	2.82E-03

Table 20 Radionuclides in Liquid Effluent Samples (continued)

Location: FM-3 F-Area Effluent (continued)

Sample Date	Am-241		Cm-244		Tc-99	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	3.51E-03	2.50E-03	0.00E+00	2.10E-03	-1.24E-01	7.74E-01
3/6/2017	1.02E-02	4.19E-03	1.69E-03	1.69E-03	3.11E+00	4.00E-01
4/3/2017	5.41E-03	2.07E-03	0.00E+00	2.08E-03	9.24E-01	7.39E-01
5/1/2017	1.28E-02	4.89E-03	5.41E-03	3.14E-03	3.46E-01	7.75E-01
6/5/2017	-2.34E-03	1.69E-03	0.00E+00	2.02E-03	1.32E+00	7.81E-01
7/3/2017	1.76E-03	1.79E-03	0.00E+00	1.96E-03	2.18E+00	8.31E-01
8/7/2017	6.78E-03	3.41E-03	1.67E-03	1.78E-03	2.12E+00	7.99E-01
9/5/2017	8.49E-03	3.81E-03	5.03E-03	3.06E-03	1.33E+00	7.66E-01
10/2/2017	6.05E-04	2.20E-03	5.43E-03	3.15E-03	4.68E-01	8.09E-01
11/6/2017	9.22E-03	4.38E-03	0.00E+00	2.28E-03	2.63E+00	8.12E-01
12/4/2017	2.19E-03	2.58E-03	4.89E-03	2.83E-03	4.49E+00	7.81E-01
1/2/2018	5.68E-03	3.38E-03	1.87E-03	1.96E-03	1.35E-01	2.50E-01

Sample Date	Gross Beta		Gross Alpha	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	3.30E+00	7.11E-01	6.46E-01	3.53E-01
3/6/2017	3.59E+00	7.09E-01	1.12E+00	4.51E-01
4/3/2017	3.89E+00	7.52E-01	1.96E+00	5.81E-01
5/1/2017	2.45E+00	6.50E-01	6.70E-01	3.61E-01
6/5/2017	2.73E+00	7.22E-01	1.21E+00	4.91E-01
7/3/2017	2.29E+00	6.12E-01	1.08E+00	4.47E-01
8/7/2017	1.95E+00	6.17E-01	4.89E-01	3.17E-01
9/5/2017	2.51E+00	6.58E-01	4.86E-01	3.16E-01
10/2/2017	2.36E+00	6.26E-01	5.14E-01	3.27E-01
11/6/2017	3.86E+00	7.88E-01	7.03E-01	3.81E-01
12/4/2017	6.08E+00	8.76E-01	4.68E+00	8.80E-01
1/2/2018	2.12E+00	6.73E-01	2.92E-01	2.96E-01

Table 20 Radionuclides in Liquid Effluent Samples (continued)

Location: H-004

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	2.34E+04	4.65E+02	-1.08E+00	1.93E+00	1.47E+00	2.11E+00
3/6/2017	8.46E+03	3.01E+02	-1.74E-01	2.03E+00	-1.84E+00	2.15E+00
4/3/2017	6.32E+03	2.74E+02	2.31E+00	2.04E+00	-1.57E+00	2.31E+00
5/1/2017	3.22E+03	2.16E+02	-1.96E-01	1.86E+00	-3.00E+00	2.03E+00
6/5/2017	1.22E+04	3.76E+02	1.62E+00	1.96E+00	-4.95E-01	2.08E+00
7/3/2017	9.68E+03	3.43E+02	5.73E-01	1.89E+00	2.64E+00	2.00E+00
8/7/2017	2.86E+04	5.06E+02	1.33E+00	1.89E+00	2.59E+00	2.13E+00
9/5/2017	1.20E+04	3.65E+02	-4.78E-01	2.06E+00	3.49E+00	2.04E+00
10/2/2017	8.05E+03	2.91E+02	1.26E+00	1.88E+00	-7.03E-01	2.00E+00
11/6/2017	3.08E+03	2.11E+02	-1.06E+00	1.87E+00	3.00E+00	2.09E+00
12/4/2017	2.78E+03	2.09E+02	-2.23E+00	1.80E+00	-2.09E+00	1.90E+00
1/2/2018	1.65E+04	4.00E+02	3.41E+00	1.96E+00	9.11E-01	2.11E+00

Sample Date	Sr-89/90		U-234		U-235	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	4.22E-02	9.56E-01	4.05E-01	6.56E-02	9.86E-03	1.02E-02
3/6/2017	7.11E-01	1.00E+00	3.89E-01	6.21E-02	1.95E-02	1.38E-02
4/3/2017	1.84E+00	7.43E-01	3.73E-01	6.16E-02	7.22E-02	2.91E-02
5/1/2017	8.27E-01	1.04E+00	7.78E+00	5.62E-01	2.49E-01	5.43E-02
6/5/2017	7.32E-01	7.43E-01	1.47E+00	1.47E-01	8.30E-02	3.01E-02
7/3/2017	7.27E-01	5.59E-01	8.62E-01	1.01E-01	4.05E-02	2.08E-02
8/7/2017	9.97E-01	9.09E-01	6.73E-01	8.67E-02	3.00E-02	1.75E-02
9/5/2017	1.57E+00	1.14E+00	5.24E-01	7.48E-02	2.40E-02	1.91E-02
10/2/2017	-6.19E-01	8.88E-01	1.42E+00	1.40E-01	6.11E-02	2.68E-02
11/6/2017	8.11E-01	1.04E+00	1.12E+00	1.22E-01	4.19E-02	2.13E-02
12/4/2017	5.38E-01	9.71E-01	1.16E+00	1.25E-01	1.79E-02	2.12E-02
1/2/2018	-1.05E-01	9.44E-01	5.76E-01	7.99E-02	2.43E-02	1.95E-02

Table 20 Radionuclides in Liquid Effluent Samples (continued)

Location: H-004 (continued)

Sample Date	U-238		Pu-238		Pu-239	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	1.53E-01	3.87E-02	3.22E-02	1.63E-02	-2.15E-02	1.09E-02
3/6/2017	8.62E-02	2.72E-02	0.00E+00	1.00E-02	8.27E-03	8.29E-03
4/3/2017	8.22E-02	2.80E-02	5.03E-02	2.52E-02	2.97E-03	1.07E-02
5/1/2017	1.60E-01	3.83E-02	7.27E-02	2.56E-02	7.73E-03	7.95E-03
6/5/2017	7.54E-02	2.64E-02	4.54E-02	2.05E-02	3.03E-03	1.09E-02
7/3/2017	4.92E-02	2.14E-02	3.11E-03	1.12E-02	3.08E-03	1.12E-02
8/7/2017	7.24E-02	2.50E-02	-1.28E-05	1.68E-04	5.57E-03	1.43E-02
9/5/2017	6.62E-02	2.49E-02	1.89E-02	1.50E-02	-1.25E-04	1.64E-03
10/2/2017	1.40E-01	3.49E-02	2.56E-03	9.21E-03	7.68E-03	7.66E-03
11/6/2017	6.46E-02	2.91E-02	5.22E-02	2.35E-02	-6.95E-03	6.94E-03
12/4/2017	8.11E-02	2.85E-02	5.30E-02	2.54E-02	3.30E-03	1.19E-02
1/2/2018	7.59E-02	2.58E-02	5.30E-02	2.19E-02	4.41E-02	2.00E-02

Sample Date	Gross Beta		Gross Alpha	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	1.38E+00	1.02E+00	6.86E-01	5.69E-01
3/6/2017	1.61E+00	9.63E-01	5.65E-01	5.03E-01
4/3/2017	3.03E+00	1.16E+00	1.35E+00	7.22E-01
5/1/2017	2.32E+00	1.14E+00	1.03E+01	1.84E+00
6/5/2017	3.35E+00	1.27E+00	1.71E+00	8.39E-01
7/3/2017	3.49E+00	1.13E+00	1.16E+00	6.76E-01
8/7/2017	2.64E+00	1.15E+00	3.54E+00	1.11E+00
9/5/2017	1.17E+00	1.02E+00	2.97E+00	1.04E+00
10/2/2017	2.37E+00	1.07E+00	2.70E+00	9.97E-01
11/6/2017	1.05E+00	1.12E+00	2.10E+00	9.00E-01
12/4/2017	3.70E+00	1.18E+00	2.36E+00	9.36E-01
1/2/2018	-5.43E-01	9.24E-01	-5.65E-02	3.83E-01

Table 20 Radionuclides in Liquid Effluent Samples (continued)

Location: H-017 281-8H Retention Basin

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
1/7/2017	4.14E+03	2.27E+02	-3.65E-01	1.95E+00	2.45E+01	4.58E+00
1/28/2017	2.64E+03	1.93E+02	4.38E-01	2.13E+00	2.81E+01	4.90E+00
2/15/2017	1.81E+03	1.74E+02	1.64E-01	2.31E+00	2.39E+01	3.68E+00
3/1/2017	2.70E+03	1.96E+02	6.00E-01	2.27E+00	1.75E+01	4.09E+00
4/5/2017	2.08E+03	1.90E+02	-1.61E+00	2.14E+00	2.81E+01	4.02E+00
5/6/2017	3.05E+03	2.02E+02	-8.11E-01	1.97E+00	2.05E+01	4.64E+00
6/10/2017	9.35E+02	1.68E+02	-3.03E+00	1.96E+00	2.95E+01	4.79E+00
6/28/2017	3.81E+02	1.53E+02	1.52E+00	1.57E+00	2.89E+01	4.55E+00
7/14/2017	1.62E+03	1.76E+02	2.89E-01	1.84E+00	3.24E+01	4.99E+00
7/26/2017	1.26E+03	1.66E+02	1.26E+00	2.04E+00	4.03E+01	5.00E+00
8/17/2017	3.27E+03	2.02E+02	5.41E-01	1.91E+00	4.89E+01	5.91E+00
9/16/2017	6.11E+02	1.71E+02	1.75E+00	1.87E+00	2.86E+01	4.19E+00
11/1/2017	7.86E+02	1.49E+02	6.84E-01	1.91E+00	2.76E+01	4.74E+00
11/16/2017	2.78E+03	2.01E+02	2.76E+00	1.82E+00	2.54E+01	5.14E+00
12/14/2017	2.04E+03	1.86E+02	1.36E+00	1.88E+00	2.18E+01	4.37E+00

Sample Date	Sr-89/90		I-129		U-234	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
1/7/2017	3.19E+00	1.06E+00	2.55E-01	2.90E-01	3.46E-02	1.98E-02
1/28/2017	2.52E+00	1.06E+00	3.54E-01	2.80E-01	8.73E-03	1.04E-02
2/15/2017	3.11E+00	1.04E+00	4.59E-01	3.16E-01	7.08E-02	2.61E-02
3/1/2017	3.73E+00	1.38E+00	8.54E-02	2.81E-01	4.24E-02	2.06E-02
4/5/2017	2.54E+00	8.14E-01	6.43E-01	2.57E-01	6.84E-02	2.44E-02
5/6/2017	5.62E+00	1.47E+00	5.38E-02	2.90E-01	6.73E-02	2.36E-02
6/10/2017	8.95E-01	8.92E-01	3.08E-01	2.65E-01	1.15E-01	3.22E-02
6/28/2017	3.14E+00	1.23E+00	6.24E-01	3.64E-01	8.70E-02	2.60E-02
7/14/2017	2.21E+00	9.89E-01	1.49E-01	2.99E-01	8.81E-02	2.92E-02
7/26/2017	2.89E+00	1.10E+00	8.22E-01	6.32E-01	1.21E-01	3.42E-02
8/17/2017	9.84E-01	1.02E+00	1.00E+00	6.04E-01	1.11E-01	3.30E-02
9/16/2017	4.46E+00	1.43E+00	-1.11E-01	2.47E-01	9.38E-02	2.87E-02
11/1/2017	2.65E+00	8.22E-01	-7.24E-01	6.73E-01	7.24E-02	2.56E-02
11/16/2017	2.46E+00	7.77E-01	5.38E-01	2.83E-01	7.54E-02	2.68E-02
12/14/2017	2.25E+00	1.10E+00	9.41E-01	3.35E-01	5.32E-02	2.23E-02

Table 20 Radionuclides in Liquid Effluent Samples (continued)

Location: H-017 281-8H Retention Basin (continued)

Sample Date	U-235		Np-237		U-238	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
1/7/2017	3.32E-03	1.19E-02	1.60E-02	1.14E-02	2.39E-02	1.46E-02
1/28/2017	-1.56E-05	1.85E-04	0.00E+00	1.09E-02	3.59E-02	1.94E-02
2/15/2017	-3.16E-03	9.00E-03	0.00E+00	8.80E-03	3.76E-02	1.83E-02
3/1/2017	0.00E+00	9.48E-03	2.92E-03	1.05E-02	8.22E-02	2.81E-02
4/5/2017	-4.70E-05	5.45E-04	2.65E-03	1.08E-02	7.05E-02	2.62E-02
5/6/2017	9.16E-03	9.40E-03	0.00E+00	1.15E-02	6.22E-02	2.41E-02
6/10/2017	0.00E+00	9.71E-03	2.89E-03	1.13E-02	5.70E-02	2.25E-02
6/28/2017	-3.14E-03	1.24E-02	8.11E-03	8.38E-03	7.68E-02	2.74E-02
7/14/2017	9.49E-03	9.86E-03	0.00E+00	9.48E-03	5.95E-02	2.52E-02
7/26/2017	9.62E-03	1.00E-02	1.09E-02	1.28E-02	2.35E-02	1.41E-02
8/17/2017	2.78E-02	1.65E-02	8.54E-03	8.55E-03	1.15E-01	3.19E-02
9/16/2017	3.19E-03	1.17E-02	-5.62E-05	9.28E-04	1.09E-01	3.15E-02
11/1/2017	1.99E-02	1.42E-02	-2.78E-03	1.15E-02	8.03E-02	2.73E-02
11/16/2017	-5.84E-03	5.85E-03	0.00E+00	9.32E-03	1.06E-01	2.96E-02
12/14/2017	8.92E-03	9.13E-03	8.70E-03	8.80E-03	5.08E-02	2.00E-02

Sample Date	Pu-238		Pu-239		Am-241	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
1/7/2017	1.59E-01	3.74E-02	4.76E-02	1.99E-02	8.89E-03	9.00E-03
1/28/2017	1.12E-01	3.46E-02	3.08E-03	1.12E-02	1.12E-02	1.32E-02
2/15/2017	2.84E-01	5.25E-02	1.49E-02	1.07E-02	1.66E-02	1.18E-02
3/1/2017	2.84E-01	5.53E-02	2.58E-02	1.55E-02	1.66E-02	1.17E-02
4/5/2017	3.46E-01	6.13E-02	6.16E-02	2.54E-02	5.05E-02	2.09E-02
5/6/2017	1.21E-01	3.52E-02	5.57E-02	2.32E-02	8.51E-03	8.53E-03
6/10/2017	3.43E-01	6.34E-02	2.70E-02	1.59E-02	4.73E-02	1.96E-02
6/28/2017	1.16E-01	3.33E-02	2.16E-02	1.80E-02	2.81E-03	1.02E-02
7/14/2017	7.08E-02	2.42E-02	1.57E-02	1.12E-02	7.92E-03	7.91E-03
7/26/2017	1.08E-02	1.27E-02	1.62E-02	1.16E-02	1.07E-02	8.80E-03
8/17/2017	9.30E-02	2.90E-02	1.13E-02	1.32E-02	-5.30E-03	5.39E-03
9/16/2017	1.04E-01	3.12E-02	2.86E-03	1.04E-02	2.50E-02	1.45E-02
11/1/2017	1.29E-01	3.66E-02	2.48E-02	1.44E-02	9.46E-03	9.67E-03
11/16/2017	1.42E-01	3.64E-02	8.35E-03	8.35E-03	6.51E-02	2.36E-02
12/14/2017	1.85E-01	4.38E-02	2.59E-02	1.51E-02	9.05E-03	9.17E-03

Table 20 Radionuclides in Liquid Effluent Samples (continued)

Location: H-017 281-8H Retention Basin (continued)

Sample Date	Cm-244		Tc-99		Gross Beta	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
1/7/2017	0.00E+00	1.07E-02	1.55E+00	7.92E-01	2.32E+01	1.09E+00
1/28/2017	-5.54E-03	5.58E-03	6.49E-01	7.75E-01	2.22E+01	7.56E-01
2/15/2017	1.09E-02	1.28E-02	1.51E+00	7.71E-01	1.98E+01	7.18E-01
3/1/2017	0.00E+00	1.01E-02	3.68E+00	7.64E-01	1.66E+01	9.13E-01
4/5/2017	0.00E+00	9.71E-03	2.28E+00	7.75E-01	1.41E+01	8.59E-01
5/6/2017	-4.27E-05	5.01E-04	3.92E-01	7.72E-01	1.84E+01	9.71E-01
6/10/2017	2.33E-02	1.35E-02	1.10E+01	8.88E-01	1.86E+01	9.82E-01
6/28/2017	0.00E+00	9.82E-03	7.46E-01	7.66E-01	2.17E+01	1.04E+00
7/14/2017	-5.27E-03	5.23E-03	2.20E+00	7.73E-01	2.04E+01	1.01E+00
7/26/2017	-4.11E-05	4.80E-04	1.95E+00	7.62E-01	2.78E+01	1.18E+00
8/17/2017	1.56E-02	1.12E-02	1.95E+00	7.62E-01	3.24E+01	1.26E+00
9/16/2017	-5.68E-05	6.64E-04	7.78E-01	7.62E-01	2.45E+01	1.11E+00
11/1/2017	9.43E-03	9.44E-03	7.81E-01	7.36E-01	2.22E+01	1.07E+00
11/16/2017	0.00E+00	1.03E-02	2.08E+00	7.53E-01	1.77E+01	5.48E-01
12/14/2017	8.97E-03	9.04E-03	4.46E+00	8.03E-01	1.68E+01	9.17E-01

Sample Date	Gross Alpha	
	Results (pCi/L)	Standard Dev. (pCi/L)
1/7/2017	7.57E-01	2.76E-01
1/28/2017	4.05E-01	1.51E-01
2/15/2017	6.86E-01	1.89E-01
3/1/2017	6.78E-01	2.57E-01
4/5/2017	1.63E-01	1.61E-01
5/6/2017	1.47E-01	1.53E-01
6/10/2017	6.92E-01	2.72E-01
6/28/2017	9.51E-01	3.07E-01
7/14/2017	1.72E-01	1.47E-01
7/26/2017	3.16E-01	1.92E-01
8/17/2017	3.41E-01	1.92E-01
9/16/2017	2.36E-01	1.72E-01
11/1/2017	7.46E-01	2.89E-01
11/16/2017	3.43E-01	1.21E-01
12/14/2017	7.11E-01	2.64E-01

Table 20 Radionuclides in Liquid Effluent Samples (continued)

Location: HP-52 H-Area Tank Farm

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	1.69E+03	1.69E+02	2.78E+00	1.96E+00	4.70E+00	2.32E+00
3/7/2017	1.92E+03	1.85E+02	6.57E-01	2.10E+00	4.27E+00	2.19E+00
4/4/2017	1.92E+03	1.81E+02	3.03E+00	2.00E+00	2.86E+00	2.26E+00
5/2/2017	7.11E+02	1.49E+02	-1.36E+00	2.17E+00	2.09E+00	2.29E+00
6/6/2017	7.38E+02	1.62E+02	1.25E+00	1.89E+00	1.06E+00	2.18E+00
7/5/2017	4.00E+02	1.41E+02	2.30E+00	2.00E+00	1.59E+00	2.05E+00
8/8/2017	1.70E+03	1.86E+02	-8.46E-01	2.08E+00	-1.74E-01	1.95E+00
9/6/2017	4.19E+02	1.43E+02	-3.70E-01	2.06E+00	-2.16E+00	2.27E+00
10/3/2017	3.70E+01	1.55E+02	1.71E-02	2.23E+00	1.96E-01	1.97E+00
11/7/2017	1.24E+02	1.20E+02	2.06E+00	2.18E+00	6.95E-01	2.13E+00
12/5/2017	-3.32E+01	1.27E+02	-3.00E+00	2.01E+00	8.22E-01	1.98E+00
1/2/2018	5.59E+02	1.31E+02	-7.78E-01	1.73E+00	4.49E+00	2.25E+00

Sample Date	Sr-89/90		U-234		U-235	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	1.96E-01	2.04E-01	2.39E-02	7.01E-03	-6.73E-04	2.77E-03
3/7/2017	4.32E-01	2.29E-01	2.68E-02	7.12E-03	2.06E-03	2.08E-03
4/4/2017	2.38E-01	2.18E-01	2.39E-02	6.91E-03	-2.25E-06	1.33E-04
5/2/2017	2.55E-01	1.36E-01	3.59E-02	8.34E-03	0.00E+00	1.92E-03
6/6/2017	5.08E-02	1.41E-01	2.56E-02	7.32E-03	-2.02E-06	1.20E-04
7/5/2017	9.68E-02	1.04E-01	4.14E-02	8.84E-03	1.96E-03	1.97E-03
8/8/2017	2.29E-01	1.51E-01	4.81E-02	9.52E-03	5.68E-03	3.29E-03
9/6/2017	4.14E-01	2.00E-01	2.49E-02	7.86E-03	0.00E+00	2.02E-03
10/3/2017	1.29E-01	1.98E-01	2.95E-02	8.10E-03	4.27E-03	3.15E-03
11/7/2017	4.16E-01	2.56E-01	1.92E-02	7.18E-03	2.45E-03	2.39E-03
12/5/2017	-6.51E-02	1.84E-01	5.41E-02	1.10E-02	1.36E-03	3.48E-03
1/2/2018	4.43E-02	1.55E-01	1.97E-02	6.12E-03	-6.59E-04	2.72E-03

Table 20 Radionuclides in Liquid Effluent Samples (continued)

Location: HP-52 H-Area Tank Farm (continued)

Sample Date	U-238		Pu-238		Pu-239	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	2.65E-02	7.10E-03	6.49E-03	3.29E-03	1.62E-03	1.63E-03
3/7/2017	3.05E-02	7.79E-03	6.86E-03	3.90E-03	4.84E-04	1.82E-03
4/4/2017	3.00E-02	7.46E-03	4.76E-02	9.71E-03	3.51E-03	2.58E-03
5/2/2017	3.11E-02	7.56E-03	1.59E-02	5.63E-03	0.00E+00	2.06E-03
6/6/2017	2.84E-02	7.49E-03	1.19E-03	3.03E-03	0.00E+00	2.10E-03
7/5/2017	2.70E-02	6.94E-03	1.60E-02	6.07E-03	3.84E-03	2.74E-03
8/8/2017	6.43E-02	1.08E-02	1.76E-03	2.01E-03	3.54E-03	2.53E-03
9/6/2017	4.43E-02	9.48E-03	4.43E-03	3.70E-03	7.22E-03	3.92E-03
10/3/2017	2.64E-02	1.14E-02	0.00E+00	1.91E-03	3.30E-03	2.34E-03
11/7/2017	3.05E-02	8.51E-03	5.19E-03	3.02E-03	1.73E-03	1.74E-03
12/5/2017	5.03E-02	1.02E-02	5.70E-03	3.33E-03	3.81E-03	2.70E-03
1/2/2018	2.39E-02	6.51E-03	2.28E-03	2.69E-03	7.41E-03	4.03E-03

Sample Date	Am-241		Cm-244		Gross Beta	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	8.41E-03	3.82E-03	5.54E-04	2.04E-03	4.49E+00	2.97E-01
3/7/2017	3.27E-03	2.38E-03	0.00E+00	1.85E-03	5.03E+00	3.12E-01
4/4/2017	1.09E-02	4.58E-03	1.80E-03	2.16E-03	6.00E+00	3.50E-01
5/2/2017	6.65E-03	3.40E-03	-1.10E-03	1.10E-03	1.91E+00	2.32E-01
6/6/2017	7.22E-03	3.74E-03	-2.38E-03	1.69E-03	1.48E+00	2.23E-01
7/5/2017	6.89E-03	3.60E-03	0.00E+00	2.25E-03	2.18E+00	2.42E-01
8/8/2017	1.01E-02	5.08E-03	1.77E-03	1.77E-03	1.70E+00	2.28E-01
9/6/2017	9.35E-03	4.77E-03	1.63E-03	1.65E-03	1.96E+00	2.44E-01
10/3/2017	1.37E-02	4.98E-03	1.69E-03	1.73E-03	1.26E+00	1.96E-01
11/7/2017	1.60E-02	6.13E-03	-5.54E-06	3.32E-04	2.26E+00	2.65E-01
12/5/2017	9.43E-03	4.26E-03	1.86E-03	2.17E-03	5.68E+00	4.06E-01
1/2/2018	1.08E-02	4.51E-03	-1.81E-06	1.07E-04	6.59E+00	3.68E-01

Table 20 Radionuclides in Liquid Effluent Samples (continued)

Location: HP-52 H-Area Tank Farm (continued)

Sample Date	Gross Alpha	
	Results (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	8.32E-01	1.70E-01
3/7/2017	7.35E-01	1.64E-01
4/4/2017	1.99E+00	2.80E-01
5/2/2017	6.68E-01	1.58E-01
6/6/2017	6.97E-02	8.33E-02
7/5/2017	6.78E-01	1.61E-01
8/8/2017	4.73E-01	1.50E-01
9/6/2017	9.35E-01	1.83E-01
10/3/2017	5.08E-01	1.45E-01
11/7/2017	1.29E+00	2.16E-01
12/5/2017	3.97E+00	4.27E-01
1/2/2018	4.32E+00	3.61E-01

Table 20 Radionuclides in Liquid Effluent Samples (continued)

Location: K Canal

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	2.86E+02	1.34E+02	1.36E-01	1.93E+00	2.31E-01	1.96E+00
3/6/2017	3.73E+02	1.28E+02	-2.10E+00	2.04E+00	-9.43E-01	1.99E+00
4/3/2017	1.51E+02	1.32E+02	-4.97E-01	1.87E+00	4.78E-01	2.18E+00
5/1/2017	9.59E+01	1.34E+02	4.03E+00	1.93E+00	-1.43E+00	2.04E+00
6/5/2017	2.48E+02	1.50E+02	-4.14E+00	2.15E+00	1.88E+00	2.08E+00
7/3/2017	-3.00E+01	1.41E+02	-5.05E-01	2.05E+00	-2.52E+00	1.97E+00
8/7/2017	1.43E+01	1.33E+02	-1.72E+00	2.01E+00	-1.63E+00	2.30E+00
9/5/2017	5.89E+01	1.36E+02	3.43E-01	1.93E+00	-3.54E+00	2.10E+00
10/2/2017	4.32E+02	1.61E+02	-1.54E+00	1.84E+00	1.31E+00	2.11E+00
11/6/2017	1.68E+02	1.22E+02	5.65E-01	1.83E+00	7.46E-01	2.42E+00
12/4/2017	5.03E+02	1.50E+02	-7.49E-01	2.10E+00	-4.89E-01	2.08E+00
1/2/2018	1.45E+02	1.40E+02	1.95E+00	1.77E+00	-8.08E-01	2.06E+00

Sample Date	Sr-89/90		Gross Beta		Gross Alpha	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	-2.40E-02	1.90E-01	1.56E+00	5.87E-01	1.91E-01	2.48E-01
3/6/2017	-1.55E-01	1.80E-01	1.65E+00	5.62E-01	4.73E-01	3.17E-01
4/3/2017	4.32E-02	2.27E-01	3.81E+00	7.45E-01	5.51E-01	3.48E-01
5/1/2017	-1.61E-01	1.80E-01	1.17E+00	5.49E-01	2.02E-01	2.43E-01
6/5/2017	7.86E-02	1.43E-01	1.98E+00	6.40E-01	5.46E-03	1.86E-01
7/3/2017	5.78E-01	1.36E-01	2.54E+00	6.29E-01	2.66E-01	2.62E-01
8/7/2017	-1.83E-01	1.43E-01	2.16E+00	6.36E-01	3.68E-01	3.03E-01
9/5/2017	6.16E-04	2.00E-01	1.81E+00	6.09E-01	3.00E-02	1.95E-01
10/2/2017	-2.24E-02	1.70E-01	2.86E+00	6.66E-01	3.86E-01	3.12E-01
11/6/2017	4.65E-01	2.23E-01	2.66E+00	7.02E-01	2.13E-01	2.61E-01
12/4/2017	2.61E-01	2.02E-01	2.50E+00	6.40E-01	4.30E-02	1.97E-01
1/2/2018	2.95E-01	2.07E-01	1.84E+00	5.79E-01	-5.81E-03	1.99E-01

Table 20 Radionuclides in Liquid Effluent Samples (continued)

Location: L07

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	3.08E+02	1.36E+02	-3.00E+00	1.89E+00	-1.92E+00	2.13E+00
3/6/2017	3.38E+02	1.26E+02	1.15E+00	1.90E+00	1.89E+00	2.04E+00
4/3/2017	1.81E+02	1.35E+02	2.62E+00	2.15E+00	-6.00E-01	2.19E+00
5/1/2017	4.81E+01	1.35E+02	-1.59E-01	1.95E+00	-3.35E+00	2.17E+00
6/5/2017	7.68E+01	1.43E+02	9.11E-01	1.86E+00	-3.89E+00	1.88E+00
7/3/2017	7.19E+01	1.49E+02	2.51E+00	2.13E+00	3.16E+00	2.08E+00
8/7/2017	1.76E+02	1.39E+02	-4.41E+00	1.92E+00	-1.61E+00	2.03E+00
9/5/2017	4.84E+01	1.38E+02	-1.78E-01	1.97E+00	-2.17E+00	2.03E+00
10/2/2017	4.41E+02	1.66E+02	2.19E+00	1.78E+00	1.56E+00	2.04E+00
11/6/2017	3.22E+02	1.31E+02	3.00E+00	1.93E+00	-1.31E+00	2.02E+00
12/4/2017	2.56E+02	1.46E+02	-2.55E-01	2.10E+00	6.84E-01	1.91E+00
1/2/2018	3.32E+02	1.47E+02	-3.16E+00	1.86E+00	-3.22E+00	2.13E+00

Sample Date	Sr-89/90		Gross Beta		Gross Alpha	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	1.49E-02	1.95E-01	2.49E+00	4.11E-01	2.86E-01	1.86E-01
3/6/2017	4.24E-01	2.35E-01	2.58E+00	4.05E-01	1.62E-01	1.46E-01
4/3/2017	1.18E-01	1.28E-01	2.45E+00	4.08E-01	3.03E-01	1.92E-01
5/1/2017	2.15E-01	2.18E-01	1.91E+00	3.75E-01	4.84E-01	2.30E-01
6/5/2017	2.92E-02	1.36E-01	1.67E+00	3.69E-01	1.78E-03	9.93E-02
7/3/2017	1.70E-01	2.41E-01	1.39E+00	3.25E-01	5.03E-02	1.10E-01
8/7/2017	5.22E-01	2.13E-01	1.67E+00	3.62E-01	1.11E-01	1.42E-01
9/5/2017	1.76E-01	2.22E-01	2.97E+00	4.39E-01	1.58E-02	1.06E-01
10/2/2017	3.57E-01	2.12E-01	2.89E+00	4.26E-01	-7.27E-02	4.98E-02
11/6/2017	-1.33E-01	1.85E-01	2.76E+00	4.47E-01	4.30E-01	2.34E-01
12/4/2017	4.89E-01	2.30E-01	1.06E+00	3.08E-01	7.92E-01	2.74E-01
1/2/2018	5.49E-01	2.32E-01	2.34E+00	4.19E-01	-2.15E-02	1.16E-01

Table 20 Radionuclides in Liquid Effluent Samples (continued)

Location: S-004

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	9.32E+03	3.07E+02	-7.30E-01	2.15E+00	-9.49E-01	2.01E+00
3/6/2017	6.95E+03	2.73E+02	3.03E+00	2.22E+00	-6.08E-01	2.27E+00
4/3/2017	3.78E+03	2.28E+02	-1.19E+00	2.16E+00	2.70E-01	2.10E+00
5/1/2017	5.08E+03	2.50E+02	-1.66E+00	2.16E+00	2.86E-01	2.26E+00
6/5/2017	4.54E+03	2.50E+02	-1.59E+00	1.96E+00	2.60E+00	2.09E+00
7/3/2017	4.92E+03	2.60E+02	-1.78E+00	2.04E+00	1.83E+00	1.94E+00
8/7/2017	8.81E+03	2.97E+02	1.55E+00	2.18E+00	1.63E+00	2.08E+00
9/5/2017	2.89E+03	2.09E+02	-1.29E+00	2.08E+00	1.71E+00	2.09E+00
10/2/2017	2.81E+03	2.06E+02	-1.62E-01	1.97E+00	5.43E-01	2.09E+00
11/6/2017	1.03E+03	1.47E+02	-2.13E+00	1.51E+00	-1.90E+00	2.23E+00
12/4/2017	2.26E+02	1.42E+02	7.51E-01	1.89E+00	-2.25E+00	2.15E+00
1/2/2018	5.70E+03	2.58E+02	-4.97E-01	2.13E+00	5.54E+00	2.16E+00

Sample Date	Sr-89/90		U-234		U-235	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	5.16E-01	1.01E+00	7.92E-02	2.86E-02	9.08E-03	9.40E-03
3/6/2017	1.50E+00	1.06E+00	1.05E-01	3.24E-02	3.14E-02	1.83E-02
4/3/2017	1.14E+00	6.95E-01	4.49E-02	2.22E-02	-3.49E-03	1.44E-02
5/1/2017	5.51E-01	9.97E-01	1.42E-01	3.73E-02	1.00E-02	1.03E-02
6/5/2017	1.59E+00	7.71E-01	8.92E-02	3.07E-02	2.44E-02	1.75E-02
7/3/2017	3.92E+00	1.39E+00	1.01E-01	3.09E-02	-1.44E-04	1.69E-03
8/7/2017	1.16E+00	9.28E-01	5.14E-02	2.69E-02	-4.68E-05	5.51E-04
9/5/2017	1.75E+00	1.17E+00	2.92E-02	1.97E-02	9.84E-03	9.86E-03
10/2/2017	-3.78E-01	8.03E-01	1.08E-01	3.13E-02	2.05E-02	1.47E-02
11/6/2017	1.15E+00	1.05E+00	1.04E-01	3.39E-02	1.27E-02	1.29E-02
12/4/2017	1.87E-02	9.21E-01	1.28E-01	3.42E-02	2.11E-02	1.50E-02
1/2/2018	1.74E+00	1.03E+00	6.49E-02	2.48E-02	9.57E-03	9.71E-03

Table 20 Radionuclides in Liquid Effluent Samples (continued)

Location: S-004 (continued)

Sample Date	U-238		Pu-238		Pu-239	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	1.01E-01	3.24E-02	-1.19E-02	8.43E-03	0.00E+00	1.04E-02
3/6/2017	1.21E-01	3.47E-02	2.62E-02	2.20E-02	-5.81E-03	5.82E-03
4/3/2017	1.10E-01	3.17E-02	1.24E-01	3.54E-02	0.00E+00	1.19E-02
5/1/2017	1.47E-01	3.63E-02	2.78E-02	1.61E-02	-7.68E-05	1.02E-03
6/5/2017	7.89E-02	2.91E-02	1.23E-02	1.44E-02	0.00E+00	1.14E-02
7/3/2017	1.01E-01	3.17E-02	2.86E-03	1.04E-02	-1.15E-02	8.14E-03
8/7/2017	1.14E-01	3.38E-02	-1.28E-05	1.66E-04	-1.28E-05	1.66E-04
9/5/2017	8.73E-02	2.81E-02	7.89E-03	7.91E-03	-5.38E-03	5.41E-03
10/2/2017	1.11E-01	3.30E-02	3.30E-02	1.91E-02	1.09E-02	1.09E-02
11/6/2017	1.16E-01	3.94E-02	8.22E-02	2.95E-02	-1.25E-05	1.69E-04
12/4/2017	5.14E-02	2.11E-02	1.78E-02	1.26E-02	-1.18E-02	8.41E-03
1/2/2018	4.92E-02	2.15E-02	2.58E-02	2.15E-02	-4.22E-05	5.64E-04

Sample Date	Gross Beta		Gross Alpha	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	2.35E+01	2.32E+00	2.25E+00	1.08E+00
3/6/2017	2.92E+01	2.53E+00	1.72E+00	9.74E-01
4/3/2017	3.24E+01	2.68E+00	2.49E+00	1.18E+00
5/1/2017	1.73E+01	2.07E+00	2.17E+00	1.17E+00
6/5/2017	1.83E+01	2.13E+00	8.95E-01	8.02E-01
7/3/2017	1.50E+01	1.90E+00	2.54E+00	1.15E+00
8/7/2017	1.16E+01	1.75E+00	4.89E-01	6.30E-01
9/5/2017	9.11E+00	1.61E+00	1.59E+00	8.76E-01
10/2/2017	1.62E+01	1.97E+00	4.65E+00	1.45E+00
11/6/2017	1.84E+01	2.17E+00	2.45E+00	1.18E+00
12/4/2017	1.66E+01	1.96E+00	7.97E-01	6.45E-01
1/2/2018	2.29E+01	2.40E+00	4.22E+00	1.55E+00

Table 20 Radionuclides in Liquid Effluent Samples (continued)

Location: TB-2 Outfall at Road 1A

Sample Date	H-3 (tritium)	Standard Dev. (pCi/L)	C-14	Standard Dev. (pCi/L)	Co-60	Standard Dev. (pCi/L)
	Results (pCi/L)		Results (pCi/L)		Results (pCi/L)	
2/6/2017	1.51E+02	1.28E+02	8.59E+00	4.14E+00	-3.84E+00	2.04E+00
3/6/2017	2.86E+02	1.25E+02	-1.84E+00	3.91E+00	-6.65E-01	2.09E+00
4/3/2017	-9.16E+01	1.25E+02	3.84E+00	3.97E+00	-3.11E-01	2.09E+00
5/1/2017	-4.00E+01	1.29E+02	4.70E+00	4.35E+00	-1.84E+00	1.83E+00
6/5/2017	-4.24E+01	1.37E+02	-5.49E-01	4.25E+00	2.47E+00	2.18E+00
7/3/2017	-2.81E+01	1.41E+02	4.84E-01	4.04E+00	1.67E+00	1.73E+00
8/7/2017	4.59E+01	1.34E+02	3.27E-01	4.16E+00	-8.92E-01	2.21E+00
9/5/2017	1.12E+02	1.37E+02	-1.86E+00	4.22E+00	1.92E+00	1.85E+00
10/2/2017	2.44E+02	1.55E+02	1.12E-01	4.38E+00	-9.78E-02	1.97E+00
11/6/2017	6.95E+01	1.20E+02	-3.19E+00	4.28E+00	-6.00E-01	1.90E+00
12/4/2017	1.45E+01	1.36E+02	-1.12E+00	4.32E+00	1.07E+00	1.79E+00
1/2/2018	-3.00E+01	1.35E+02	-2.70E+00	4.29E+00	-2.53E+00	1.86E+00

Sample Date	Cs-137		I-129		U-234	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	2.26E+00	2.05E+00	-1.81E-01	3.31E-01	8.68E-02	1.60E-02
3/6/2017	1.78E+00	2.20E+00	-4.46E-01	6.83E-01	6.65E-02	1.31E-02
4/3/2017	6.24E-01	2.21E+00	-1.84E-01	3.31E-01	3.89E-02	9.89E-03
5/1/2017	-3.11E-01	1.93E+00	-1.65E-01	2.78E-01	1.39E-01	1.91E-02
6/5/2017	2.50E+00	2.10E+00	1.33E-01	2.90E-01	2.38E-01	2.66E-02
7/3/2017	-2.53E+00	2.09E+00	-2.20E-02	2.36E-01	1.07E-01	1.96E-02
8/7/2017	1.45E+00	2.17E+00	3.41E-02	6.27E-01	8.38E-02	1.46E-02
9/5/2017	-1.89E+00	2.03E+00	5.00E-01	6.26E-01	8.46E-02	1.46E-02
10/2/2017	3.30E+00	2.02E+00	-3.97E-01	2.53E-01	5.57E-02	1.10E-02
11/6/2017	-1.07E+00	2.20E+00	-1.73E-01	2.55E-01	3.76E-02	9.82E-03
12/4/2017	-1.88E+00	2.01E+00	5.32E-01	2.99E-01	4.38E-02	9.36E-03
1/2/2018	-2.17E-03	2.02E+00	-1.99E-01	2.66E-01	2.76E-02	8.26E-03

Table 20 Radionuclides in Liquid Effluent Samples (continued)

Location: TB-2 Outfall at Road 1A (continued)

Sample Date	U-235		U-238		Pu-238	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	8.22E-03	4.53E-03	6.70E-02	1.55E-02	5.62E-03	3.58E-03
3/6/2017	4.32E-03	3.07E-03	4.89E-02	1.11E-02	4.11E-03	3.29E-03
4/3/2017	2.12E-03	2.13E-03	2.40E-02	7.48E-03	6.84E-04	2.51E-03
5/1/2017	1.39E-02	5.68E-03	9.03E-02	1.39E-02	4.97E-03	2.58E-03
6/5/2017	1.97E-02	6.84E-03	1.85E-01	2.31E-02	7.59E-03	4.12E-03
7/3/2017	3.62E-03	7.86E-03	7.16E-02	1.75E-02	1.46E-02	7.90E-03
8/7/2017	4.32E-03	3.19E-03	3.92E-02	9.48E-03	2.48E-03	2.94E-03
9/5/2017	4.38E-03	3.12E-03	5.73E-02	1.29E-02	1.86E-03	1.87E-03
10/2/2017	6.05E-03	3.63E-03	6.00E-02	1.20E-02	1.09E-03	2.81E-03
11/6/2017	1.28E-02	6.27E-03	3.43E-02	1.30E-02	1.31E-02	5.39E-03
12/4/2017	-1.50E-03	1.50E-03	2.55E-02	6.98E-03	0.00E+00	2.46E-03
1/2/2018	-1.31E-05	7.81E-04	3.11E-02	7.86E-03	7.59E-03	4.83E-03

Sample Date	Pu-239		Tc-99		Gross Beta	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	3.38E-03	2.39E-03	1.38E-01	7.51E-01	1.03E+00	3.15E-01
3/6/2017	0.00E+00	2.12E-03	1.54E+00	7.20E-01	1.35E+00	3.23E-01
4/3/2017	-2.73E-03	1.95E-03	1.72E+00	7.52E-01	2.58E+00	4.20E-01
5/1/2017	-1.54E-05	1.04E-03	1.11E-01	7.73E-01	1.49E+00	3.48E-01
6/5/2017	7.00E-03	3.53E-03	9.51E-01	7.46E-01	5.19E+00	5.89E-01
7/3/2017	-1.13E-03	4.64E-03	2.35E-01	7.58E-01	6.68E-01	2.69E-01
8/7/2017	-2.56E-06	1.71E-04	1.48E+00	7.59E-01	1.00E+00	3.15E-01
9/5/2017	1.22E-03	3.62E-03	1.38E+00	7.67E-01	1.37E+00	3.40E-01
10/2/2017	3.27E-03	2.32E-03	2.69E-02	7.40E-01	1.52E+00	3.44E-01
11/6/2017	2.19E-03	2.21E-03	1.37E+00	7.36E-01	1.18E+00	3.47E-01
12/4/2017	1.92E-03	1.92E-03	1.17E+00	7.35E-01	2.13E+00	3.81E-01
1/2/2018	-1.53E-03	1.59E-03	7.97E-01	7.55E-01	9.16E-01	2.92E-01

Table 20 Radionuclides in Liquid Effluent Samples (continued)

Location: TB-2 Outfall at Road 1A (continued)

Sample Date	Gross Alpha	
	Results (pCi/L)	Standard Dev. (pCi/L)
2/6/2017	7.05E-01	2.62E-01
3/6/2017	4.30E-01	2.10E-01
4/3/2017	1.87E+00	4.14E-01
5/1/2017	9.81E-01	3.05E-01
6/5/2017	2.76E+00	5.34E-01
7/3/2017	6.97E-01	2.66E-01
8/7/2017	7.92E-01	2.77E-01
9/5/2017	1.87E-01	1.55E-01
10/2/2017	1.16E+00	3.30E-01
11/6/2017	3.84E-01	2.07E-01
12/4/2017	-7.27E-02	5.01E-02
1/2/2018	8.70E-01	2.91E-01

Table 20 Radionuclides in Liquid Effluent Samples (continued)

Location: U3R-2A ETP Outfall at Road C

Sample Date	H-3 (tritium)		C-14		Co-60	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
1/9/2017	4.19E+05	1.93E+03	-2.76E+00	3.93E+00	3.00E+00	2.02E+00
1/17/2017	3.32E+05	1.72E+03	1.48E+01	4.03E+00	-3.30E+00	2.12E+00
1/23/2017	4.76E+05	2.00E+03	3.14E+00	3.87E+00	9.43E-01	1.98E+00
1/30/2017	6.49E+05	2.34E+03	2.34E+01	4.11E+00	1.39E+00	1.67E+00
2/6/2017	5.11E+05	2.07E+03	9.81E-01	4.16E+00	-1.59E+00	1.93E+00
2/13/2017	3.35E+05	1.73E+03	3.62E+00	4.12E+00	5.49E-02	1.98E+00
2/27/2017	9.00E+05	2.85E+03	5.84E+00	4.19E+00	2.63E+00	1.81E+00
3/6/2017	1.43E+06	3.57E+03	5.24E+00	3.92E+00	1.52E+00	1.94E+00
3/13/2017	1.63E+06	3.72E+03	9.54E-01	3.97E+00	1.04E+00	1.87E+00
5/8/2017	2.03E+06	4.06E+03	1.92E+01	4.41E+00	1.50E+00	1.94E+00
5/15/2017	2.62E+06	4.94E+03	2.47E+01	4.47E+00	-2.14E+00	2.04E+00
5/22/2017	1.45E+06	3.67E+03	1.10E+01	4.34E+00	9.51E-01	2.00E+00
5/30/2017	1.45E+06	3.70E+03	8.89E+00	4.35E+00	-8.00E-01	2.15E+00
6/5/2017	1.18E+06	3.31E+03	1.92E+00	4.29E+00	-1.07E+00	2.06E+00
6/12/2017	3.62E+06	5.83E+03	1.73E+01	4.44E+00	-7.86E-01	1.89E+00
6/19/2017	3.62E+06	5.82E+03	6.08E+00	4.21E+00	8.30E-01	1.88E+00
6/26/2017	2.05E+06	4.38E+03	2.16E+00	4.09E+00	-1.13E+00	1.77E+00
7/10/2017	2.25E+06	4.60E+03	3.97E+00	4.09E+00	1.25E+00	1.79E+00
7/17/2017	2.44E+06	4.62E+03	3.84E+00	4.23E+00	1.97E+00	1.96E+00
8/7/2017	1.54E+06	3.50E+03	6.57E+00	4.14E+00	-1.48E+00	1.67E+00
8/14/2017	7.54E+05	2.53E+03	5.00E+01	4.63E+00	2.73E+00	2.15E+00
8/21/2017	8.11E+05	2.62E+03	7.16E+00	4.28E+00	-1.09E+00	1.73E+00
9/18/2017	1.88E+06	3.60E+03	9.59E+00	4.35E+00	6.05E+00	2.07E+00
9/25/2017	1.27E+06	2.95E+03	5.54E+00	4.32E+00	-1.09E+00	1.90E+00
10/2/2017	1.10E+06	2.74E+03	-5.05E+00	4.35E+00	2.26E+00	1.91E+00
10/9/2017	1.85E+06	3.94E+03	8.32E-01	4.37E+00	2.95E+00	2.03E+00
12/4/2017	3.78E+06	5.50E+03	3.89E+01	5.35E+00	7.68E-02	1.60E+00
12/11/2017	3.95E+06	5.69E+03	4.22E+00	4.35E+00	-2.56E+00	1.81E+00
12/18/2017	3.92E+06	5.70E+03	5.08E+00	4.16E+00	5.00E-01	1.78E+00

Table 20 Radionuclides in Liquid Effluent Samples (continued)

Location: U3R-2A ETP Outfall at Road C (continued)

Sample Date	Cs-137		Sr-89/90		U-234	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
1/9/2017	4.03E-01	2.16E+00	1.01E+00	7.80E-01	6.89E-02	2.24E-02
1/17/2017	1.51E+00	2.25E+00	8.11E-01	7.39E-01	3.30E-02	1.74E-02
1/23/2017	2.19E+00	1.83E+00	1.15E+00	8.46E-01	5.59E-02	2.01E-02
1/30/2017	2.14E+00	2.23E+00	7.54E-01	7.33E-01	9.49E-02	2.72E-02
2/6/2017	5.19E-01	1.96E+00	-7.05E-01	6.05E-01	5.78E-02	2.22E-02
2/13/2017	-1.12E+00	2.02E+00	5.78E-02	6.84E-01	5.59E-02	2.03E-02
2/27/2017	6.84E+00	2.47E+00	1.29E+00	8.88E-01	8.32E-02	2.39E-02
3/6/2017	9.68E-01	2.14E+00	8.41E-01	9.09E-01	6.76E-02	2.20E-02
3/13/2017	3.08E-01	2.29E+00	7.97E-02	7.63E-01	3.46E-02	1.75E-02
5/8/2017	2.04E+00	2.37E+00	-2.43E-01	7.54E-01	3.22E-02	1.61E-02
5/15/2017	-1.33E+00	2.37E+00	-4.59E-01	6.95E-01	6.46E-02	2.13E-02
5/22/2017	4.70E-01	2.30E+00	4.51E-01	8.20E-01	5.05E-02	1.97E-02
5/30/2017	-1.94E+00	2.06E+00	2.11E-02	7.11E-01	6.14E-02	2.16E-02
6/5/2017	1.30E+00	2.24E+00	5.76E-01	6.74E-01	3.70E-02	1.68E-02
6/12/2017	5.57E-01	2.09E+00	6.73E-01	6.72E-01	4.46E-02	1.92E-02
6/19/2017	2.55E+00	2.05E+00	-6.16E-01	5.71E-01	1.03E-01	2.86E-02
6/26/2017	2.17E+00	2.20E+00	2.66E-02	7.66E-01	3.57E-02	1.85E-02
7/10/2017	4.70E+00	2.27E+00	2.54E-01	7.81E-01	6.30E-02	2.14E-02
7/17/2017	-1.78E+00	2.34E+00	1.03E+00	7.51E-01	5.14E-02	1.98E-02
8/7/2017	3.35E+00	2.04E+00	5.11E-01	7.74E-01	4.14E-02	2.04E-02
8/14/2017	5.51E-01	2.07E+00	5.62E-01	6.96E-01	6.08E-02	2.27E-02
8/21/2017	3.70E+00	2.08E+00	1.28E+00	8.63E-01	7.51E-02	2.51E-02
9/18/2017	4.35E+00	2.13E+00	1.18E-01	8.32E-01	7.27E-02	2.26E-02
9/25/2017	-3.19E-02	2.18E+00	8.92E-01	6.75E-01	4.68E-02	1.77E-02
10/2/2017	2.84E-02	2.00E+00	3.70E-01	6.68E-01	1.93E-02	1.70E-02
10/9/2017	5.95E-01	2.20E+00	3.38E-01	6.50E-01	8.22E-02	2.35E-02
12/4/2017	3.65E-01	2.04E+00	7.81E-01	6.83E-01	1.01E-01	2.53E-02
12/11/2017	3.49E+00	2.10E+00	1.29E+00	7.49E-01	9.73E-02	2.51E-02
12/18/2017	2.66E+00	2.06E+00	-5.00E-01	6.31E-01	4.22E-02	1.72E-02

Table 20 Radionuclides in Liquid Effluent Samples (continued)

Location: U3R-2A ETP Outfall at Road C (continued)

Sample Date	U-235		Np-237		U-238	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
1/9/2017	-5.19E-03	5.25E-03	2.81E-02	1.43E-02	4.59E-02	2.23E-02
1/17/2017	1.44E-02	1.02E-02	8.68E-03	1.02E-02	4.24E-02	1.78E-02
1/23/2017	-5.14E-03	5.21E-03	9.49E-03	1.12E-02	5.59E-02	1.97E-02
1/30/2017	4.59E-02	1.91E-02	1.29E-02	9.13E-03	7.41E-02	2.32E-02
2/6/2017	7.41E-03	7.45E-03	0.00E+00	8.06E-03	4.57E-02	2.02E-02
2/13/2017	1.54E-02	1.09E-02	0.00E+00	8.84E-03	8.27E-02	2.54E-02
2/27/2017	2.37E-02	1.38E-02	6.54E-03	6.92E-03	5.73E-02	2.02E-02
3/6/2017	8.32E-03	8.36E-03	-4.00E-03	4.06E-03	4.24E-02	1.92E-02
3/13/2017	7.54E-03	7.56E-03	6.92E-03	6.91E-03	4.86E-02	1.82E-02
5/8/2017	-7.05E-05	1.03E-03	2.86E-02	1.56E-02	7.03E-02	2.37E-02
5/15/2017	6.97E-03	7.21E-03	1.92E-02	1.12E-02	3.59E-02	1.65E-02
5/22/2017	-7.05E-05	1.03E-03	-3.97E-03	3.98E-03	1.40E-02	1.20E-02
5/30/2017	2.81E-03	1.01E-02	-1.17E-04	2.41E-03	7.49E-02	2.38E-02
6/5/2017	7.24E-03	7.08E-03	4.54E-03	1.22E-02	5.27E-02	1.86E-02
6/12/2017	1.44E-02	1.03E-02	2.07E-03	8.29E-03	7.00E-02	2.14E-02
6/19/2017	3.05E-02	1.54E-02	4.16E-03	1.12E-02	5.76E-02	2.10E-02
6/26/2017	2.33E-03	9.00E-03	2.13E-02	1.27E-02	8.68E-02	2.61E-02
7/10/2017	-1.16E-04	1.69E-03	-2.20E-03	8.88E-03	2.41E-02	1.35E-02
7/17/2017	1.58E-02	1.16E-02	6.76E-03	6.76E-03	2.78E-02	1.95E-02
8/7/2017	1.46E-02	1.07E-02	1.29E-02	9.13E-03	5.54E-02	2.00E-02
8/14/2017	7.97E-03	8.35E-03	2.35E-03	8.47E-03	8.27E-02	2.62E-02
8/21/2017	9.46E-03	1.14E-02	-7.11E-03	1.09E-02	5.41E-02	1.95E-02
9/18/2017	2.46E-03	9.04E-03	-4.43E-03	4.43E-03	4.81E-02	1.89E-02
9/25/2017	7.19E-03	7.37E-03	6.22E-03	6.78E-03	5.05E-02	2.03E-02
10/2/2017	-6.19E-05	9.09E-04	-9.76E-05	1.93E-03	4.08E-02	1.86E-02
10/9/2017	2.36E-03	8.80E-03	7.27E-03	7.84E-03	3.70E-02	1.69E-02
12/4/2017	-4.86E-03	4.88E-03	6.97E-03	7.02E-03	5.51E-02	1.95E-02
12/11/2017	7.49E-03	7.52E-03	1.54E-02	1.10E-02	7.68E-02	2.40E-02
12/18/2017	2.42E-03	9.04E-03	2.21E-03	8.03E-03	4.22E-02	1.66E-02

Table 20 Radionuclides in Liquid Effluent Samples (continued)

Location: U3R-2A ETP Outfall at Road C (continued)

Sample Date	Pu-238		Pu-239		Am-241	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
1/9/2017	2.09E-02	1.21E-02	1.16E-02	1.38E-02	-4.41E-03	4.39E-03
1/17/2017	1.29E-02	9.13E-03	1.28E-02	9.24E-03	6.46E-03	6.55E-03
1/23/2017	7.05E-03	7.05E-03	7.03E-03	7.17E-03	8.27E-03	8.37E-03
1/30/2017	-1.51E-04	2.94E-03	1.27E-02	9.17E-03	-4.65E-03	4.65E-03
2/6/2017	-4.54E-03	5.11E-03	2.17E-03	7.94E-03	0.00E+00	8.25E-03
2/13/2017	1.35E-02	1.05E-02	-2.30E-03	9.40E-03	0.00E+00	7.16E-03
2/27/2017	2.59E-02	1.34E-02	8.54E-03	1.05E-02	6.70E-03	8.07E-03
3/6/2017	-7.97E-03	5.64E-03	7.81E-03	9.63E-03	1.59E-02	1.27E-02
3/13/2017	1.36E-02	1.00E-02	9.03E-03	1.10E-02	-4.30E-03	4.33E-03
5/8/2017	1.96E-02	1.16E-02	2.17E-03	7.88E-03	1.34E-02	9.48E-03
5/15/2017	6.30E-03	6.47E-03	2.53E-02	1.28E-02	6.27E-03	8.17E-03
5/22/2017	3.89E-03	1.01E-02	1.95E-03	7.09E-03	-4.54E-03	4.57E-03
5/30/2017	1.90E-02	1.61E-02	9.51E-03	1.12E-02	7.51E-03	7.61E-03
6/5/2017	-1.16E-02	1.16E-02	6.92E-03	7.00E-03	6.41E-03	6.51E-03
6/12/2017	2.10E-03	7.97E-03	8.65E-03	1.02E-02	-4.32E-03	4.30E-03
6/19/2017	2.05E-03	7.79E-03	1.27E-02	9.09E-03	6.62E-03	6.70E-03
6/26/2017	1.41E-02	1.01E-02	7.03E-03	1.47E-02	6.78E-03	6.83E-03
7/10/2017	1.27E-02	9.13E-03	1.90E-02	1.11E-02	-1.11E-05	1.64E-04
7/17/2017	1.34E-02	9.48E-03	1.34E-02	9.52E-03	-4.27E-03	4.37E-03
8/7/2017	1.28E-02	9.04E-03	8.49E-03	9.97E-03	0.00E+00	7.58E-03
8/14/2017	2.32E-03	8.39E-03	9.30E-03	1.09E-02	6.84E-03	6.85E-03
8/21/2017	7.03E-03	7.04E-03	0.00E+00	8.76E-03	0.00E+00	7.93E-03
9/18/2017	6.51E-03	6.58E-03	6.54E-03	7.41E-03	0.00E+00	8.76E-03
9/25/2017	8.32E-03	9.78E-03	-4.22E-03	4.29E-03	-9.11E-06	1.34E-04
10/2/2017	1.75E-02	1.02E-02	2.32E-02	1.21E-02	-9.11E-06	1.33E-04
10/9/2017	1.70E-02	1.36E-02	1.69E-02	1.38E-02	1.41E-02	1.00E-02
12/4/2017	6.92E-03	6.93E-03	4.59E-03	1.17E-02	-4.49E-03	4.49E-03
12/11/2017	1.02E-02	1.19E-02	2.53E-03	9.17E-03	-4.22E-03	4.22E-03
12/18/2017	6.62E-03	6.61E-03	6.59E-03	6.63E-03	-3.16E-05	4.63E-04

Table 20 Radionuclides in Liquid Effluent Samples (continued)

Location: U3R-2A ETP Outfall at Road C (continued)

Sample Date	Cm-244		Gross Beta		Gross Alpha	
	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)	Results (pCi/L)	Standard Dev. (pCi/L)
1/9/2017	-4.32E-03	4.34E-03	2.36E+00	4.17E-01	1.11E-01	1.44E-01
1/17/2017	0.00E+00	7.48E-03	3.78E-01	2.78E-01	1.21E-01	1.51E-01
1/23/2017	0.00E+00	9.89E-03	7.38E-01	3.08E-01	1.96E-01	1.60E-01
1/30/2017	1.38E-02	9.74E-03	8.08E-01	3.00E-01	-9.84E-02	2.02E-02
2/6/2017	1.38E-02	9.78E-03	5.05E-01	2.73E-01	9.78E-03	1.01E-01
2/13/2017	0.00E+00	7.18E-03	1.18E+00	2.48E-01	6.16E-02	8.84E-02
2/27/2017	0.00E+00	8.11E-03	2.48E+00	4.02E-01	-4.68E-02	3.48E-02
3/6/2017	6.76E-03	6.76E-03	8.65E-01	2.89E-01	-4.57E-02	3.50E-02
3/13/2017	-4.24E-03	4.25E-03	9.49E-01	3.12E-01	1.09E-02	1.14E-01
5/8/2017	-3.41E-05	4.99E-04	2.02E+00	3.91E-01	4.14E-01	2.61E-01
5/15/2017	-3.41E-05	4.95E-04	-1.65E-01	2.22E-01	6.03E-03	1.21E-01
5/22/2017	-3.41E-05	4.99E-04	3.76E-01	2.76E-01	4.89E-03	1.19E-01
5/30/2017	7.46E-03	7.46E-03	2.09E-01	2.63E-01	1.18E-01	1.64E-01
6/5/2017	0.00E+00	7.88E-03	4.89E-01	2.80E-01	-9.51E-02	3.48E-02
6/12/2017	0.00E+00	7.27E-03	1.78E-01	2.54E-01	4.65E-03	1.05E-01
6/19/2017	6.57E-03	6.55E-03	4.41E-01	2.77E-01	-9.81E-02	3.59E-02
6/26/2017	0.00E+00	8.80E-03	1.31E-01	2.13E-01	5.19E-02	1.11E-01
7/10/2017	0.00E+00	8.29E-03	3.35E-01	2.60E-01	1.18E-01	1.50E-01
7/17/2017	-3.27E-05	4.78E-04	2.97E-01	2.55E-01	-8.08E-02	4.84E-02
8/7/2017	-3.27E-05	4.82E-04	6.76E-01	2.96E-01	2.70E-02	1.13E-01
8/14/2017	6.73E-03	6.82E-03	2.38E-01	2.57E-01	2.76E-02	1.11E-01
8/21/2017	-3.27E-05	4.81E-04	9.11E-01	3.08E-01	1.16E-01	1.49E-01
9/18/2017	-4.54E-05	6.65E-04	8.08E-01	3.12E-01	3.22E-01	2.02E-01
9/25/2017	0.00E+00	8.15E-03	3.59E-01	2.69E-01	1.18E-01	1.38E-01
10/2/2017	0.00E+00	8.00E-03	2.08E-01	2.30E-01	2.22E-02	1.00E-01
10/9/2017	0.00E+00	8.67E-03	3.57E-01	2.43E-01	-7.43E-02	2.87E-02
12/4/2017	-4.43E-03	4.44E-03	4.03E-01	2.48E-01	-6.59E-02	4.56E-02
12/11/2017	-4.16E-03	4.17E-03	3.46E-01	2.45E-01	1.16E-01	1.40E-01
12/18/2017	-3.11E-05	4.56E-04	1.25E-02	2.10E-01	1.13E-01	1.36E-01

Table 21 Comparison of Annual Average Liquid Effluent Radionuclide Concentrations to DOE Derived Concentration Standards

Outfall or Facility	Radionuclide	Quantity of Radionuclides Released (Ci)	Average Effluent Concentration ($\mu\text{Ci/mL}$)	DOE DCS ($\mu\text{Ci/mL}$)	Fraction of DOE DCS
A Area: TB-2 Outfall at Road 1A	H-3	Below MDL	5.77E-08	1.90E-03	3.04E-05
	C-14	Below MDL	5.68E-10	6.20E-05	9.16E-06
	Co-60	Below MDL	-3.04E-10	7.20E-06	0.00E+00
	I-129	Below MDL	-4.75E-11	3.30E-07	0.00E+00
	Cs-137	Below MDL	3.53E-10	3.00E-06	1.18E-04
	U-234	2.96E-05	8.41E-11	6.80E-07	1.24E-04
	U-235	1.36E-06	6.49E-12	7.20E-07	9.02E-06
	U-238	2.15E-05	6.11E-11	7.50E-07	8.15E-05
	Pu-238	6.25E-07	5.32E-12	1.50E-07	3.54E-05
	Pu-239	Below MDL	1.13E-12	1.40E-07	8.07E-06
	Tc-99	Below MDL	9.11E-10	4.40E-05	2.07E-05
	Sum of Fractions				4.36E-04
	Sum of Fractions Excluding H-3				4.05E-04
F Area: F-013 200-F Cooling Basin	H-3	1.38E-02	7.79E-07	1.90E-03	4.10E-04
	Co-60	Below MDL	1.01E-09	7.20E-06	1.41E-04
	Sr-89/90	Below MDL	3.59E-10	1.10E-06	3.26E-04
	I-129	Below MDL	2.93E-10	3.30E-07	8.88E-04
	Cs-137	Below MDL	1.63E-09	3.00E-06	5.44E-04
	U-234	2.27E-06	1.30E-10	6.80E-07	1.91E-04
	U-235	Below MDL	6.90E-13	7.20E-07	9.58E-07
	Np-237	Below MDL	8.36E-12	3.20E-07	2.61E-05
	U-238	1.30E-06	8.53E-11	7.50E-07	1.14E-04
	Pu-238	Below MDL	2.31E-11	1.50E-07	1.54E-04
	Pu-239	5.01E-07	3.54E-11	1.40E-07	2.53E-04
	Am-241	1.10E-07	1.77E-11	1.70E-07	1.04E-04
	Cm-244	2.46E-07	2.52E-11	2.60E-07	9.69E-05
	Tc-99	3.78E-05	2.40E-09	4.40E-05	5.45E-05
	Sum of Fractions				3.30E-03
	Sum of Fractions Excluding H-3				2.89E-03

Table 21 Comparison of Annual Average Liquid Effluent Radionuclide Concentrations to DOE Derived Concentration Standards (continued)

Outfall or Facility	Radionuclide	Quantity of Radionuclides Released (Ci)	Average Effluent Concentration ($\mu\text{Ci/mL}$)	DOE DCS ($\mu\text{Ci/mL}$)	Fraction of DOE DCS
F-05	H-3	1.02E-03	2.74E-07	1.90E-03	1.44E-04
	C-14	3.13E-05	1.12E-08	6.20E-05	1.81E-04
	Co-60	Below MDL	1.31E-09	7.20E-06	1.82E-04
	Sr-89/90	1.85E-05	2.82E-09	1.10E-06	2.57E-03
	I-129	Below MDL	-7.80E-11	3.30E-07	0.00E+00
	Cs-137	Below MDL	1.77E-09	3.00E-06	5.91E-04
	U-234	2.57E-07	8.30E-11	6.80E-07	1.22E-04
	U-235	Below MDL	6.57E-12	7.20E-07	9.13E-06
	Np-237	Below MDL	1.41E-12	3.20E-07	4.42E-06
	U-238	3.21E-07	9.52E-11	7.50E-07	1.27E-04
	Pu-238	2.99E-09	6.07E-12	1.50E-07	4.05E-05
	Pu-239	3.01E-08	1.02E-11	1.40E-07	7.27E-05
	Am-241	9.68E-08	3.36E-11	1.70E-07	1.98E-04
	Cm-244	4.44E-09	5.31E-12	2.60E-07	2.04E-05
	Tc-99	2.51E-06	1.55E-09	4.40E-05	3.51E-05
	Sum of Fractions				4.30E-03
	Sum of Fractions Excluding H-3				4.15E-03
FM-3 F-Area Effluent	H-3	3.13E-02	3.09E-07	1.90E-03	1.63E-04
	C-14	Below MDL	-1.42E-09	6.20E-05	0.00E+00
	Co-60	Below MDL	6.77E-11	7.20E-06	9.40E-06
	Sr-89/90	6.12E-06	3.09E-10	1.10E-06	2.81E-04
	I-129	1.22E-05	2.56E-10	3.30E-07	7.75E-04
	Cs-137	Below MDL	3.81E-10	3.00E-06	1.27E-04
	U-234	1.10E-05	1.04E-10	6.80E-07	1.52E-04
	U-235	5.24E-07	7.08E-12	7.20E-07	9.84E-06
	Np-237	Below MDL	2.22E-12	3.20E-07	6.95E-06
	U-238	1.06E-05	1.02E-10	7.50E-07	1.36E-04
	Pu-238	8.61E-07	7.41E-12	1.50E-07	4.94E-05
	Pu-239	1.22E-07	6.82E-12	1.40E-07	4.87E-05
	Am-241	2.98E-07	5.36E-12	1.70E-07	3.15E-05
	Cm-244	Below MDL	2.16E-12	2.60E-07	8.32E-06
	Tc-99	1.08E-05	1.58E-09	4.40E-05	3.59E-05
	Sum of Fractions				1.83E-03
	Sum of Fractions Excluding H-3				1.67E-03

Table 21 Comparison of Annual Average Liquid Effluent Radionuclide Concentrations to DOE Derived Concentration Standards (continued)

Outfall or Facility	Radionuclide	Quantity of Radionuclides Released (Ci)	Average Effluent Concentration ($\mu\text{Ci/mL}$)	DOE DCS ($\mu\text{Ci/mL}$)	Fraction of DOE DCS
F-Tank Farm: F-012 281-8F Retention Basin	H-3	3.91E-02	7.18E-07	1.90E-03	3.78E-04
	Co-60	Below MDL	7.99E-10	7.20E-06	1.11E-04
	Sr-89/90	4.16E-05	1.45E-09	1.10E-06	1.32E-03
	I-129	Below MDL	1.73E-10	3.30E-07	5.24E-04
	Cs-137	1.24E-04	5.24E-09	3.00E-06	1.75E-03
	U-234	4.41E-06	7.08E-11	6.80E-07	1.04E-04
	U-235	Below MDL	1.01E-11	7.20E-07	1.41E-05
	Np-237	Below MDL	4.92E-12	3.20E-07	1.54E-05
	U-238	6.37E-06	9.80E-11	7.50E-07	1.31E-04
	Pu-238	1.07E-06	3.13E-11	1.50E-07	2.09E-04
	Pu-239	Below MDL	1.14E-11	1.40E-07	8.11E-05
	Am-241	Below MDL	5.49E-12	1.70E-07	3.23E-05
	Cm-244	Below MDL	2.81E-12	2.60E-07	1.08E-05
	Tc-99	7.42E-05	1.46E-09	4.40E-05	3.33E-05
	Sum of Fractions				4.71E-03
	Sum of Fractions Excluding H-3				4.33E-03
H Area: FM-1C H-Area Effluent	H-3	1.04E+00	2.88E-06	1.90E-03	1.52E-03
	C-14	Below MDL	-2.67E-10	6.20E-05	0.00E+00
	Co-60	Below MDL	-2.86E-10	7.20E-06	0.00E+00
	Sr-89/90	3.92E-04	1.19E-09	1.10E-06	1.09E-03
	Cs-137	8.78E-05	2.07E-09	3.00E-06	6.90E-04
	U-234	6.17E-06	1.79E-11	6.80E-07	2.63E-05
	U-235	Below MDL	2.47E-12	7.20E-07	3.44E-06
	Np-237	4.21E-07	6.03E-12	3.20E-07	1.88E-05
	U-238	6.54E-06	1.89E-11	7.50E-07	2.52E-05
	Pu-238	1.95E-04	4.34E-10	1.50E-07	2.89E-03
	Pu-239	1.80E-05	4.18E-11	1.40E-07	2.99E-04
	Am-241	2.08E-05	5.40E-11	1.70E-07	3.18E-04
	Cm-244	4.38E-06	1.22E-11	2.60E-07	4.67E-05
	Sum of Fractions				6.92E-03
	Sum of Fractions Excluding H-3				5.41E-03

Table 21 Comparison of Annual Average Liquid Effluent Radionuclide Concentrations to DOE Derived Concentration Standards (continued)

Outfall or Facility	Radionuclide	Quantity of Radionuclides Released (Ci)	Average Effluent Concentration ($\mu\text{Ci/mL}$)	DOE DCS ($\mu\text{Ci/mL}$)	Fraction of DOE DCS
H-004	H-3	5.48E-01	1.12E-05	1.90E-03	5.89E-03
	Co-60	Below MDL	4.41E-10	7.20E-06	6.13E-05
	Sr-89/90	Below MDL	6.73E-10	1.10E-06	6.12E-04
	Cs-137	Below MDL	3.69E-10	3.00E-06	1.23E-04
	U-234	6.26E-05	1.40E-09	6.80E-07	2.05E-03
	U-235	1.67E-06	5.61E-11	7.20E-07	7.80E-05
	U-238	4.04E-06	9.21E-11	7.50E-07	1.23E-04
	Pu-238	6.59E-07	3.19E-11	1.50E-07	2.13E-04
	Pu-239	Below MDL	4.76E-12	1.40E-07	3.40E-05
	Sum of Fractions				9.18E-03
	Sum of Fractions Excluding H-3				3.30E-03
H-ETP: U3R-2A ETP Outfall at Road C	H-3	3.05E+01	1.73E-03	1.90E-03	9.12E-01
	C-14	1.30E-04	9.55E-09	6.20E-05	1.54E-04
	Co-60	Below MDL	5.03E-10	7.20E-06	6.98E-05
	Sr-89/90	Below MDL	4.36E-10	1.10E-06	3.97E-04
	Cs-137	Below MDL	1.43E-09	3.00E-06	4.78E-04
	U-234	1.05E-06	5.98E-11	6.80E-07	8.79E-05
	U-235	2.00E-08	8.32E-12	7.20E-07	1.16E-05
	Np-237	Below MDL	6.57E-12	3.20E-07	2.05E-05
	U-238	8.87E-07	5.35E-11	7.50E-07	7.13E-05
	Pu-238	Below MDL	8.89E-12	1.50E-07	5.93E-05
	Pu-239	4.47E-08	8.62E-12	1.40E-07	6.16E-05
	Am-241	Below MDL	2.41E-12	1.70E-07	1.42E-05
	Cm-244	Below MDL	1.30E-12	2.60E-07	4.99E-06
	Sum of Fractions				9.13E-01
	Sum of Fractions Excluding H-3				1.43E-03

Table 21 Comparison of Annual Average Liquid Effluent Radionuclide Concentrations to DOE Derived Concentration Standards (continued)

Outfall or Facility	Radionuclide	Quantity of Radionuclides Released (Ci)	Average Effluent Concentration ($\mu\text{Ci/mL}$)	DOE DCS ($\mu\text{Ci/mL}$)	Fraction of DOE DCS
H-Tank Farm: H-017 281-8H Retention Basin	H-3	2.85E-01	2.01E-06	1.90E-03	1.06E-03
	Co-60	Below MDL	3.71E-10	7.20E-06	5.15E-05
	Sr-89/90	2.71E-04	2.84E-09	1.10E-06	2.58E-03
	I-129	Below MDL	3.60E-10	3.30E-07	1.09E-03
	Cs-137	3.71E-03	2.84E-08	3.00E-06	9.46E-03
	U-234	8.31E-06	7.39E-11	6.80E-07	1.09E-04
	U-235	Below MDL	5.29E-12	7.20E-07	7.34E-06
	Np-237	Below MDL	3.86E-12	3.20E-07	1.21E-05
	U-238	7.05E-06	6.60E-11	7.50E-07	8.81E-05
	Pu-238	1.99E-05	1.67E-10	1.50E-07	1.11E-03
	Pu-239	1.28E-06	2.42E-11	1.40E-07	1.73E-04
	Am-241	9.48E-07	1.90E-11	1.70E-07	1.12E-04
	Cm-244	Below MDL	3.82E-12	2.60E-07	1.47E-05
	Tc-99	2.01E-04	2.40E-09	4.40E-05	5.45E-05
	Sum of Fractions				1.59E-02
	Sum of Fractions Excluding H-3				1.49E-02
HP-52 H-Area Tank Farm	H-3	9.98E-02	8.48E-07	1.90E-03	4.46E-04
	Co-60	Below MDL	4.79E-10	7.20E-06	6.66E-05
	Sr-89/90	Below MDL	2.03E-10	1.10E-06	1.85E-04
	Cs-137	Below MDL	1.71E-09	3.00E-06	5.68E-04
	U-234	3.66E-06	3.11E-11	6.80E-07	4.57E-05
	U-235	Below MDL	1.37E-12	7.20E-07	1.90E-06
	U-238	4.03E-06	3.44E-11	7.50E-07	4.59E-05
	Pu-238	3.63E-07	9.46E-12	1.50E-07	6.31E-05
	Pu-239	Below MDL	3.04E-12	1.40E-07	2.17E-05
	Am-241	9.16E-07	9.39E-12	1.70E-07	5.52E-05
	Cm-244	Below MDL	4.85E-13	2.60E-07	1.87E-06
	Sum of Fractions				1.50E-03
	Sum of Fractions Excluding H-3				1.05E-03
K-Area: K Canal	H-3	4.68E-02	2.04E-07	1.90E-03	1.07E-04
	Co-60	Below MDL	-3.51E-10	7.20E-06	0.00E+00
	Sr-89/90	3.05E-05	9.80E-11	1.10E-06	8.91E-05
	Cs-137	Below MDL	-5.60E-10	3.00E-06	0.00E+00
	Sum of Fractions				1.97E-04
	Sum of Fractions Excluding H-3				8.91E-05

Table 21 Comparison of Annual Average Liquid Effluent Radionuclide Concentrations to DOE Derived Concentration Standards (continued)

Outfall or Facility	Radionuclide	Quantity of Radionuclides Released (Ci)	Average Effluent Concentration ($\mu\text{Ci/mL}$)	DOE DCS ($\mu\text{Ci/mL}$)	Fraction of DOE DCS
L Area: L-07	H-3	3.44E-01	2.16E-07	1.90E-03	1.14E-04
	Co-60	Below MDL	1.01E-10	7.20E-06	1.41E-05
	Sr-89/90	Below MDL	2.44E-10	1.10E-06	2.22E-04
	Cs-137	Below MDL	-8.98E-10	3.00E-06	0.00E+00
	Sum of Fractions				3.50E-04
	Sum of Fractions Excluding H-3				2.36E-04
S Area: S-004	H-3	2.96E-01	4.67E-06	1.90E-03	2.46E-03
	Co-60	Below MDL	-4.74E-10	7.20E-06	0.00E+00
	Sr-89/90	1.66E-05	1.22E-09	1.10E-06	1.11E-03
	Cs-137	Below MDL	7.25E-10	3.00E-06	2.42E-04
	U-234	3.70E-06	8.72E-11	6.80E-07	1.28E-04
	U-235	Below MDL	1.21E-11	7.20E-07	1.68E-05
	U-238	5.10E-06	9.91E-11	7.50E-07	1.32E-04
	Pu-238	4.24E-07	2.90E-11	1.50E-07	1.93E-04
	Pu-239	Below MDL	-1.98E-12	1.40E-07	0.00E+00
	Sum of Fractions				4.28E-03
	Sum of Fractions Excluding H-3				1.82E-03
Tritium: HP-15 Tritium Facility Outfall	H-3	2.13E+00	6.51E-06	1.90E-03	3.43E-03
	Co-60	Below MDL	1.14E-09	7.20E-06	1.59E-04
	Sr-89/90	Below MDL	8.65E-11	1.10E-06	7.86E-05
	Cs-137	Below MDL	1.33E-09	3.00E-06	4.43E-04
	Sum of Fractions				4.11E-03
	Sum of Fractions Excluding H-3				6.80E-04

Table 22 Radionuclides in Stormwater Basin Water

Location: E-05

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/9/2017	6.14E+03	2.64E+02	-1.03E+00	2.05E+00	-2.59E+00	1.93E+00
2/13/2017	5.78E+03	2.58E+02	-1.22E+00	2.12E+00	-1.88E+00	2.27E+00
4/10/2017	7.62E+03	3.00E+02	1.99E+00	1.87E+00	6.81E-01	2.17E+00
8/14/2017	5.51E+03	2.50E+02	-1.34E+00	2.00E+00	2.36E+00	2.01E+00
9/18/2017	7.16E+03	2.78E+02	-7.22E-01	1.88E+00	2.21E+00	2.03E+00
10/9/2017	8.70E+02	1.64E+02	2.48E+00	2.04E+00	2.86E+00	2.03E+00
11/13/2017	3.59E+03	2.26E+02	-2.76E-01	1.84E+00	-1.58E-01	1.99E+00
12/11/2017	7.92E+03	2.95E+02	-4.86E-01	1.67E+00	1.10E+00	2.00E+00

Sample Date	Tc-99		C-14		Sr-89/90	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/9/2017	8.24E-01	7.87E-01	8.19E+00	4.05E+00	3.68E-01	4.44E-01
2/13/2017	2.06E+00	7.79E-01	1.55E+00	3.75E+00	8.81E-01	4.77E-01
4/10/2017	3.27E+00	8.72E-01	1.29E+00	3.89E+00	8.03E-02	2.38E-01
8/14/2017	5.62E-01	7.53E-01	2.76E-01	4.17E+00	2.09E-01	3.75E-01
9/18/2017	1.69E+00	8.67E-01	-9.95E-01	4.15E+00	-9.00E-02	3.66E-01
10/9/2017	-2.09E+00	8.13E-01	2.11E+00	4.54E+00	1.45E-01	3.92E-01
11/13/2017	1.80E+00	8.00E-01	1.07E+00	4.93E+00	2.55E-01	3.74E-01
12/11/2017	1.21E+00	7.57E-01	-3.41E+00	4.21E+00	9.49E-01	4.26E-01

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/9/2017	2.48E+00	6.99E-01	8.51E-01	4.09E-01
2/13/2017	9.73E-01	4.32E-01	7.70E-01	2.81E-01
4/10/2017	2.52E+00	6.97E-01	8.24E-01	4.06E-01
8/14/2017	3.62E+00	7.37E-01	8.24E-01	3.99E-01
9/18/2017	2.23E+00	6.53E-01	2.04E-01	2.41E-01
10/9/2017	5.27E+00	8.80E-01	1.21E+00	4.81E-01
11/13/2017	5.38E+00	8.27E-01	1.26E+00	4.95E-01
12/11/2017	2.26E+00	6.19E-01	5.14E-01	3.28E-01

Table 22 Radionuclides in Stormwater Basin Water (continued)

Location: EAV Basin North (E-004)

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/9/2017	1.08E+04	3.47E+02	-1.15E+00	1.70E+00	1.94E+00	2.19E+00
2/13/2017	7.92E+03	3.05E+02	-6.38E-01	1.82E+00	-1.92E+00	2.20E+00
3/13/2017	4.97E+03	2.47E+02	-1.55E+00	1.95E+00	-8.16E-01	2.08E+00
4/10/2017	5.95E+03	2.67E+02	5.73E-01	1.90E+00	-2.95E+00	2.10E+00
5/8/2017	5.38E+03	2.53E+02	-2.03E+00	2.34E+00	9.78E-01	2.14E+00
6/12/2017	5.30E+03	2.70E+02	1.46E+00	1.98E+00	-2.73E-01	2.04E+00
7/10/2017	5.57E+03	2.73E+02	-3.95E+00	1.91E+00	-9.32E-01	1.99E+00
8/14/2017	5.16E+03	2.49E+02	-1.08E+00	2.28E+00	-2.21E+00	2.11E+00
9/18/2017	5.62E+03	2.57E+02	9.57E-01	2.02E+00	6.24E-01	2.09E+00
10/9/2017	5.19E+03	2.51E+02	1.06E+00	1.69E+00	2.06E+00	2.21E+00
11/13/2017	6.11E+03	2.58E+02	-1.86E+00	1.88E+00	1.62E+00	2.17E+00
12/11/2017	7.65E+03	2.91E+02	1.80E+00	1.74E+00	5.57E-01	2.11E+00

Sample Date	Tc-99		C-14		Sr-89/90	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/9/2017	2.35E-01	7.71E-01	2.78E+00	4.01E+00	1.52E-01	4.27E-01
2/13/2017	2.15E+00	7.89E-01	3.32E+00	3.84E+00	7.43E-01	4.63E-01
3/13/2017	4.30E+00	1.04E+00	2.34E+00	3.77E+00	3.73E-01	3.66E-01
4/10/2017	2.33E+00	7.61E-01	-7.81E-01	3.93E+00	4.08E-01	2.69E-01
5/8/2017	4.43E-01	7.62E-01	1.14E+01	4.39E+00	6.14E-01	4.63E-01
6/12/2017	1.36E+00	7.55E-01	9.70E+00	4.41E+00	-4.59E-02	3.53E-01
7/10/2017	3.86E-01	7.30E-01	-6.86E-01	3.96E+00	1.49E+00	5.22E-01
8/14/2017	1.05E+00	7.46E-01	1.47E+00	4.14E+00	6.54E-01	4.10E-01
9/18/2017	3.27E+00	7.97E-01	-3.65E+00	4.17E+00	5.16E-01	4.32E-01
10/9/2017	-2.02E+00	7.72E-01	1.39E+00	4.38E+00	7.41E-03	3.65E-01
11/13/2017	1.14E+00	7.37E-01	-1.68E+00	4.80E+00	3.00E-02	2.34E-01
12/11/2017	8.03E-01	7.31E-01	-5.68E+00	4.26E+00	2.73E-01	3.24E-01

Table 22 Radionuclides in Stormwater Basin Water (continued)

Location: EAV Basin North (E-004) (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/9/2017	2.51E+00	6.95E-01	6.59E-01	3.61E-01
2/13/2017	1.14E+00	4.26E-01	1.05E-01	1.49E-01
3/13/2017	1.92E+00	6.09E-01	1.68E-01	2.19E-01
4/10/2017	1.03E+00	5.80E-01	6.35E-01	3.55E-01
5/8/2017	1.92E+00	6.06E-01	3.05E-02	1.60E-01
6/12/2017	2.06E+00	6.42E-01	4.81E-03	1.71E-01
7/10/2017	5.46E-01	4.98E-01	4.86E-01	3.15E-01
8/14/2017	1.67E+00	5.95E-01	4.92E-01	3.19E-01
9/18/2017	1.56E+00	6.01E-01	2.00E-01	2.35E-01
10/9/2017	3.24E+00	7.33E-01	3.14E-02	1.74E-01
11/13/2017	3.08E+00	6.79E-01	1.20E+00	4.70E-01
12/11/2017	1.99E+00	5.96E-01	1.93E-01	2.33E-01

Table 22 Radionuclides in Stormwater Basin Water (continued)

Location: EAV Basin South (E-003)

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/9/2017	6.30E+03	2.83E+02	-3.03E-01	1.85E+00	-1.38E+00	2.37E+00
2/13/2017	1.06E+04	3.47E+02	-2.02E+00	1.98E+00	1.37E+00	2.28E+00
5/8/2017	8.97E+03	3.21E+02	2.12E+00	1.96E+00	2.92E-01	2.13E+00
6/12/2017	1.03E+04	3.50E+02	-1.56E+00	2.13E+00	1.33E+00	2.13E+00
8/14/2017	4.27E+03	2.39E+02	9.97E-01	1.77E+00	-1.40E-01	2.13E+00
10/9/2017	2.66E+03	2.03E+02	-1.84E+00	2.07E+00	-2.16E+00	2.12E+00
12/11/2017	3.03E+03	2.15E+02	-1.78E+00	2.22E+00	-2.95E+00	2.17E+00

Sample Date	Tc-99		C-14		Sr-89/90	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/9/2017	1.25E-01	7.70E-01	5.76E+00	4.05E+00	2.32E-01	4.16E-01
2/13/2017	1.78E+00	7.75E-01	3.03E+00	4.01E+00	2.86E-01	1.91E-01
5/8/2017	3.05E-01	7.62E-01	4.97E-01	4.29E+00	8.62E-02	4.22E-01
6/12/2017	1.70E+00	7.61E-01	-1.10E+01	4.10E+00	8.16E-01	2.34E-01
8/14/2017	1.91E+00	7.59E-01	5.95E+00	4.33E+00	9.16E-02	3.69E-01
10/9/2017	-2.54E+00	7.99E-01	-4.54E+00	4.30E+00	5.76E-01	4.47E-01
12/11/2017	1.82E+00	7.55E-01	-4.78E+00	4.31E+00	8.86E-02	3.55E-01

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/9/2017	4.16E+00	7.97E-01	4.92E-01	3.20E-01
2/13/2017	2.04E+00	4.88E-01	8.38E-01	2.87E-01
5/8/2017	3.41E+00	7.14E-01	3.46E-01	2.77E-01
6/12/2017	2.81E+00	7.10E-01	5.16E-01	3.47E-01
8/14/2017	1.48E+00	5.80E-01	4.89E-01	3.17E-01
10/9/2017	3.92E+00	7.84E-01	3.59E-01	2.91E-01
12/11/2017	2.56E+00	6.39E-01	1.93E-01	2.33E-01

Table 22 Radionuclides in Stormwater Basin Water (continued)

Location: Pond 400

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/9/2017	3.43E+02	1.49E+02	-1.16E+00	2.08E+00	5.24E-01	2.11E+00
2/13/2017	2.68E+02	1.30E+02	-1.76E+00	1.99E+00	8.14E-02	2.13E+00
3/13/2017	3.16E+02	1.44E+02	1.06E+00	1.93E+00	-1.71E+00	2.12E+00
4/10/2017	2.53E+02	1.47E+02	-1.40E+00	2.00E+00	4.30E+00	2.27E+00
5/8/2017	3.51E+02	1.43E+02	8.00E-01	1.99E+00	-1.51E-01	2.18E+00
6/12/2017	5.54E+01	1.50E+02	8.08E-01	2.09E+00	-3.76E+00	2.25E+00
7/10/2017	3.27E+01	1.48E+02	1.40E+00	1.84E+00	1.45E+00	1.95E+00
8/14/2017	4.78E+02	1.41E+02	1.49E+00	2.04E+00	-1.16E+00	2.25E+00
9/18/2017	7.78E+01	1.68E+02	-2.64E+00	2.04E+00	-1.76E+00	2.05E+00
10/9/2017	7.05E+00	1.32E+02	6.92E-02	1.98E+00	-3.65E+00	2.24E+00
11/13/2017	-5.16E+01	1.35E+02	2.57E+00	1.81E+00	2.01E+00	2.08E+00
12/11/2017	2.63E+02	1.47E+02	2.12E+00	1.90E+00	2.06E+00	1.84E+00

Sample Date	Tc-99		Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/9/2017	4.43E-01	7.75E-01	4.22E+00	8.04E-01	6.62E-01	3.63E-01
2/13/2017	2.11E+00	8.53E-01	4.51E+00	5.99E-01	9.95E-01	3.09E-01
3/13/2017	3.00E+00	7.91E-01	3.68E+00	7.38E-01	8.32E-01	4.02E-01
4/10/2017	2.54E+00	7.63E-01	4.03E+00	7.78E-01	1.64E-01	2.36E-01
5/8/2017	1.24E+00	7.86E-01	5.73E+00	8.55E-01	6.65E-01	3.57E-01
6/12/2017	2.31E+00	7.68E-01	4.78E+00	8.18E-01	-1.66E-01	5.85E-02
7/10/2017	3.19E-01	7.28E-01	5.43E+00	8.42E-01	4.97E-01	3.24E-01
8/14/2017	1.24E+00	7.49E-01	4.59E+00	7.93E-01	1.82E-01	2.33E-01
9/18/2017	3.24E+00	9.59E-01	4.97E+00	8.47E-01	1.01E+00	4.34E-01
10/9/2017	-2.12E+00	8.12E-01	6.59E+00	9.48E-01	1.19E+00	4.74E-01
11/13/2017	4.03E-01	7.26E-01	6.78E+00	9.04E-01	1.79E+00	5.82E-01
12/11/2017	2.86E+00	8.50E-01	5.11E+00	8.13E-01	1.66E+00	5.44E-01

Sample Date	C-14		Sr-89/90	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/9/2017	6.76E-01	3.95E+00	1.21E+00	4.89E-01
2/13/2017	3.49E+00	3.78E+00	9.92E-01	4.63E-01
3/13/2017	2.20E+00	3.94E+00	1.38E+00	4.80E-01

Table 22 Radionuclides in Stormwater Basin Water (continued)

Location: SWDF Basin North (E-002)

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/9/2017	7.73E+03	2.97E+02	6.46E-01	1.88E+00	1.81E+00	1.90E+00
2/13/2017	6.54E+03	2.78E+02	-1.26E+00	2.28E+00	1.61E+00	2.19E+00
3/13/2017	1.15E+04	3.44E+02	-1.14E+00	1.86E+00	-1.24E+00	2.08E+00
4/10/2017	1.30E+04	3.67E+02	3.16E+00	2.19E+00	1.59E+00	2.37E+00
5/8/2017	8.24E+03	3.01E+02	4.27E-02	2.10E+00	7.78E-01	2.06E+00
6/12/2017	8.73E+03	3.27E+02	1.35E+00	2.27E+00	-1.45E+00	2.07E+00
7/10/2017	6.86E+03	2.97E+02	2.14E+00	1.90E+00	-6.16E-01	2.00E+00
8/14/2017	4.32E+03	2.45E+02	1.11E+00	2.15E+00	1.37E+00	1.96E+00
9/18/2017	7.14E+03	2.91E+02	-2.13E+00	1.85E+00	1.01E+00	2.11E+00
10/9/2017	1.07E+04	3.32E+02	-1.61E+00	1.96E+00	-2.41E+00	2.06E+00
11/13/2017	1.84E+04	4.16E+02	9.38E-01	2.26E+00	-2.42E+00	2.16E+00

Sample Date	Tc-99		C-14		Sr-89/90	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/9/2017	-4.14E-02	7.66E-01	-5.19E+00	3.96E+00	9.03E-01	4.72E-01
2/13/2017	2.29E+00	8.23E-01	8.00E+00	3.86E+00	2.84E-01	4.20E-01
3/13/2017	2.04E+00	3.84E-01	-2.61E+00	3.87E+00	-1.31E-01	3.19E-01
4/10/2017	1.34E+00	7.47E-01	-3.89E+00	3.87E+00	4.35E-01	2.67E-01
5/8/2017	9.41E-01	7.69E-01	1.38E+00	4.28E+00	8.30E-02	4.35E-01
6/12/2017	1.62E+00	7.58E-01	-4.62E+00	4.18E+00	9.49E-01	4.36E-01
7/10/2017	2.21E-01	7.28E-01	-8.95E-01	4.19E+00	1.57E-01	4.41E-01
8/14/2017	5.95E-01	7.40E-01	9.97E+00	4.20E+00	5.11E-01	3.83E-01
9/18/2017	9.38E-01	7.70E-01	1.39E+00	4.22E+00	-1.95E-01	3.73E-01
10/9/2017	-1.38E+00	7.75E-01	-9.41E-01	4.33E+00	6.84E-01	4.31E-01
11/13/2017	4.62E-01	7.18E-01	-1.20E+01	4.15E+00	5.19E-01	3.97E-01

Table 22 Radionuclides in Stormwater Basin Water (continued)

Location: SWDF Basin North (E-002) (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/9/2017	2.89E+00	7.06E-01	2.46E-02	1.78E-01
2/13/2017	4.95E+00	6.07E-01	3.49E-01	2.09E-01
3/13/2017	6.97E-01	5.07E-01	1.71E-01	2.21E-01
4/10/2017	5.89E-01	5.26E-01	1.66E-01	2.32E-01
5/8/2017	3.00E-01	4.67E-01	5.00E-01	3.15E-01
6/12/2017	1.21E+00	5.85E-01	3.27E-01	2.85E-01
7/10/2017	3.95E+00	7.53E-01	2.67E-02	1.77E-01
8/14/2017	5.00E+00	8.18E-01	3.57E-01	2.96E-01
9/18/2017	4.30E+00	7.94E-01	3.73E-01	2.97E-01
10/9/2017	5.65E+00	8.76E-01	2.84E-02	1.79E-01
11/13/2017	5.41E+00	8.26E-01	7.41E-01	3.92E-01

Location: SWDF Basin South (E-001)

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/9/2017	4.51E+03	2.41E+02	1.23E+00	1.84E+00	-1.66E+00	2.07E+00
2/13/2017	2.78E+03	2.02E+02	1.90E+00	1.87E+00	-4.08E+00	2.27E+00
3/13/2017	2.92E+03	2.07E+02	9.03E-02	1.82E+00	-5.05E-01	2.25E+00
4/10/2017	2.69E+03	2.03E+02	3.54E-01	1.88E+00	2.23E+00	2.12E+00
5/8/2017	2.35E+03	2.00E+02	1.95E+00	1.86E+00	-2.15E+00	2.20E+00
6/12/2017	2.13E+03	2.21E+02	-7.89E-01	2.14E+00	-4.65E+00	2.36E+00
7/10/2017	1.94E+03	1.95E+02	1.48E+00	1.81E+00	2.14E+00	2.01E+00
8/14/2017	1.95E+03	1.87E+02	2.52E+00	2.11E+00	1.27E+00	2.04E+00
9/18/2017	2.95E+03	2.21E+02	-3.81E+00	2.14E+00	2.00E+00	2.07E+00
10/9/2017	4.16E+03	2.32E+02	-6.03E-01	1.95E+00	1.96E+00	2.00E+00
11/13/2017	4.32E+03	2.40E+02	3.73E+00	2.01E+00	-2.04E+00	2.02E+00
12/11/2017	3.22E+03	2.20E+02	8.38E-01	1.92E+00	4.32E+00	2.19E+00

Table 22 Radionuclides in Stormwater Basin Water (continued)

Location: SWDF Basin South (E-001)

Sample Date	Tc-99		C-14		Sr-89/90	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/9/2017	1.50E+00	9.00E-01	-1.56E+00	3.94E+00	9.08E-02	4.03E-01
2/13/2017	3.00E+00	9.78E-01	6.32E+00	3.87E+00	4.49E-01	4.36E-01
3/13/2017	4.27E+00	8.03E-01	8.00E+00	4.00E+00	2.57E-01	3.79E-01
4/10/2017	1.50E+00	7.48E-01	5.51E+00	4.04E+00	2.78E-01	2.57E-01
5/8/2017	1.29E+00	8.01E-01	6.57E+00	4.35E+00	1.37E-01	4.77E-01
6/12/2017	1.28E+00	7.58E-01	-3.19E+00	4.22E+00	9.70E-01	4.13E-01
7/10/2017	1.26E+00	7.46E-01	-7.89E-01	4.55E+00	1.86E-02	3.69E-01
8/14/2017	8.30E-01	7.43E-01	3.57E+01	4.48E+00	-8.43E-02	3.43E-01
9/18/2017	1.25E+00	8.29E-01	2.36E+00	4.17E+00	3.89E-01	4.23E-01
10/9/2017	-1.52E+00	8.04E-01	7.24E-01	4.38E+00	5.35E-01	4.05E-01
11/13/2017	2.66E-02	7.16E-01	-2.84E+00	4.19E+00	9.27E-01	3.01E-01
12/11/2017	1.57E+00	8.88E-01	1.40E+00	4.36E+00	9.65E-01	4.13E-01

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/9/2017	3.16E+00	7.32E-01	3.49E-01	2.89E-01
2/13/2017	2.09E+00	4.74E-01	-5.70E-02	1.02E-01
3/13/2017	1.91E+00	6.10E-01	3.30E-01	2.74E-01
4/10/2017	2.26E+00	6.65E-01	3.24E-01	2.82E-01
5/8/2017	2.28E+00	6.37E-01	3.51E-01	2.81E-01
6/12/2017	3.30E+00	7.28E-01	2.81E-03	1.70E-01
7/10/2017	2.81E+00	6.78E-01	3.35E-01	2.78E-01
8/14/2017	1.77E+00	6.28E-01	5.35E-01	3.35E-01
9/18/2017	2.95E+00	7.00E-01	4.05E-02	1.79E-01
10/9/2017	2.63E+00	6.95E-01	1.92E-01	2.35E-01
11/13/2017	3.11E+00	6.79E-01	7.03E-01	3.72E-01
12/11/2017	2.36E+00	6.26E-01	3.57E-01	2.86E-01

Table 22 Radionuclides in Stormwater Basin Water (continued)

Location: Z-Area Basin

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/9/2017	1.02E+03	1.61E+02	3.81E+00	1.99E+00	2.06E+02	1.53E+01
2/13/2017	1.74E+03	1.76E+02	-1.92E+00	2.01E+00	9.14E+01	7.99E+00
3/13/2017	8.65E+02	1.57E+02	-1.77E+00	2.24E+00	7.81E+01	8.06E+00
4/10/2017	6.84E+02	1.56E+02	2.10E+00	1.92E+00	1.20E+02	1.04E+01
5/8/2017	8.73E+02	1.57E+02	-6.76E-02	2.38E+00	1.39E+02	1.15E+01
6/12/2017	1.00E+03	1.73E+02	1.53E+00	1.86E+00	1.58E+02	1.22E+01
7/10/2017	1.49E+03	1.83E+02	1.02E+00	1.97E+00	2.08E+02	1.66E+01
8/14/2017	6.86E+02	1.48E+02	-2.10E-01	1.85E+00	2.28E+02	1.77E+01
9/18/2017	1.88E+02	1.67E+02	1.64E+00	1.98E+00	1.77E+02	1.44E+01
10/9/2017	1.87E+02	1.32E+02	-9.86E-01	1.58E+00	2.06E+02	1.67E+01
11/13/2017	1.10E+02	1.31E+02	1.99E+00	1.84E+00	1.23E+02	1.04E+01
12/11/2017	8.70E+01	1.39E+02	-2.05E-01	1.96E+00	1.40E+02	1.18E+01

Sample Date	Sr-89/90		I-129		U-234	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/9/2017	2.03E-01	7.73E-01	1.49E+00	7.47E-01	1.17E-01	2.95E-02
2/13/2017	5.86E-01	8.18E-01	-9.95E-03	2.54E-01	9.22E-02	2.73E-02
3/13/2017	-4.38E-01	3.43E-01	9.00E-02	2.73E-01	2.64E-02	1.01E-02
4/10/2017	1.46E-01	2.73E-01	3.81E-01	2.61E-01	4.84E-02	1.59E-02
5/8/2017	1.45E-01	4.03E-01	-5.22E-01	3.36E-01	5.43E-02	1.43E-02
6/12/2017	5.41E-01	3.51E-01	1.61E-01	2.52E-01	3.86E-02	1.28E-02
7/10/2017	1.40E-01	3.94E-01	-3.62E-02	3.32E-01	3.16E-02	1.18E-02
8/14/2017	9.46E-01	4.03E-01	-1.81E-02	3.01E-01	4.08E-02	1.36E-02
9/18/2017	2.23E-01	4.34E-01	-1.31E-01	3.12E-01	3.54E-02	1.18E-02
10/9/2017	6.59E-02	3.33E-01	8.00E-01	3.07E-01	4.65E-02	1.35E-02
11/13/2017	2.92E-01	2.68E-01	-4.51E-01	6.68E-01	3.05E-02	1.15E-02
12/11/2017	2.16E-01	3.31E-01	-9.73E-01	7.28E-01	5.49E-02	1.37E-02

Table 22 Radionuclides in Stormwater Basin Water (continued)

Location: Z-Area Basin (continued)

Sample Date	U-235		Np-237		U-238	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/9/2017	1.58E-02	1.12E-02	2.09E-03	7.52E-03	7.84E-02	2.46E-02
2/13/2017	2.28E-02	1.32E-02	0.00E+00	7.24E-03	6.73E-02	2.43E-02
3/13/2017	7.84E-03	5.57E-03	3.70E-03	3.71E-03	2.84E-02	1.06E-02
4/10/2017	-1.88E-05	5.50E-04	9.84E-03	9.13E-03	4.95E-02	1.55E-02
5/8/2017	7.43E-03	5.49E-03	0.00E+00	3.99E-03	4.22E-02	1.27E-02
6/12/2017	-1.25E-03	5.19E-03	7.78E-03	6.37E-03	3.95E-02	1.21E-02
7/10/2017	-5.81E-05	1.71E-03	-4.84E-03	3.51E-03	2.05E-02	1.05E-02
8/14/2017	3.76E-03	4.21E-03	-2.59E-03	2.67E-03	4.59E-02	1.29E-02
9/18/2017	3.65E-03	3.74E-03	-2.38E-03	2.47E-03	3.65E-02	1.30E-02
10/9/2017	7.62E-03	5.59E-03	1.03E-03	4.42E-03	4.03E-02	1.25E-02
11/13/2017	3.65E-03	3.67E-03	-2.33E-03	2.42E-03	3.54E-02	1.25E-02
12/11/2017	3.70E-03	3.71E-03	3.43E-03	3.48E-03	6.68E-02	1.52E-02

Sample Date	Pu-238		Pu-239		Am-241	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/9/2017	-6.27E-03	9.52E-03	8.16E-03	1.00E-02	-4.22E-03	4.26E-03
2/13/2017	7.95E-03	9.59E-03	1.19E-02	8.96E-03	6.30E-03	7.42E-03
3/13/2017	6.95E-02	1.75E-02	3.62E-03	4.38E-03	-2.22E-03	2.27E-03
4/10/2017	2.58E-02	1.02E-02	-2.50E-03	2.97E-03	-2.15E-03	2.16E-03
5/8/2017	2.92E-02	1.12E-02	1.40E-02	7.13E-03	0.00E+00	4.23E-03
6/12/2017	1.94E-02	9.21E-03	-3.89E-03	4.66E-03	3.16E-03	3.25E-03
7/10/2017	2.26E-02	1.01E-02	4.76E-03	5.62E-03	3.46E-03	3.49E-03
8/14/2017	7.70E-03	5.45E-03	1.28E-02	8.18E-03	4.78E-03	5.62E-03
9/18/2017	3.14E-02	1.09E-02	3.49E-03	3.50E-03	4.49E-03	5.27E-03
10/9/2017	8.57E-03	7.12E-03	3.19E-03	3.61E-03	-4.54E-06	1.34E-04
11/13/2017	-2.31E-03	2.35E-03	6.92E-03	4.89E-03	1.15E-03	4.38E-03
12/11/2017	1.14E-02	7.24E-03	-3.70E-06	1.57E-04	0.00E+00	4.37E-03

Table 22 Radionuclides in Stormwater Basin Water (continued)

Location: Z-Area Basin (continued)

Sample Date	Cm-244		Tc-99	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/9/2017	0.00E+00	6.99E-03	5.41E-01	7.76E-01
2/13/2017	-4.16E-03	4.16E-03	5.86E+00	1.11E+00
3/13/2017	3.30E-03	3.29E-03	6.00E+00	9.48E-01
4/10/2017	-2.13E-03	2.13E-03	3.14E+00	7.81E-01
5/8/2017	-1.70E-05	5.03E-04	4.49E+00	8.42E-01
6/12/2017	-2.09E-03	2.14E-03	3.70E+00	7.99E-01
7/10/2017	0.00E+00	4.05E-03	3.84E+00	9.13E-01
8/14/2017	7.05E-03	5.09E-03	3.00E+00	7.75E-01
9/18/2017	-2.27E-05	6.66E-04	5.08E+00	8.33E-01
10/9/2017	0.00E+00	3.93E-03	7.03E+00	9.67E-01
11/13/2017	-2.34E-03	2.34E-03	4.65E+00	8.37E-01
12/11/2017	0.00E+00	4.38E-03	6.78E+00	9.13E-01

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/9/2017	1.70E+02	4.42E+00	1.02E+00	4.74E-01
2/13/2017	6.84E+01	1.95E+00	3.92E-01	2.30E-01
3/13/2017	5.97E+01	2.46E+00	1.53E-01	2.18E-01
4/10/2017	7.14E+01	2.73E+00	3.68E-01	3.20E-01
5/8/2017	7.92E+01	2.81E+00	3.19E-01	2.72E-01
6/12/2017	1.09E+02	3.36E+00	3.11E-01	3.22E-01
7/10/2017	1.40E+02	3.89E+00	1.44E-01	2.29E-01
8/14/2017	1.23E+02	3.61E+00	-4.62E-03	1.71E-01
9/18/2017	1.17E+02	3.53E+00	3.32E-01	3.22E-01
10/9/2017	1.62E+02	4.25E+00	8.81E-01	4.49E-01
11/13/2017	8.65E+01	2.96E+00	3.22E-01	2.86E-01
12/11/2017	1.02E+02	3.20E+00	1.67E-01	2.32E-01

Table 23 Radionuclides in Stream Water

Stream: Tims Branch
Location: TB-5 Near Road C

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	3.59E+02	1.38E+02	-1.06E+00	2.13E+00	-1.69E+00	2.06E+00
3/7/2017	1.05E+02	1.47E+02	-7.51E-02	2.02E+00	-1.35E+00	2.03E+00
4/4/2017	-8.35E+01	1.62E+02	-2.32E+00	2.19E+00	-2.28E+00	1.99E+00
5/2/2017	2.70E-04	1.38E+02	-1.17E+00	1.97E+00	-6.16E-01	2.04E+00
6/6/2017	1.82E+02	1.60E+02	1.13E+00	1.87E+00	-1.09E+00	2.15E+00
7/5/2017	5.65E+02	1.62E+02	2.00E+00	2.28E+00	2.34E+00	2.04E+00
8/8/2017	4.05E+01	1.63E+02	7.97E-03	1.85E+00	1.24E+00	1.97E+00
9/6/2017	1.78E+02	1.49E+02	3.32E-01	1.89E+00	1.41E+00	2.16E+00
10/3/2017	1.74E+02	1.74E+02	9.81E-02	1.65E+00	1.25E+00	2.06E+00
11/7/2017	1.73E+02	1.34E+02	-1.39E+00	1.85E+00	9.43E-01	2.02E+00
12/5/2017	-1.68E+00	1.35E+02	3.76E+00	2.05E+00	-1.98E+00	2.33E+00
1/2/2018	2.18E+02	1.24E+02	4.49E+00	1.89E+00	2.26E+00	2.14E+00

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
1/30/2017	Sr-89/90	5.92E-02	4.84E-01
	I-129	-3.43E-01	2.60E-01
	U-234	1.25E+00	9.09E-02
	U-235	8.97E-02	2.16E-02
	U-238	1.32E+00	9.36E-02
	Pu-238	0.00E+00	6.42E-03
	Pu-239	7.65E-03	5.82E-03
	Am-241	4.81E-02	1.74E-02
	Cm-244	8.51E-03	6.03E-03
	Tc-99	2.76E-01	7.71E-01

Table 23 Radionuclides in Stream Water (continued)

Stream: Tims Branch (continued)
Location: TB-5 Near Road C (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	1.93E+00	2.20E-01	2.24E+00	2.57E-01
3/7/2017	2.41E+00	3.39E-01	9.49E+00	5.26E-01
4/4/2017	1.75E+00	2.23E-01	2.37E+00	2.57E-01
5/2/2017	5.14E+00	3.32E-01	9.00E+00	5.03E-01
6/6/2017	3.57E+00	2.85E-01	5.32E+00	3.81E-01
7/5/2017	1.93E+00	2.37E-01	3.38E+00	3.08E-01
8/8/2017	1.59E+00	2.24E-01	2.14E+00	2.49E-01
9/6/2017	1.08E+00	2.59E-01	4.78E+00	3.73E-01
10/3/2017	1.32E+00	2.01E-01	1.87E+00	2.32E-01
11/7/2017	1.76E+00	2.19E-01	2.50E+00	2.70E-01
12/5/2017	3.19E+00	2.69E-01	4.43E+00	3.55E-01
1/2/2018	2.97E+00	3.41E-01	6.84E+00	4.45E-01

Stream: Upper Three Runs
Location: Crouch Branch at Road 4

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	5.11E+03	2.44E+02	-1.59E+00	2.20E+00	7.84E-01	2.20E+00
3/7/2017	5.27E+03	2.46E+02	2.64E+00	2.14E+00	-5.14E-01	2.24E+00
4/4/2017	5.38E+03	2.63E+02	1.40E+00	1.76E+00	1.03E+00	2.28E+00
5/2/2017	5.24E+03	2.52E+02	1.36E+00	2.27E+00	-2.62E-01	2.21E+00
6/6/2017	5.16E+03	2.63E+02	1.61E+00	2.06E+00	2.08E+00	1.98E+00
7/5/2017	5.62E+03	2.70E+02	2.21E+00	2.02E+00	4.95E+00	1.78E+00
8/8/2017	3.32E+03	2.23E+02	1.07E+00	2.09E+00	-3.24E+00	2.16E+00
9/6/2017	4.22E+03	2.34E+02	-9.24E-01	2.17E+00	-1.53E-01	2.18E+00
10/3/2017	4.08E+02	1.69E+02	1.99E+00	1.78E+00	6.73E-01	1.94E+00
11/7/2017	3.68E+03	2.20E+02	4.00E+00	2.12E+00	3.16E+00	2.05E+00
12/5/2017	3.24E+03	2.14E+02	3.89E+00	1.62E+00	-1.75E+00	2.14E+00
1/2/2018	2.41E+03	1.81E+02	1.41E+00	1.72E+00	1.05E+00	2.08E+00

Table 23 Radionuclides in Stream Water (continued)

Stream: Upper Three Runs (continued)
Location: Crouch Branch at Road 4 (continued)

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
1/30/2017	Sr-89/90	2.37E-01	4.72E-01
	I-129	-1.16E-01	2.70E-01
	U-234	5.95E-02	2.56E-02
	U-235	-6.78E-03	6.74E-03
	U-238	6.22E-02	2.74E-02
	Pu-238	2.61E-03	6.66E-03
	Pu-239	-1.58E-04	1.46E-03
	Am-241	1.04E-02	1.24E-02
	Cm-244	0.00E+00	9.40E-03
	Tc-99	-1.09E+00	7.62E-01

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	9.05E-01	1.98E-01	2.33E-01	9.59E-02
3/7/2017	1.17E+00	1.85E-01	2.22E-01	8.84E-02
4/4/2017	1.41E+00	2.07E-01	8.70E-01	1.62E-01
5/2/2017	9.68E-01	1.95E-01	6.16E-01	1.42E-01
6/6/2017	1.06E+00	1.92E-01	5.14E-01	1.25E-01
7/5/2017	9.68E-01	1.75E-01	3.89E-01	1.17E-01
8/8/2017	9.59E-01	1.73E-01	1.51E-01	7.94E-02
9/6/2017	2.28E+00	2.44E-01	8.00E-01	1.59E-01
10/3/2017	2.44E+00	2.40E-01	1.54E+00	2.20E-01
11/7/2017	1.61E+00	2.08E-01	1.86E-01	9.36E-02
12/5/2017	1.27E+00	2.24E-01	5.46E-01	1.39E-01
1/2/2018	1.05E+00	2.21E-01	3.68E-01	1.24E-01

Table 23 Radionuclides in Stream Water (continued)

Stream: Upper Three Runs (continued)

Location: F-01

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	1.02E+03	1.50E+02	-3.32E-01	2.13E+00	8.27E-01	2.12E+00
3/7/2017	1.29E+03	1.56E+02	4.81E-01	1.73E+00	4.24E-01	1.95E+00
4/4/2017	-7.08E+01	1.23E+02	5.70E-01	2.10E+00	-6.14E-01	1.95E+00
6/6/2017	1.61E+02	1.43E+02	6.27E+00	2.40E+00	1.72E+00	2.04E+00
8/8/2017	1.13E+02	1.49E+02	1.15E-01	2.10E+00	3.46E+00	1.98E+00
11/7/2017	-1.70E+00	1.21E+02	1.13E+00	2.08E+00	-2.17E+00	2.10E+00
12/5/2017	4.92E+00	1.36E+02	-1.19E+00	2.20E+00	1.43E+00	2.04E+00

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
2/15/2017	Sr-89/90	2.15E-01	1.53E-01
	I-129	1.24E-01	2.57E-01
	U-234	5.86E-02	1.09E-02
	U-235	6.22E-03	3.64E-03
	Np-237	2.66E-03	3.15E-03
	U-238	6.70E-02	1.18E-02
	Pu-238	6.32E-03	3.31E-03
	Pu-239	5.22E-04	1.93E-03
	Am-241	5.89E-04	2.09E-03
	Cm-244	5.84E-04	2.11E-03
	Tc-99	2.08E-01	7.82E-01

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	2.78E+00	4.42E-01	9.97E-01	2.63E-01
3/7/2017	2.18E+00	2.25E-01	6.03E-01	1.42E-01
4/4/2017	2.55E+00	2.53E-01	1.09E+00	1.88E-01
6/6/2017	2.30E+00	2.58E-01	9.16E-01	1.69E-01
8/8/2017	2.06E+00	2.37E-01	5.32E-01	1.39E-01
11/7/2017	2.07E+00	2.25E-01	4.62E-01	1.28E-01
12/5/2017	1.16E+00	3.73E-01	1.85E-01	1.55E-01

Table 23 Radionuclides in Stream Water (continued)

Stream: Upper Three Runs (continued)

Location: U3R-2 F Storm Sewer

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	4.38E+02	1.34E+02	-2.15E+00	1.86E+00	3.05E+00	2.26E+00
3/7/2017	-3.57E+00	1.27E+02	1.97E+00	1.96E+00	8.86E-01	2.07E+00
4/4/2017	-1.02E+02	1.52E+02	1.10E-01	2.17E+00	2.57E+00	2.23E+00
5/2/2017	4.35E+02	1.39E+02	-2.29E+00	2.21E+00	-7.19E-01	1.91E+00
6/6/2017	-3.62E+01	1.39E+02	3.49E+00	1.89E+00	-1.77E+00	1.97E+00
7/5/2017	3.59E+02	1.39E+02	-8.43E-01	1.99E+00	-2.54E-01	1.94E+00
8/8/2017	-1.50E+02	1.42E+02	2.26E+00	1.92E+00	-1.32E+00	2.17E+00
9/6/2017	2.62E+02	1.40E+02	-8.62E-01	1.72E+00	-1.68E+00	2.13E+00
10/3/2017	1.57E+02	1.60E+02	-1.21E-01	2.05E+00	3.92E-01	2.16E+00
11/7/2017	7.49E+02	1.41E+02	3.03E+00	1.97E+00	-3.49E+00	2.06E+00
12/5/2017	-7.78E+01	1.31E+02	1.17E-01	1.95E+00	-1.28E+00	2.11E+00
1/2/2018	2.23E+02	1.16E+02	-1.10E+00	2.03E+00	8.22E-01	1.98E+00

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
2/15/2017	Sr-89/90	4.97E-02	1.38E-01
	I-129	-1.39E-01	2.66E-01
	U-234	1.49E-01	1.83E-02
	U-235	1.53E-02	5.54E-03
	Np-237	6.89E-03	3.49E-03
	U-238	1.49E-01	1.83E-02
	Pu-238	5.14E-03	4.39E-03
	Pu-239	3.41E-03	2.48E-03
	Am-241	1.17E-02	4.48E-03
	Cm-244	-6.19E-07	2.05E-03
	Tc-99	-5.51E-01	7.67E-01

Table 23 Radionuclides in Stream Water (continued)

Stream: Upper Three Runs (continued)
Location: U3R-2 F Storm Sewer (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	1.54E+00	2.29E-01	7.11E-01	1.48E-01
3/7/2017	2.15E+00	2.55E-01	1.17E+00	1.85E-01
4/4/2017	3.62E+00	3.09E-01	2.25E+00	2.59E-01
5/2/2017	2.46E+00	2.43E-01	6.43E-01	1.38E-01
6/6/2017	2.10E+00	2.45E-01	4.08E-01	1.19E-01
7/5/2017	1.78E+00	2.10E-01	1.11E+00	1.84E-01
8/8/2017	2.21E+00	2.40E-01	4.81E-01	1.25E-01
9/6/2017	2.09E+00	2.36E-01	4.03E-01	1.17E-01
10/3/2017	2.70E+00	2.48E-01	1.12E+00	1.84E-01
11/7/2017	2.92E+00	4.26E-01	4.41E-01	2.11E-01
12/5/2017	2.69E+00	2.46E-01	6.22E-01	1.40E-01
1/2/2018	1.16E+00	2.11E-01	5.92E-01	1.38E-01

Location: U3R-3 at Road C

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	3.95E+02	1.41E+02	-7.89E-01	1.89E+00	-1.47E+00	2.18E+00
3/7/2017	2.92E+02	1.46E+02	1.78E+00	2.13E+00	-1.08E+00	2.20E+00
4/4/2017	1.11E+02	1.64E+02	5.16E-01	1.72E+00	2.55E+00	2.00E+00
5/2/2017	2.18E+02	1.49E+02	-8.38E-01	1.72E+00	3.32E+00	2.09E+00
6/6/2017	1.02E+03	1.76E+02	2.25E-01	1.84E+00	2.07E+00	2.01E+00
7/5/2017	6.11E+04	7.55E+02	2.73E+00	2.04E+00	1.22E+00	1.98E+00
8/8/2017	2.67E+02	1.57E+02	-5.00E-01	2.20E+00	6.35E-01	2.03E+00
9/6/2017	4.95E+02	1.50E+02	-3.84E+00	1.97E+00	-2.08E+00	1.90E+00
10/3/2017	5.03E+02	1.71E+02	2.26E-01	1.73E+00	-2.31E+00	2.20E+00
11/7/2017	4.11E+02	1.34E+02	-4.49E+00	1.85E+00	3.08E+00	2.04E+00
12/5/2017	3.89E+02	1.49E+02	2.17E+00	2.00E+00	1.17E+00	2.07E+00
1/2/2018	7.08E+02	1.41E+02	-2.39E+00	1.93E+00	-1.52E+00	2.12E+00

Table 23 Radionuclides in Stream Water (continued)

Stream: Upper Three Runs (continued)

Location: U3R-3 at Road C (continued)

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
1/30/2017	Sr-89/90	3.41E-01	4.74E-01
	I-129	-3.89E-02	2.81E-01
	U-234	5.41E-02	1.76E-02
	U-235	3.35E-03	8.55E-03
	U-238	9.19E-02	2.13E-02
	Pu-238	0.00E+00	6.07E-03
	Pu-239	-5.30E-03	3.83E-03
	Am-241	1.58E-02	1.15E-02
	Cm-244	0.00E+00	9.63E-03
	Tc-99	7.05E-02	7.81E-01

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	1.34E+00	2.32E-01	1.56E+00	2.15E-01
3/7/2017	1.38E+00	2.46E-01	2.61E+00	2.76E-01
4/4/2017	1.49E+00	2.15E-01	2.97E+00	2.90E-01
5/2/2017	9.16E-01	2.20E-01	1.62E+00	2.20E-01
6/6/2017	1.56E+00	2.15E-01	1.92E+00	2.35E-01
7/5/2017	3.05E+00	2.68E-01	7.95E-01	1.61E-01
8/8/2017	9.22E-01	1.95E-01	9.78E-01	1.72E-01
9/6/2017	1.84E+00	2.16E-01	2.92E+00	2.94E-01
10/3/2017	1.54E+00	2.09E-01	1.89E+00	2.34E-01
11/7/2017	1.54E+00	2.09E-01	1.91E+00	2.36E-01
12/5/2017	1.72E+00	2.16E-01	1.87E+00	2.33E-01
1/2/2018	9.05E-01	2.38E-01	2.20E+00	2.59E-01

Table 23 Radionuclides in Stream Water (continued)

Stream: Upper Three Runs (continued)

Location: U3R-4 at Road A

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	5.73E+02	1.49E+02	-4.89E-01	2.09E+00	-2.78E+00	2.11E+00
3/7/2017	5.43E+02	1.57E+02	2.39E+00	1.98E+00	1.66E+00	2.35E+00
4/4/2017	2.33E+02	1.65E+02	-1.41E-01	2.01E+00	-2.59E+00	1.94E+00
5/2/2017	2.16E+02	1.52E+02	-1.34E+00	2.18E+00	-3.05E-01	2.33E+00
6/6/2017	6.41E+02	1.70E+02	-1.14E+00	1.88E+00	-2.73E+00	2.12E+00
7/5/2017	1.01E+03	1.64E+02	1.36E-03	1.86E+00	1.15E+00	2.07E+00
8/8/2017	6.73E+02	1.57E+02	-1.26E+00	2.13E+00	4.59E+00	2.06E+00
9/6/2017	5.08E+02	1.49E+02	-9.46E-01	2.03E+00	4.76E-01	2.06E+00
10/3/2017	2.41E+02	1.68E+02	6.70E-01	2.03E+00	-1.16E+00	1.98E+00
11/7/2017	4.38E+02	1.43E+02	-1.62E+00	2.10E+00	4.00E-02	1.99E+00
12/5/2017	3.92E+02	1.48E+02	1.43E+00	2.19E+00	-5.65E-01	2.15E+00
1/3/2018	4.78E+02	1.34E+02	5.30E+00	2.14E+00	2.28E+00	1.98E+00

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
1/30/2017	Sr-89/90	5.76E-01	4.83E-01
	I-129	5.86E-01	2.82E-01
	Pu-238	2.62E-03	6.70E-03
	Pu-239	-1.58E-04	1.46E-03
	Am-241	3.65E-02	1.44E-02
	Cm-244	0.00E+00	7.05E-03
	Tc-99	-1.94E-01	7.74E-01

Table 23 Radionuclides in Stream Water (continued)

Stream: Upper Three Runs (continued)

Location: U3R-4 at Road A (continued)

Sample Date	U-234		U-235		U-238	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/30/2017	8.73E-02	1.94E-02	3.27E-03	8.33E-03	1.37E-01	2.56E-02
2/7/2017	1.49E-01	2.68E-02	2.09E-02	9.74E-03	1.32E-01	2.60E-02
3/7/2017	1.73E-01	2.73E-02	0.00E+00	3.99E-03	1.77E-01	2.76E-02
4/4/2017	3.24E-02	1.13E-02	9.41E-03	7.50E-03	6.30E-02	1.60E-02
5/2/2017	2.05E-01	3.13E-02	8.57E-03	6.33E-03	1.56E-01	2.58E-02
6/6/2017	8.43E-01	7.74E-02	2.53E-02	1.06E-02	9.38E-01	8.27E-02
7/5/2017	6.43E-02	1.54E-02	9.68E-03	8.09E-03	6.19E-02	1.68E-02
8/8/2017	2.20E-01	3.20E-02	1.38E-02	8.88E-03	1.92E-01	2.87E-02
9/6/2017	8.78E-02	2.01E-02	4.65E-03	4.66E-03	6.00E-02	1.70E-02
10/3/2017	2.81E-01	3.71E-02	1.71E-02	8.72E-03	2.47E-01	3.44E-02
11/7/2017	3.27E-01	3.98E-02	4.65E-02	1.44E-02	4.22E-01	4.57E-02
12/5/2017	1.74E-01	2.74E-02	1.58E-02	8.13E-03	1.90E-01	2.76E-02
1/3/2018	1.20E-01	2.18E-02	3.97E-03	3.99E-03	1.25E-01	2.18E-02

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	9.05E-01	2.20E-01	1.82E+00	2.31E-01
3/7/2017	2.21E+00	2.44E-01	4.08E+00	3.36E-01
4/4/2017	1.84E+00	2.35E-01	3.76E+00	3.33E-01
5/2/2017	3.78E+00	3.00E-01	7.95E+00	4.81E-01
6/6/2017	1.34E+01	5.08E-01	2.20E+01	8.06E-01
7/5/2017	4.84E+00	3.30E-01	9.30E+00	5.12E-01
8/8/2017	1.45E+00	1.98E-01	1.75E+00	2.30E-01
9/6/2017	7.22E-01	1.88E-01	1.19E+00	1.90E-01
10/3/2017	2.50E+00	2.46E-01	3.49E+00	3.19E-01
11/7/2017	3.57E+00	3.63E-01	8.62E+00	5.04E-01
12/5/2017	5.84E+00	3.55E-01	8.11E+00	4.80E-01
1/3/2018	1.25E+00	3.78E-01	1.34E+00	3.53E-01

Table 23 Radionuclides in Stream Water (continued)

Stream: Four Mile Creek
Location: FM-2 at Road 4

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	7.08E+02	1.50E+02	-7.11E-01	2.09E+00	-6.68E-01	2.18E+00
3/7/2017	1.18E+03	1.64E+02	2.58E+00	1.85E+00	2.01E+00	2.10E+00
4/4/2017	6.86E+02	1.78E+02	1.61E+00	1.89E+00	2.21E+00	2.05E+00
5/2/2017	1.81E+03	2.04E+02	1.27E+00	1.84E+00	5.84E+00	2.10E+00
6/6/2017	3.14E+03	2.69E+02	1.38E-01	1.76E+00	4.32E-01	2.20E+00
7/5/2017	2.89E+03	2.48E+02	3.57E+00	2.02E+00	4.97E+00	2.07E+00
8/8/2017	3.00E+03	2.54E+02	1.67E+00	1.98E+00	-4.81E-01	2.28E+00
9/6/2017	5.81E+03	2.87E+02	3.41E+00	1.88E+00	9.14E+00	2.32E+00
10/3/2017	4.05E+03	2.61E+02	3.08E+00	2.02E+00	6.68E-01	2.17E+00
11/7/2017	3.08E+03	2.13E+02	-2.48E+00	2.04E+00	2.59E+00	2.26E+00
12/5/2017	3.08E+03	2.33E+02	1.71E+00	1.90E+00	3.05E+00	2.11E+00
1/2/2018	1.81E+03	1.77E+02	2.12E+00	1.84E+00	2.56E+00	2.10E+00

Sample Date	Sr-89/90		I-129	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	1.10E-01	2.02E-01	3.38E-01	2.78E-01
3/7/2017	2.12E-01	2.18E-01	-3.59E-01	6.53E-01
4/4/2017	4.19E-01	1.55E-01	-7.68E-02	2.74E-01
5/2/2017	1.38E+00	2.94E-01	9.35E-01	4.36E-01
6/6/2017	1.59E+00	2.47E-01	-8.59E-02	2.54E-01
7/5/2017	2.56E+00	4.02E-01	-1.78E-01	2.99E-01
8/8/2017	2.00E+00	3.22E-01	-5.43E-01	2.96E-01
9/6/2017	2.70E+00	3.85E-01	6.68E-01	5.97E-01
10/3/2017	1.83E+00	3.27E-01	5.86E-02	3.01E-01
11/7/2017	2.28E+00	3.45E-01	6.86E-01	3.12E-01
12/5/2017	2.65E+00	3.66E-01	6.76E-02	6.23E-01
1/2/2018	1.46E+00	2.96E-01	7.95E-01	3.09E-01

Table 23 Radionuclides in Stream Water (continued)

Stream: Four Mile Creek (continued)

Location: FM-2 at Road 4 (continued)

Sample Date	C-14	
	Result (pCi/L)	Standard Dev. (pCi/L)
4/4/2017	4.41E+00	4.04E+00
5/2/2017	-2.29E+00	4.11E+00
6/6/2017	6.19E+00	4.05E+00
7/5/2017	3.27E+01	4.96E+00
8/8/2017	2.51E+00	3.97E+00
9/6/2017	-4.00E+00	4.20E+00
10/3/2017	1.23E+01	4.23E+00
11/7/2017	6.97E+00	4.32E+00
12/5/2017	1.34E+01	4.38E+00
1/2/2018	-6.24E+00	4.01E+00

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
1/30/2017	U-234	6.51E-02	1.60E-02
	U-235	-2.06E-03	7.24E-03
	Np-237	3.78E-03	2.73E-03
	U-238	3.49E-02	1.19E-02
	Pu-238	1.70E-02	5.82E-03
	Pu-239	6.22E-04	2.26E-03
	Am-241	5.38E-04	2.05E-03
	Cm-244	0.00E+00	1.99E-03

Table 23 Radionuclides in Stream Water (continued)

Stream: Four Mile Creek (continued)
Location: FM-2 at Road 4 (continued)

Sample Date	Tc-99	Standard Dev. (pCi/L)	Gross Beta		Gross Alpha	
	Result (pCi/L)		Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	1.66E-01	7.68E-01	1.26E+00	1.89E-01	3.95E-01	1.13E-01
3/7/2017	2.57E+00	7.36E-01	1.26E+00	1.89E-01	4.00E-01	1.15E-01
4/4/2017	1.65E+00	7.50E-01	9.05E-01	1.92E-01	3.32E-01	1.10E-01
5/2/2017	1.22E+00	7.89E-01	4.81E+00	3.22E-01	3.19E-01	1.14E-01
6/6/2017	6.49E-01	7.41E-01	7.49E+00	3.74E-01	5.76E-01	1.40E-01
7/5/2017	-5.65E-01	7.47E-01	8.73E+00	3.95E-01	9.95E-01	1.89E-01
8/8/2017	8.73E-01	7.52E-01	7.35E+00	6.26E-01	5.19E-01	2.36E-01
9/6/2017	1.48E+00	7.74E-01	1.17E+01	4.59E-01	3.54E-01	1.25E-01
10/3/2017	2.69E-01	7.46E-01	7.54E+00	3.73E-01	7.43E-01	1.62E-01
11/7/2017	1.26E+00	7.30E-01	7.97E+00	3.98E-01	5.65E-01	1.47E-01
12/5/2017	1.83E+00	7.84E-01	9.49E+00	4.29E-01	7.84E-01	1.69E-01
1/2/2018	6.27E+00	8.23E-01	6.00E+00	3.60E-01	5.46E-01	1.51E-01

Stream: Four Mile Creek (continued)
Location: FM-2B Above F-Area Effluent

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	9.78E+03	3.22E+02	7.81E-01	1.96E+00	-5.76E-02	2.21E+00
3/7/2017	1.16E+04	3.57E+02	-1.39E+00	2.03E+00	1.49E+00	2.12E+00
4/4/2017	1.56E+04	4.06E+02	-1.57E+00	2.04E+00	4.84E+00	2.25E+00
5/2/2017	1.39E+04	3.95E+02	1.81E-01	1.97E+00	-1.24E+00	2.14E+00
6/6/2017	1.78E+04	4.65E+02	7.81E-01	1.91E+00	-3.97E-01	2.37E+00
7/5/2017	1.91E+04	4.81E+02	1.56E+00	1.82E+00	-1.06E+00	1.97E+00
8/8/2017	1.64E+04	4.43E+02	-8.73E-01	2.07E+00	8.73E+00	3.01E+00
8/15/2017	6.35E+04	8.72E+02	1.65E+00	1.91E+00	9.49E+00	4.22E+00
8/22/2017	5.86E+04	8.50E+02				
8/23/2017	2.52E+04	7.96E+02	2.13E+00	2.26E+00	5.49E+00	2.41E+00
9/6/2017	3.16E+04	6.68E+02	-8.00E-01	2.22E+00	1.64E+01	3.81E+00
10/3/2017	2.51E+04	4.85E+02	2.70E+00	1.95E+00	2.69E+00	2.24E+00
11/7/2017	2.64E+04	5.20E+02	5.62E-01	1.79E+00	6.30E+00	2.36E+00
12/5/2017	4.19E+04	7.85E+02	3.16E+00	1.95E+00	1.58E+01	4.72E+00
1/2/2018	2.95E+04	5.53E+02	1.78E+00	1.78E+00	6.43E+00	2.28E+00

Table 23 Radionuclides in Stream Water (continued)

Stream: Four Mile Creek (continued)
Location: FM-2B Above F-Area Effluent (continued)

Sample Date	Sr-89/90		I-129	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	1.49E+00	3.05E-01	5.30E-01	3.30E-01
3/7/2017	1.22E+00	2.96E-01	-3.32E-01	6.53E-01
4/4/2017	1.67E+00	2.32E-01	8.35E-01	4.64E-01
5/2/2017	2.08E+00	3.51E-01	3.59E-01	2.89E-01
6/6/2017	2.78E+00	3.24E-01	1.22E+00	4.60E-01
7/5/2017	3.65E+00	4.53E-01	7.57E-01	4.49E-01
8/8/2017	5.22E+00	5.19E-01	4.30E-01	3.07E-01
8/15/2017	9.14E-01	4.35E-01	1.19E+00	6.30E+00
8/22/2017				
8/23/2017	6.08E+00	8.08E-01	-3.11E+00	6.74E+00
9/6/2017	3.62E+00	4.51E-01	2.61E-01	3.01E-01
10/3/2017	3.51E+00	4.44E-01	7.46E-01	3.43E-01
11/7/2017	2.03E+00	3.44E-01	2.42E-01	2.61E-01
12/5/2017	3.86E+00	4.59E-01	5.14E-01	2.65E-01
1/2/2018	1.78E+00	3.27E-01	1.09E+00	4.54E-01

Sample Date	C-14	
	Result (pCi/L)	Standard Dev. (pCi/L)
4/4/2017	6.86E+00	4.16E+00
5/2/2017	-4.24E+00	4.05E+00
6/6/2017	2.70E+00	4.13E+00
7/5/2017	7.68E+00	4.09E+00
8/8/2017	2.76E+01	4.36E+00
8/15/2017	2.97E+00	4.10E+00
8/22/2017		
8/23/2017	-9.54E-01	4.00E+00
9/6/2017	7.84E+00	4.18E+00
10/3/2017	5.24E+00	4.32E+00
11/7/2017	9.95E+00	4.54E+00
12/5/2017	-8.43E-01	4.24E+00
1/2/2018	-2.95E+00	4.01E+00

Table 23 Radionuclides in Stream Water (continued)

Stream: Four Mile Creek (continued)
Location: FM-2B Above F-Area Effluent (continued)

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
1/30/2017	U-234	3.00E-02	7.84E-03
	U-235	-1.98E-06	1.17E-04
	Np-237	1.11E-02	4.35E-03
	U-238	2.18E-02	6.99E-03
	Pu-238	1.42E-02	4.87E-03
	Pu-239	-1.05E-03	1.96E-03
	Am-241	1.09E-02	4.55E-03
	Cm-244	0.00E+00	2.05E-03

Sample Date	Tc-99		Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	2.14E+00	8.88E-01	5.38E+00	3.19E-01	4.00E-01	1.15E-01
3/7/2017	3.51E+00	7.73E-01	5.03E+00	3.09E-01	4.03E-01	1.16E-01
4/4/2017	7.59E-01	7.37E-01	4.38E+00	3.05E-01	4.43E-01	1.23E-01
5/2/2017	1.38E+00	5.52E-01	6.22E+00	3.55E-01	4.08E-01	1.26E-01
6/6/2017	2.06E+00	7.61E-01	1.12E+01	4.47E-01	1.55E+00	2.22E-01
7/5/2017	2.62E-01	7.59E-01	1.01E+01	4.22E-01	1.22E+00	2.07E-01
8/8/2017	1.13E+00	7.55E-01	8.70E+00	6.76E-01	8.65E-01	2.92E-01
8/15/2017	9.38E-01	7.29E-01	1.10E+01	6.44E-01	2.29E+00	3.83E-01
8/22/2017						
8/23/2017	9.30E-01	1.85E+00	2.32E+01	9.78E-01	8.49E+00	8.33E-01
9/6/2017	3.22E+00	8.88E-01	2.52E+01	9.59E-01	1.12E+01	1.04E+00
10/3/2017	3.14E+00	7.81E-01	8.59E+00	3.94E-01	6.43E-01	1.52E-01
11/7/2017	1.91E+00	7.46E-01	1.10E+01	4.60E-01	1.49E+00	2.30E-01
12/5/2017	1.49E+00	7.45E-01	2.51E+01	6.82E-01	6.22E+00	4.81E-01
1/2/2018	3.68E+00	7.85E-01	1.12E+01	4.55E-01	9.35E-01	1.87E-01

Table 23 Radionuclides in Stream Water (continued)

Stream: Four Mile Creek (continued)
Location: FM-3A Below F-Area Effluent

Sample Date	H-3 (tritium)		Sr-89/90		I-129	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	4.92E+05	2.05E+03	7.78E-01	1.92E+00	1.61E+00	2.25E+00
3/7/2017	6.49E+05	2.42E+03	1.43E+00	1.72E+00	-1.81E+00	2.17E+00
4/4/2017	5.27E+05	2.09E+03	3.49E+00	2.14E+00	1.24E+00	1.88E+00
5/2/2017	5.19E+05	2.13E+03	4.00E-01	2.13E+00	1.82E+00	2.13E+00
6/6/2017	5.43E+05	2.25E+03	-6.11E-01	1.78E+00	-1.01E-01	2.23E+00
7/5/2017	5.46E+05	2.29E+03	-1.33E+00	2.04E+00	-9.16E-01	2.01E+00
8/8/2017	3.84E+05	1.77E+03	-4.49E+00	2.08E+00	-2.25E+00	2.04E+00
8/15/2017	1.49E+05	1.19E+03	1.19E+00	2.04E+00	3.00E+00	2.02E+00
8/22/2017	3.00E+05	1.68E+03				
8/23/2017	4.27E+05	2.01E+03	-1.62E-01	2.08E+00	2.89E+00	2.18E+00
9/6/2017	6.57E+05	2.45E+03	1.40E+00	2.08E+00	-1.41E+00	2.14E+00
10/3/2017	5.68E+05	1.98E+03	1.01E+00	1.95E+00	6.05E-01	1.95E+00
11/7/2017	6.03E+05	2.22E+03	-6.19E-01	1.96E+00	2.86E+00	2.07E+00
12/5/2017	6.38E+05	2.29E+03	2.36E+00	1.82E+00	-2.73E+00	1.98E+00
1/2/2018	5.38E+05	2.10E+03	6.00E-01	1.99E+00	1.05E+00	2.01E+00

Sample Date	Sr-89/90		I-129	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	4.38E-01	2.31E-01	3.27E-02	2.69E-01
3/7/2017	4.86E-01	2.29E-01	2.01E-01	3.06E-01
4/4/2017	1.85E-01	1.35E-01	-3.95E-01	2.67E-01
5/2/2017	6.46E-01	2.38E-01	2.08E-01	2.81E-01
6/6/2017	3.51E-01	1.55E-01	2.45E-01	2.66E-01
7/5/2017	6.57E-01	2.70E-01	-2.57E-01	2.72E-01
8/8/2017	5.76E-01	2.13E-01	9.24E-02	2.55E-01
8/15/2017	5.73E-01	4.01E-01	3.32E-01	6.20E+00
8/22/2017				
8/23/2017	1.11E+00	4.44E-01	-3.19E+00	6.43E+00
9/6/2017	7.57E-02	2.04E-01	6.81E-01	3.61E-01
10/3/2017	5.32E-01	2.28E-01	3.70E-01	2.66E-01
11/7/2017	3.65E-01	2.19E-01	3.76E-01	2.64E-01
12/5/2017	5.97E-01	2.28E-01	8.27E-01	3.11E-01
1/2/2018	7.43E-01	2.43E-01	-1.99E-01	2.56E-01

Table 23 Radionuclides in Stream Water (continued)

Stream: Four Mile Creek (continued)
Location: FM-3A Below F-Area Effluent (continued)

Sample Date	C-14	
	Result (pCi/L)	Standard Dev. (pCi/L)
4/4/2017	-2.81E+00	4.27E+00
5/2/2017	-5.27E+00	4.32E+00
6/6/2017	1.17E-01	4.47E+00
7/5/2017	-3.27E+00	4.36E+00
8/8/2017	-4.57E+00	4.32E+00
8/15/2017	4.59E+00	4.42E+00
8/22/2017		
8/23/2017	-8.00E+00	4.27E+00
9/6/2017	2.63E+00	4.31E+00
10/3/2017	5.03E+00	4.47E+00
11/7/2017	-4.05E+00	4.38E+00
12/5/2017	-3.65E+00	4.39E+00
1/2/2018	2.73E+00	4.14E+00

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
1/30/2017	U-234	2.11E-02	6.71E-03
	U-235	4.95E-03	3.95E-03
	Np-237	1.25E-02	5.10E-03
	U-238	3.95E-02	9.00E-03
	Pu-238	5.08E-03	2.96E-03
	Pu-239	5.59E-04	2.03E-03
	Am-241	1.61E-03	1.63E-03
	Cm-244	2.14E-03	2.51E-03

Table 23 Radionuclides in Stream Water (continued)

Stream: Four Mile Creek (continued)
Location: FM-3A Below F-Area Effluent (continued)

Sample Date	Tc-99		Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	2.10E+00	8.18E-01	1.71E+00	2.07E-01	4.43E-01	1.22E-01
3/7/2017	3.46E+00	7.61E-01	1.37E+00	1.95E-01	1.05E+00	1.80E-01
4/4/2017	1.71E+00	7.51E-01	1.61E+00	2.20E-01	5.46E-01	1.37E-01
5/2/2017	9.41E-01	7.85E-01	1.53E+00	2.17E-01	7.24E-01	1.51E-01
6/6/2017	1.32E+00	7.63E-01	1.76E+00	2.20E-01	7.35E-01	1.50E-01
7/5/2017	1.68E+00	7.80E-01	2.27E+00	2.43E-01	5.95E-01	1.42E-01
8/8/2017	7.59E-01	7.49E-01	1.88E+00	3.58E-01	2.12E-01	1.51E-01
8/15/2017	3.32E+00	1.23E+00	2.61E+00	3.78E-01	1.02E+00	2.55E-01
8/22/2017						
8/23/2017	1.06E+00	7.32E-01	2.00E+00	4.45E-01	1.30E+00	3.07E-01
9/6/2017	1.84E+00	7.82E-01	1.56E+00	2.00E-01	6.59E-01	1.48E-01
10/3/2017	3.73E-01	7.63E-01	1.40E+00	1.99E-01	5.16E-01	1.32E-01
11/7/2017	1.36E+00	7.53E-01	1.15E+00	2.21E-01	7.08E-01	1.53E-01
12/5/2017	2.34E+00	8.76E-01	1.18E+00	2.27E-01	1.11E+00	1.87E-01
1/2/2018	-7.97E-01	7.44E-01	2.27E+00	2.50E-01	8.76E-01	1.69E-01

Table 23 Radionuclides in Stream Water (continued)

Stream: Four Mile Creek (continued)

Location: FM-6 at Road A-12.2

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	2.15E+04	4.54E+02	-1.84E-01	2.46E+00	-6.51E-01	2.02E+00
3/7/2017	2.26E+04	4.86E+02	3.59E+00	1.92E+00	1.74E+00	2.19E+00
4/4/2017	2.59E+04	5.01E+02	1.26E-01	2.06E+00	2.32E+00	2.33E+00
5/2/2017	2.36E+04	4.99E+02	-2.13E-01	1.92E+00	-2.24E-01	2.06E+00
6/6/2017	2.60E+04	5.28E+02	-5.14E-01	1.98E+00	1.50E+00	2.03E+00
7/5/2017	2.64E+04	5.45E+02	-5.81E-02	2.09E+00	2.25E+00	2.13E+00
8/8/2017	2.34E+04	4.68E+02	3.05E+00	1.90E+00	3.22E+00	2.22E+00
8/15/2017	2.59E+04	5.32E+02	-1.66E+00	1.77E+00	1.82E+00	2.25E+00
8/22/2017	3.19E+04	5.69E+02				
8/23/2017	3.46E+04	6.37E+02	1.12E+00	1.96E+00	1.08E+00	2.21E+00
9/6/2017	3.14E+04	5.57E+02	7.38E-02	1.66E+00	-2.34E+00	2.12E+00
10/3/2017	2.95E+04	4.86E+02	1.15E+00	1.97E+00	2.60E+00	1.99E+00
11/7/2017	3.08E+04	5.31E+02	1.02E+00	2.06E+00	2.66E+00	2.25E+00
12/5/2017	3.14E+04	5.29E+02	-1.54E-01	2.04E+00	1.60E+00	1.99E+00
1/3/2018	2.41E+04	4.70E+02	-2.11E+00	1.77E+00	-4.70E-02	2.07E+00

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
1/30/2017	Sr-89/90	1.27E+00	1.97E-01
	I-129	1.02E+00	3.61E-01
	U-234	1.98E-01	2.30E-02
	U-235	-2.84E-06	1.69E-04
	U-238	1.83E-01	2.16E-02
	Pu-238	6.30E-03	4.18E-03
	Pu-239	1.70E-03	1.83E-03
	Am-241	6.54E-03	3.65E-03
	Cm-244	1.51E-03	1.51E-03
	Tc-99	4.81E+00	8.03E-01

Table 23 Radionuclides in Stream Water (continued)

Stream: Four Mile Creek (continued)
Location: FM-6 at Road A-12.2 (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	3.81E+00	2.77E-01	5.62E-01	1.36E-01
3/7/2017	8.03E+00	4.20E-01	4.49E+00	3.79E-01
4/4/2017	5.30E+00	3.47E-01	2.08E+00	2.60E-01
5/2/2017	7.73E+00	3.90E-01	5.41E+00	4.18E-01
6/6/2017	6.41E+00	3.53E-01	3.16E+00	3.14E-01
7/5/2017	4.11E+00	2.86E-01	8.65E-01	1.73E-01
8/8/2017	6.76E+00	3.65E-01	2.68E+00	2.91E-01
8/15/2017	1.31E+01	7.03E-01	8.27E+00	7.19E-01
8/22/2017				
8/23/2017	8.32E+00	6.64E-01	4.95E+00	5.64E-01
9/6/2017	5.76E+00	3.43E-01	2.92E+00	3.03E-01
10/3/2017	8.54E+00	4.02E-01	6.78E+00	4.63E-01
11/7/2017	6.30E+00	3.89E-01	4.65E+00	3.97E-01
12/5/2017	3.30E+00	2.65E-01	1.76E-01	9.04E-02
1/3/2018	3.76E+00	3.03E-01	4.41E-01	1.36E-01

Location: FM-A7 at Road A-7

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	2.64E+04	5.05E+02	3.05E+00	2.15E+00	1.97E+00	2.02E+00
3/7/2017	3.11E+04	5.75E+02	2.97E-01	2.02E+00	1.04E+00	2.07E+00
4/4/2017	3.57E+04	5.90E+02	-2.46E+00	2.35E+00	8.19E-01	2.11E+00
5/2/2017	3.11E+04	5.69E+02	-7.03E-01	1.73E+00	7.86E+00	3.24E+00
6/6/2017	3.54E+04	6.25E+02	7.62E-01	2.00E+00	1.52E+00	2.30E+00
7/5/2017	3.59E+04	6.29E+02	3.95E+00	1.99E+00	1.39E+00	2.01E+00
8/8/2017	3.08E+04	5.39E+02	3.76E+00	2.12E+00	2.08E+00	2.22E+00
8/15/2017	4.35E+04	7.07E+02	3.95E-01	1.91E+00	1.49E+01	4.06E+00
8/15/2017	7.16E+04	8.63E+02				
8/22/2017	4.30E+04	6.86E+02				
8/23/2017	4.35E+04	7.42E+02	-5.62E-02	2.34E+00	1.35E+01	4.47E+00
9/6/2017	4.65E+04	6.90E+02	9.86E-01	2.12E+00	2.21E+00	2.22E+00
10/3/2017	4.22E+04	5.95E+02	3.59E+00	2.08E+00	3.46E-01	1.97E+00
11/7/2017	4.32E+04	6.33E+02	3.51E-01	2.18E+00	1.95E+00	2.27E+00
12/5/2017	4.70E+04	6.50E+02	3.14E+00	1.81E+00	1.04E+01	3.93E+00
1/2/2018	3.97E+04	5.96E+02	1.62E+00	1.90E+00	4.65E+00	2.35E+00

Table 23 Radionuclides in Stream Water (continued)

Stream: Four Mile Creek (continued)
Location: FM-A7 at Road A-7 (continued)

Sample Date	Sr-89/90		I-129	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/30/2017	1.64E+00	2.50E-01	1.12E+00	3.70E-01
2/7/2017	1.62E+00	3.08E-01	2.08E+00	4.81E-01
3/7/2017	2.14E+00	3.43E-01	3.57E+00	7.66E-01
4/4/2017	3.57E-01	1.50E-01	3.54E+00	8.14E-01
5/2/2017	4.08E+00	4.65E-01	2.41E+00	3.97E-01
6/6/2017	1.84E+00	2.59E-01	3.38E+00	6.40E-01
7/5/2017	1.80E+00	3.49E-01	3.78E+00	6.10E-01
8/8/2017	2.16E+00	3.21E-01	3.86E+00	4.12E-01
8/15/2017	3.43E+00	6.42E-01	1.91E+01	7.49E+00
8/15/2017				
8/22/2017				
8/23/2017	2.57E+00	5.48E-01	1.30E+01	7.63E+00
9/6/2017	2.32E+00	3.61E-01	5.11E+00	6.40E-01
10/3/2017	9.81E+00	7.94E-01	4.03E+00	7.52E-01
11/7/2017	6.16E+00	5.79E-01	4.14E+00	4.67E-01
12/5/2017	4.89E+00	4.90E-01	2.92E+00	8.08E-01
1/2/2018	3.70E+00	4.38E-01	3.30E+00	6.27E-01

Sample Date	C-14	
	Result (pCi/L)	Standard Dev. (pCi/L)
4/4/2017	1.24E+00	4.37E+00
5/2/2017	5.59E+00	4.46E+00
6/6/2017	9.95E+00	4.42E+00
7/5/2017	5.89E+00	4.48E+00
8/8/2017	6.49E+00	4.50E+00
8/15/2017	2.64E+00	4.36E+00
8/15/2017		
8/22/2017		
8/23/2017	1.80E-05	4.37E+00
9/6/2017	2.78E+00	4.48E+00
10/3/2017	4.30E+00	4.47E+00
11/7/2017	-4.57E+00	4.26E+00
12/5/2017	9.43E-01	4.30E+00
1/2/2018	1.59E-01	4.03E+00

Table 23 Radionuclides in Stream Water (continued)

Stream: Four Mile Creek (continued)
Location: FM-A7 at Road A-7 (continued)

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
1/30/2017	U-234	3.46E-01	3.98E-02
	U-235	1.95E-02	1.05E-02
	Np-237	6.00E-03	3.88E-03
	U-238	4.35E-01	4.54E-02
	Pu-238	1.62E-02	5.55E-03
	Pu-239	1.78E-03	1.81E-03
	Am-241	2.21E-02	6.30E-03
	Cm-244	2.03E-02	5.98E-03

Sample Date	Tc-99	Standard Dev. (pCi/L)	Gross Beta		Gross Alpha	
	Result (pCi/L)		Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/30/2017	2.76E+00	7.73E-01				
2/7/2017	2.17E+00	7.99E-01	6.27E+00	3.42E-01	1.08E+00	1.88E-01
3/7/2017	3.32E+00	7.72E-01	6.35E+00	3.44E-01	1.29E+00	2.07E-01
4/4/2017	1.92E+00	7.55E-01	5.57E+00	3.36E-01	9.14E-01	1.80E-01
5/2/2017	5.62E+00	8.53E-01	7.08E+00	3.88E-01	2.22E+00	2.74E-01
6/6/2017	3.73E+00	8.13E-01	8.03E+00	3.87E-01	1.19E+00	2.02E-01
7/5/2017	3.73E-01	7.60E-01	6.54E+00	3.59E-01	7.41E-01	1.68E-01
8/8/2017	1.76E+00	7.63E-01	7.08E+00	6.17E-01	4.38E-01	2.23E-01
8/15/2017	4.00E+00	1.26E+00	2.07E+01	8.72E-01	1.76E+01	1.07E+00
8/15/2017						
8/22/2017						
8/23/2017	3.41E+00	7.64E-01	1.35E+01	7.86E-01	6.14E+00	6.36E-01
9/6/2017	3.41E+00	8.34E-01	8.62E+00	3.96E-01	2.07E+00	2.83E-01
10/3/2017	2.97E+00	8.04E-01	6.92E+00	3.62E-01	2.12E+00	2.72E-01
11/7/2017	1.45E+00	7.50E-01	1.29E+01	5.21E-01	7.70E+00	5.34E-01
12/5/2017	2.21E+00	7.55E-01	1.15E+01	4.97E-01	7.46E+00	5.16E-01
1/2/2018	1.34E+00	7.66E-01	7.43E+00	3.82E-01	1.72E+00	2.39E-01

Table 23 Radionuclides in Stream Water (continued)

Stream: Pen Branch
Location: PB-3 at Road A-13.2

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	6.70E+03	2.81E+02	2.38E+00	2.11E+00	-3.32E-01	2.15E+00
3/7/2017	9.35E+03	3.32E+02	9.05E-01	1.94E+00	-6.14E-01	1.97E+00
4/4/2017	1.15E+04	3.54E+02	-5.24E-01	1.82E+00	-1.01E+00	2.21E+00
5/2/2017	9.57E+03	3.38E+02	-9.49E-02	2.14E+00	-2.40E+00	2.15E+00
6/6/2017	1.33E+04	3.94E+02	-2.86E-01	1.80E+00	1.36E-01	2.14E+00
7/5/2017	1.52E+04	4.20E+02	9.38E-01	1.79E+00	-1.20E+00	2.16E+00
8/8/2017	1.31E+04	3.63E+02	2.26E+00	1.80E+00	3.78E+00	2.16E+00
9/6/2017	1.49E+04	3.74E+02	-2.07E+00	2.00E+00	-1.31E+00	2.13E+00
10/3/2017	1.59E+04	3.72E+02	2.09E+00	1.82E+00	-2.81E+00	2.32E+00
11/7/2017	1.79E+04	4.13E+02	4.95E+00	2.50E+00	-3.62E+00	1.99E+00
12/5/2017	1.61E+04	3.92E+02	7.19E-01	1.95E+00	2.49E+00	2.17E+00
1/3/2018	1.28E+04	3.51E+02	-1.84E-02	1.71E+00	3.35E+00	2.11E+00

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
1/30/2017	Sr-89/90	-8.22E-02	4.37E-01
	I-129	-5.00E-02	2.77E-01
	U-234	5.41E-02	1.70E-02
	U-235	3.51E-03	9.00E-03
	U-238	4.81E-02	1.77E-02
	Pu-238	2.49E-03	9.32E-03
	Pu-239	-5.27E-03	5.36E-03
	Am-241	7.78E-03	8.11E-03
	Cm-244	0.00E+00	1.02E-02
	Tc-99	-1.39E-01	7.76E-01

Table 23 Radionuclides in Stream Water (continued)

Stream: Pen Branch (continued)
Location: PB-3 at Road A-13.2 (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	1.43E+00	2.34E-01	1.47E+00	2.19E-01
3/7/2017	1.05E+00	1.96E-01	5.68E-01	1.39E-01
4/4/2017	8.05E-01	1.96E-01	1.22E-01	8.48E-02
5/2/2017	1.00E+00	2.08E-01	4.46E-01	1.29E-01
6/6/2017	8.43E-01	1.90E-01	3.38E-01	1.12E-01
7/5/2017	5.32E-01	1.79E-01	1.11E-01	8.11E-02
8/8/2017	9.14E-01	1.95E-01	4.22E-01	1.27E-01
9/6/2017	1.15E+00	2.04E-01	5.41E-01	1.40E-01
10/3/2017	8.81E-01	1.80E-01	4.32E-01	1.30E-01
11/7/2017	9.08E-01	2.08E-01	3.54E-01	1.19E-01
12/5/2017	8.32E-01	1.75E-01	2.42E-01	1.01E-01
1/3/2018	7.24E-01	2.06E-01	1.29E-01	9.78E-02

Stream: Steel Creek
Location: SC-2A 1 mile above Road B

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	3.78E+04	5.80E+02	9.84E-02	1.97E+00	2.29E+00	2.17E+00
3/7/2017	4.22E+04	6.26E+02	-3.19E+00	2.06E+00	2.86E+00	2.16E+00
4/4/2017	2.76E+04	5.02E+02	-5.08E-01	1.94E+00	4.92E+00	2.41E+00
5/2/2017	4.76E+04	6.58E+02	-2.62E+00	2.10E+00	8.68E+00	3.05E+00
6/6/2017	6.65E+04	8.03E+02	-2.00E+00	1.87E+00	-1.57E+00	2.21E+00
7/5/2017	1.10E+03	8.38E+01	-2.84E-01	1.98E+00	-1.86E+00	2.00E+00
8/8/2017	5.16E+04	6.59E+02	6.73E-01	2.10E+00	8.16E-01	2.00E+00
9/6/2017	5.73E+04	6.89E+02	-1.75E+00	1.83E+00	1.22E+00	2.11E+00
10/3/2017	6.11E+04	6.71E+02	3.89E+00	1.63E+00	-1.19E+00	2.11E+00
11/7/2017	5.97E+04	7.09E+02	-4.78E-01	1.91E+00	1.06E+00	2.02E+00
12/5/2017	5.95E+04	7.10E+02	-4.65E-01	2.16E+00	-1.12E+00	2.08E+00
1/2/2018	5.43E+04	6.75E+02	1.74E+00	1.97E+00	1.42E+00	2.11E+00

Table 23 Radionuclides in Stream Water (continued)

Stream: Steel Creek (continued)
Location: SC-2A 1 mile above Road B (continued)

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
1/30/2017	Sr-89/90	5.57E-01	4.61E-01
	I-129	2.31E-01	2.72E-01
	U-234	6.59E-02	1.84E-02
	U-235	9.43E-03	6.68E-03
	U-238	7.08E-02	1.84E-02
	Pu-238	7.73E-03	5.47E-03
	Pu-239	-1.58E-04	1.46E-03
	Am-241	4.73E-02	1.43E-02
	Cm-244	-5.27E-03	3.74E-03
	Tc-99	3.46E-01	7.71E-01

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	2.81E+00	2.47E-01	1.20E+00	1.92E-01
3/7/2017	1.96E+00	2.18E-01	7.65E-01	1.56E-01
4/4/2017	2.84E+00	2.55E-01	4.57E-01	1.22E-01
5/2/2017	2.60E+00	2.54E-01	6.51E-01	1.46E-01
6/6/2017	3.03E+00	2.61E-01	8.81E-01	1.61E-01
7/5/2017	1.31E+00	2.11E-01	1.40E+00	2.02E-01
8/8/2017	1.74E+00	3.51E-01	1.08E+00	3.14E-01
9/6/2017	2.57E+00	2.59E-01	5.92E-01	1.42E-01
10/3/2017	3.14E+00	2.61E-01	1.09E+00	1.83E-01
11/7/2017	3.03E+00	2.58E-01	7.89E-01	1.62E-01
12/5/2017	2.63E+00	2.95E-01	5.54E-01	1.67E-01
1/2/2018	2.20E+00	2.61E-01	6.03E-01	1.50E-01

Table 23 Radionuclides in Stream Water (continued)

Stream: Steel Creek (continued)
Location: SC-4 Steel Creek at Road A

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	1.81E+03	1.75E+02	1.63E+00	1.99E+00	-4.81E-01	1.99E+00
3/7/2017	1.84E+03	1.88E+02	1.42E+00	1.96E+00	-1.33E-01	2.11E+00
4/4/2017	1.14E+03	1.88E+02	-2.29E+00	2.07E+00	-6.97E-01	2.15E+00
5/2/2017	1.55E+03	1.82E+02	2.33E+00	2.29E+00	-2.12E+00	2.13E+00
6/6/2017	1.98E+03	1.99E+02	7.84E-01	2.00E+00	-2.81E+00	2.15E+00
7/5/2017	1.97E+03	1.96E+02	1.05E+00	2.05E+00	-1.70E+00	2.05E+00
8/8/2017	1.51E+03	1.86E+02	2.17E+00	1.95E+00	-1.56E-01	1.95E+00
9/6/2017	1.98E+03	1.85E+02	9.19E-01	1.90E+00	1.54E+00	2.08E+00
10/3/2017	1.71E+03	1.91E+02	1.51E+00	1.86E+00	2.00E+00	1.90E+00
11/7/2017	1.64E+03	1.71E+02	-3.59E-01	1.92E+00	-1.01E+00	1.82E+00
12/5/2017	8.59E+02	1.59E+02	1.88E+00	1.85E+00	2.84E+00	2.26E+00
1/3/2018	1.41E+03	1.58E+02	-3.05E+00	1.84E+00	2.65E+00	2.02E+00

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
1/30/2017	Sr-89/90	-8.86E-02	4.24E-01
	I-129	-1.37E-01	2.80E-01
	U-234	6.22E-02	1.80E-02
	U-235	2.45E-02	1.38E-02
	U-238	4.22E-02	1.42E-02
	Pu-238	-5.46E-03	3.93E-03
	Pu-239	1.62E-02	8.46E-03
	Am-241	5.62E-02	1.57E-02
	Cm-244	0.00E+00	6.62E-03
	Tc-99	2.21E-01	7.80E-01

Table 23 Radionuclides in Stream Water (continued)

Stream: Steel Creek (continued)
Location: SC-4 Steel Creek at Road A (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	1.26E+00	1.90E-01	4.30E-01	1.24E-01
3/7/2017	9.32E-01	1.99E-01	1.03E-01	7.94E-02
4/4/2017	7.35E-01	1.97E-01	4.16E-01	1.26E-01
5/2/2017	1.51E+00	2.31E-01	8.43E-01	1.71E-01
6/6/2017	1.29E+00	2.04E-01	9.97E-01	1.77E-01
7/5/2017	1.05E+00	1.79E-01	3.19E-01	1.12E-01
8/8/2017	4.00E+00	3.05E-01	4.65E+00	4.08E-01
9/6/2017	1.13E+00	1.83E-01	5.24E-01	1.40E-01
10/3/2017	2.23E+00	2.34E-01	1.47E+00	2.18E-01
11/7/2017	1.96E+00	2.25E-01	1.37E+00	2.15E-01
12/5/2017	2.12E+00	2.34E-01	2.70E+00	2.99E-01
1/3/2018	8.49E-01	2.12E-01	2.18E-01	1.11E-01

Stream: Lower Three Runs Creek
Location: L3R-1A at Road B

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	2.61E+02	1.26E+02	1.59E-01	1.76E+00	-1.60E+00	2.14E+00
3/7/2017	9.51E+01	1.29E+02	-1.25E+00	2.31E+00	-5.73E-03	2.04E+00
4/4/2017	2.09E+02	1.57E+02	-9.49E-02	2.05E+00	-1.12E+00	2.11E+00
5/2/2017	6.57E+01	1.32E+02	-1.46E+00	2.05E+00	-6.70E-02	2.28E+00
6/6/2017	3.16E+02	1.46E+02	-2.18E+00	2.10E+00	-1.15E+00	2.05E+00
7/5/2017	3.81E+02	1.36E+02	-1.50E+00	1.96E+00	5.22E-01	2.15E+00
8/8/2017	1.59E+01	1.46E+02	-2.02E+00	1.88E+00	3.68E+00	2.24E+00
9/6/2017	2.21E+02	1.43E+02	-2.50E-01	1.81E+00	-5.51E-01	2.01E+00
10/3/2017	6.95E+00	1.56E+02	7.95E-01	1.74E+00	1.49E-01	2.07E+00
11/7/2017	1.19E+02	1.33E+02	-1.51E+00	2.03E+00	3.16E+00	2.10E+00
12/5/2017	4.73E+02	1.45E+02	-3.32E+00	2.05E+00	6.92E-01	2.08E+00
1/3/2018	1.60E+02	1.17E+02	-1.36E+00	1.87E+00	-1.45E+00	1.97E+00

Table 23 Radionuclides in Stream Water (continued)

Stream: Lower Three Runs Creek (continued)

Location: L3R-1A at Road B (continued)

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
1/30/2017	Sr-89/90	7.86E-01	4.73E-01
	I-129	1.19E-01	2.76E-01
	U-234	4.30E-02	1.82E-02
	U-235	3.32E-03	8.46E-03
	U-238	4.00E-02	1.70E-02
	Pu-238	0.00E+00	6.96E-03
	Pu-239	3.27E-02	1.21E-02
	Am-241	6.84E-02	1.78E-02
	Cm-244	0.00E+00	6.79E-03
	Tc-99	3.73E-01	7.71E-01

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	1.18E+00	1.85E-01	1.67E-01	7.94E-02
3/7/2017	1.10E+00	1.81E-01	1.38E-01	7.37E-02
4/4/2017	1.22E+00	2.10E-01	3.03E-02	6.33E-02
5/2/2017	1.02E+00	1.96E-01	8.97E-02	6.75E-02
6/6/2017	1.14E+00	1.95E-01	2.59E-01	9.59E-02
7/5/2017	1.09E+00	1.79E-01	9.89E-02	7.15E-02
8/8/2017	1.31E+00	2.09E-01	3.38E-01	1.12E-01
9/6/2017	9.30E-01	1.97E-01	1.62E-01	8.76E-02
10/3/2017	9.08E-01	1.79E-01	7.38E-02	7.35E-02
11/7/2017	9.89E-01	3.01E-01	3.57E-01	1.93E-01
12/5/2017	1.42E+00	2.02E-01	5.00E-01	1.34E-01
1/3/2018	1.06E+00	2.17E-01	6.92E-02	8.76E-02

Table 23 Radionuclides in Stream Water (continued)

Stream: Lower Three Runs Creek (continued)

Location: L3R-2 Patterson Mill Road

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	8.86E+02	1.50E+02	-1.43E+00	2.03E+00	-3.49E-02	2.20E+00
3/7/2017	9.54E+02	1.62E+02	7.78E-01	1.82E+00	7.54E-01	2.28E+00
4/4/2017	9.68E+02	1.82E+02	4.54E+00	2.14E+00	2.58E+00	2.10E+00
5/2/2017	9.27E+02	1.64E+02	1.15E+00	2.14E+00	8.24E-01	2.01E+00
6/6/2017	1.36E+03	1.82E+02	3.32E+00	1.77E+00	2.22E+00	2.07E+00
7/5/2017	1.40E+03	1.71E+02	4.08E-02	2.13E+00	1.99E+00	2.17E+00
8/8/2017	1.03E+03	1.74E+02	-3.46E+00	2.14E+00	-8.05E-01	2.06E+00
9/6/2017	1.41E+03	1.72E+02	-8.59E-01	1.85E+00	1.95E+00	2.19E+00
10/3/2017	1.86E+03	1.95E+02	-1.32E+00	1.86E+00	-3.16E+00	1.98E+00
11/7/2017	1.95E+03	1.79E+02	1.45E+00	1.81E+00	2.73E+00	2.03E+00
12/5/2017	1.42E+03	1.71E+02	-1.78E-02	2.07E+00	3.97E+00	2.45E+00
1/3/2018	1.11E+03	1.53E+02	6.76E-01	1.93E+00	6.35E-02	2.28E+00

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
1/30/2017	Sr-89/90	4.41E-01	4.71E-01
	I-129	-1.52E-01	2.76E-01
	U-234	8.73E-02	2.19E-02
	U-235	1.96E-02	9.82E-03
	U-238	3.92E-02	1.33E-02
	Pu-238	0.00E+00	6.76E-03
	Pu-239	1.84E-02	1.07E-02
	Am-241	4.35E-02	1.51E-02
	Cm-244	0.00E+00	7.10E-03
	Tc-99	4.65E+00	8.45E-01

Table 23 Radionuclides in Stream Water (continued)

Stream: Lower Three Runs Creek (continued)
Location: L3R-2 Patterson Mill Road (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	1.51E+00	2.00E-01	5.05E-01	1.30E-01
3/7/2017	1.47E+00	1.98E-01	4.19E-01	1.20E-01
4/4/2017	1.43E+00	2.21E-01	1.81E-01	9.48E-02
5/2/2017	1.09E+00	2.11E-01	4.16E-01	1.26E-01
6/6/2017	1.31E+00	2.03E-01	4.73E-01	1.26E-01
7/5/2017	1.21E+00	2.15E-01	7.05E-01	1.56E-01
8/8/2017	8.51E-01	1.92E-01	3.84E-01	1.21E-01
9/6/2017	1.51E+00	1.99E-01	6.11E-01	1.48E-01
10/3/2017	1.64E+00	2.11E-01	6.78E-01	1.56E-01
11/7/2017	1.51E+00	2.07E-01	9.05E-01	1.79E-01
12/5/2017	1.26E+00	2.33E-01	5.59E-01	1.77E-01
1/3/2018	1.38E+00	2.31E-01	2.22E-01	1.14E-01

Location: L3R-3 at Highway 125

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	4.11E+02	1.39E+02	-4.35E+00	2.03E+00	-1.04E+00	2.12E+00
3/7/2017	3.41E+02	1.47E+02	3.43E-02	1.95E+00	1.91E+00	2.24E+00
4/4/2017	4.68E+02	1.72E+02	1.85E-01	1.91E+00	1.02E+00	2.09E+00
5/2/2017	4.92E+02	1.95E+02	-1.89E+00	2.36E+00	4.19E+00	2.39E+00
6/6/2017	7.51E+02	2.11E+02	-3.97E-02	1.89E+00	4.38E+00	2.29E+00
7/5/2017	9.97E+02	2.15E+02	1.06E+00	2.09E+00	3.70E+01	5.39E+00
8/8/2017	6.59E+02	1.75E+02	-1.15E+00	1.91E+00	2.24E+01	3.81E+00
9/6/2017	8.16E+02	1.62E+02	-8.35E-01	2.28E+00	2.81E+01	4.29E+00
10/3/2017	8.35E+02	1.77E+02	-5.84E-01	1.91E+00	-9.46E-01	2.13E+00
11/7/2017	7.16E+02	1.50E+02	1.57E-01	1.71E+00	2.30E+00	2.13E+00
12/5/2017	2.51E+02	1.39E+02	1.15E+00	1.95E+00	-2.53E+00	2.05E+00
1/3/2018	4.16E+02	1.28E+02	-6.19E-01	2.20E+00	-5.54E+00	2.14E+00

Table 23 Radionuclides in Stream Water (continued)

Stream: Lower Three Runs Creek (continued)

Location: L3R-3 at Highway 125 (continued)

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
1/30/2017	Sr-89/90	1.06E-01	4.47E-01
	I-129	3.57E-01	2.76E-01
	U-234	1.02E-01	2.34E-02
	U-235	2.24E-02	1.12E-02
	U-238	6.30E-02	1.78E-02
	Pu-238	8.35E-03	5.91E-03
	Pu-239	8.19E-03	6.18E-03
	Am-241	3.78E-02	1.39E-02
	Cm-244	3.16E-03	8.06E-03
	Tc-99	-1.44E+00	7.56E-01

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	8.27E-01	1.97E-01	3.35E-01	1.14E-01
3/7/2017	1.17E+00	2.00E-01	4.38E-01	1.23E-01
4/4/2017	1.16E+00	2.15E-01	5.49E-01	1.43E-01
5/2/2017	8.57E+00	4.63E-01	1.29E+01	7.25E-01
6/6/2017	9.22E+01	3.83E+00	1.44E+02	6.82E+00
7/5/2017	3.54E+01	2.78E+00	5.76E+01	4.67E+00
8/8/2017	3.46E+01	2.43E+00	4.89E+01	4.07E+00
9/6/2017	9.32E+00	6.45E-01	1.14E+01	8.72E-01
10/3/2017	1.65E+00	2.11E-01	4.62E-01	1.33E-01
11/7/2017	2.21E+00	2.64E-01	1.41E+00	2.21E-01
12/5/2017	1.67E+00	2.11E-01	4.46E-01	1.32E-01
1/3/2018	1.27E+00	2.28E-01	2.84E-01	1.22E-01

Table 23 Radionuclides in Stream Water (continued)

Stream: Identified as Miscellaneous
Location: G-010

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	7.59E+02	1.48E+02	-2.70E+00	2.11E+00	-1.04E-01	2.05E+00
3/7/2017	5.51E+02	1.56E+02	-1.85E+00	1.79E+00	-2.43E+00	2.12E+00
4/4/2017	3.57E+02	1.45E+02	1.64E+00	2.02E+00	1.17E+00	2.32E+00
5/2/2017	5.08E+02	1.47E+02	-8.59E-01	1.90E+00	-3.35E+00	1.91E+00
6/6/2017	1.75E+03	2.00E+02	9.84E-01	1.53E+00	-1.75E+00	1.98E+00
7/5/2017	1.64E+03	1.83E+02	5.41E-01	1.74E+00	-3.32E+00	2.25E+00
8/8/2017	1.39E+03	1.85E+02	-2.55E+00	2.01E+00	-3.08E+00	2.06E+00
9/6/2017	1.53E+03	1.78E+02	-1.97E+00	2.14E+00	-3.68E-01	2.05E+00
10/3/2017	8.92E+02	1.86E+02	3.00E+00	2.01E+00	-3.38E+00	2.08E+00
11/7/2017	7.30E+02	1.50E+02	2.97E-01	2.10E+00	-2.41E-01	2.06E+00
12/5/2017	1.11E+02	1.47E+02	5.84E-01	1.82E+00	2.18E+00	1.89E+00
1/2/2018	5.97E+02	1.40E+02	1.85E+00	1.92E+00	2.22E+00	2.02E+00

Sample Date	Sr-89/90		I-129		Tc-99	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	2.12E-01	2.05E-01	-4.16E-01	2.87E-01	-1.81E-01	7.69E-01
3/7/2017	1.80E-01	2.20E-01	3.30E-01	2.95E-01	3.24E+00	7.70E-01
4/4/2017	-1.00E-01	1.95E-01	-2.47E-01	2.70E-01	1.57E+00	7.49E-01
5/2/2017	2.73E-01	1.45E-01	-2.89E-01	2.82E-01	-5.11E-01	7.64E-01
6/6/2017	4.51E-01	1.71E-01	-2.68E-02	3.01E-01	7.16E-01	7.41E-01
7/5/2017	2.65E-01	1.06E-01	-7.27E-01	2.74E-01	5.11E-01	7.62E-01
8/8/2017	7.76E-03	1.40E-01	-3.43E-01	6.72E-01	1.26E+00	7.69E-01
9/6/2017	1.40E-01	1.80E-01	-3.22E-01	6.38E-01	2.16E+00	7.78E-01
10/3/2017	3.16E-01	2.10E-01	-9.95E-02	2.54E-01	-5.11E-01	7.33E-01
11/7/2017	2.39E-01	2.41E-01	8.73E-01	5.77E-01	2.00E+00	7.56E-01
12/5/2017	2.86E-01	2.08E-01	2.17E-01	2.54E-01	1.40E+00	9.32E-01
1/2/2018	4.51E-01	1.92E-01	5.97E-02	3.05E-01	6.27E-01	7.43E-01

Table 23 Radionuclides in Stream Water (continued)

Stream: Identified as Miscellaneous (continued)
Location: G-010 (continued)

Sample Date	U-234		U-235		U-238	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	5.57E-02	1.07E-02	-4.11E-06	2.43E-04	4.84E-02	9.71E-03
3/7/2017	1.45E-02	5.11E-03	-2.25E-06	1.33E-04	1.13E-02	4.47E-03
4/4/2017	1.81E-02	5.77E-03	6.11E-03	3.57E-03	2.30E-02	6.48E-03
5/2/2017	1.83E-02	6.38E-03	0.00E+00	1.98E-03	1.77E-02	5.87E-03
6/6/2017	1.01E-02	4.28E-03	2.08E-03	2.10E-03	1.69E-02	5.57E-03
7/5/2017	1.72E-02	5.79E-03	4.24E-03	3.02E-03	2.58E-02	7.03E-03
8/8/2017	1.47E-02	5.69E-03	0.00E+00	1.98E-03	2.46E-02	6.92E-03
9/6/2017	1.12E-02	5.32E-03	0.00E+00	1.84E-03	1.74E-02	5.93E-03
10/3/2017	1.30E-02	5.64E-03	2.09E-03	2.11E-03	3.43E-02	8.48E-03
11/7/2017	3.38E-03	4.07E-03	4.19E-03	2.97E-03	1.19E-02	4.76E-03
12/5/2017	7.89E-03	4.93E-03	0.00E+00	2.05E-03	1.98E-02	6.79E-03
1/2/2018	1.56E-02	5.77E-03	1.98E-03	2.03E-03	2.04E-02	6.49E-03

Sample Date	Pu-238		Pu-239		Am-241	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	8.35E-03	5.34E-03	2.50E-03	2.52E-03	5.16E-03	3.02E-03
3/7/2017	8.73E-03	3.95E-03	-1.17E-03	1.21E-03	8.08E-03	3.72E-03
4/4/2017	5.89E-02	1.08E-02	6.92E-03	3.57E-03	8.81E-03	4.30E-03
5/2/2017	1.04E-02	4.32E-03	2.32E-03	2.72E-03	1.19E-02	4.62E-03
6/6/2017	5.43E-03	3.17E-03	0.00E+00	2.03E-03	1.22E-02	4.78E-03
7/5/2017	1.70E-03	1.74E-03	1.70E-03	1.71E-03	1.20E-02	4.72E-03
8/8/2017	4.27E-03	3.23E-03	7.11E-04	2.58E-03	4.49E-03	3.61E-03
9/6/2017	1.80E-03	1.80E-03	1.80E-03	1.81E-03	8.54E-03	4.92E-03
10/3/2017	2.06E-02	6.57E-03	1.82E-03	2.27E-03	1.56E-02	5.68E-03
11/7/2017	2.26E-03	2.65E-03	-5.65E-04	1.82E-03	8.86E-03	4.15E-03
12/5/2017	2.33E-03	2.76E-03	-1.16E-03	1.17E-03	1.28E-02	4.61E-03
1/2/2018	6.86E-03	3.75E-03	2.12E-03	2.48E-03	9.27E-03	4.51E-03

Table 23 Radionuclides in Stream Water (continued)

Stream: Identified as Miscellaneous (continued)

Location: G-010 (continued)

Sample Date	Cm-244		Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	0.00E+00	2.04E-03	9.14E+00	1.48E+00	7.22E-01	5.53E-01
3/7/2017	1.60E-03	1.87E-03	9.41E+00	1.49E+00	1.27E+00	6.79E-01
4/4/2017	0.00E+00	1.98E-03	1.02E+01	1.67E+00	4.70E-02	4.43E-01
5/2/2017	0.00E+00	2.09E-03	9.89E+00	1.65E+00	-2.12E-01	3.38E-01
6/6/2017	1.72E-03	1.72E-03	7.59E+00	1.35E+00	-1.79E-01	2.85E-01
7/5/2017	0.00E+00	2.13E-03	1.01E+01	1.66E+00	3.70E-01	6.08E-01
8/8/2017	3.81E-03	2.72E-03	1.13E+01	2.62E+00	1.91E+00	1.36E+00
9/6/2017	3.62E-03	2.59E-03	9.76E+00	1.45E+00	-2.76E-01	3.66E-01
10/3/2017	-3.86E-06	2.33E-04	1.16E+01	1.43E+00	-2.81E-01	3.06E-01
11/7/2017	-5.54E-06	3.29E-04	1.45E+01	1.67E+00	-3.43E-01	3.68E-01
12/5/2017	0.00E+00	1.90E-03	1.73E+01	1.85E+00	-7.65E-02	5.96E-01
1/2/2018	-1.81E-06	1.06E-04	1.86E+01	2.03E+00	-4.03E-01	5.34E-01

Location: HP-52 H-Area Tank Farm

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	1.69E+03	1.69E+02	2.78E+00	1.96E+00	4.70E+00	2.32E+00
3/7/2017	1.92E+03	1.85E+02	6.57E-01	2.10E+00	4.27E+00	2.19E+00
4/4/2017	1.92E+03	1.81E+02	3.03E+00	2.00E+00	2.86E+00	2.26E+00
5/2/2017	7.11E+02	1.49E+02	-1.36E+00	2.17E+00	2.09E+00	2.29E+00
6/6/2017	7.38E+02	1.62E+02	1.25E+00	1.89E+00	1.06E+00	2.18E+00
7/5/2017	4.00E+02	1.41E+02	2.30E+00	2.00E+00	1.59E+00	2.05E+00
8/8/2017	1.70E+03	1.86E+02	-8.46E-01	2.08E+00	-1.74E-01	1.95E+00
9/6/2017	4.19E+02	1.43E+02	-3.70E-01	2.06E+00	-2.16E+00	2.27E+00
10/3/2017	3.70E+01	1.55E+02	1.71E-02	2.23E+00	1.96E-01	1.97E+00
11/7/2017	1.24E+02	1.20E+02	2.06E+00	2.18E+00	6.95E-01	2.13E+00
12/5/2017	-3.32E+01	1.27E+02	-3.00E+00	2.01E+00	8.22E-01	1.98E+00
1/2/2018	5.59E+02	1.31E+02	-7.78E-01	1.73E+00	4.49E+00	2.25E+00

Table 23 Radionuclides in Stream Water (continued)

Stream: Identified as Miscellaneous (continued)

Location: HP-52 H-Area Tank Farm (continued)

Sample Date	Sr-89/90		U-234		U-235	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	1.96E-01	2.04E-01	2.39E-02	7.01E-03	-6.73E-04	2.77E-03
3/7/2017	4.32E-01	2.29E-01	2.68E-02	7.12E-03	2.06E-03	2.08E-03
4/4/2017	2.38E-01	2.18E-01	2.39E-02	6.91E-03	-2.25E-06	1.33E-04
5/2/2017	2.55E-01	1.36E-01	3.59E-02	8.34E-03	0.00E+00	1.92E-03
6/6/2017	5.08E-02	1.41E-01	2.56E-02	7.32E-03	-2.02E-06	1.20E-04
7/5/2017	9.68E-02	1.04E-01	4.14E-02	8.84E-03	1.96E-03	1.97E-03
8/8/2017	2.29E-01	1.51E-01	4.81E-02	9.52E-03	5.68E-03	3.29E-03
9/6/2017	4.14E-01	2.00E-01	2.49E-02	7.86E-03	0.00E+00	2.02E-03
10/3/2017	1.29E-01	1.98E-01	2.95E-02	8.10E-03	4.27E-03	3.15E-03
11/7/2017	4.16E-01	2.56E-01	1.92E-02	7.18E-03	2.45E-03	2.39E-03
12/5/2017	-6.51E-02	1.84E-01	5.41E-02	1.10E-02	1.36E-03	3.48E-03
1/2/2018	4.43E-02	1.55E-01	1.97E-02	6.12E-03	-6.59E-04	2.72E-03

Sample Date	U-238		Pu-238		Pu-239	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	2.65E-02	7.10E-03	6.49E-03	3.29E-03	1.62E-03	1.63E-03
3/7/2017	3.05E-02	7.79E-03	6.86E-03	3.90E-03	4.84E-04	1.82E-03
4/4/2017	3.00E-02	7.46E-03	4.76E-02	9.71E-03	3.51E-03	2.58E-03
5/2/2017	3.11E-02	7.56E-03	1.59E-02	5.63E-03	0.00E+00	2.06E-03
6/6/2017	2.84E-02	7.49E-03	1.19E-03	3.03E-03	0.00E+00	2.10E-03
7/5/2017	2.70E-02	6.94E-03	1.60E-02	6.07E-03	3.84E-03	2.74E-03
8/8/2017	6.43E-02	1.08E-02	1.76E-03	2.01E-03	3.54E-03	2.53E-03
9/6/2017	4.43E-02	9.48E-03	4.43E-03	3.70E-03	7.22E-03	3.92E-03
10/3/2017	2.64E-02	1.14E-02	0.00E+00	1.91E-03	3.30E-03	2.34E-03
11/7/2017	3.05E-02	8.51E-03	5.19E-03	3.02E-03	1.73E-03	1.74E-03
12/5/2017	5.03E-02	1.02E-02	5.70E-03	3.33E-03	3.81E-03	2.70E-03
1/2/2018	2.39E-02	6.51E-03	2.28E-03	2.69E-03	7.41E-03	4.03E-03

Table 23 Radionuclides in Stream Water (continued)

Stream: Identified as Miscellaneous (continued)

Location: HP-52 H-Area Tank Farm (continued)

Sample Date	Am-241		Cm-244	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	8.41E-03	3.82E-03	5.54E-04	2.04E-03
3/7/2017	3.27E-03	2.38E-03	0.00E+00	1.85E-03
4/4/2017	1.09E-02	4.58E-03	1.80E-03	2.16E-03
5/2/2017	6.65E-03	3.40E-03	-1.10E-03	1.10E-03
6/6/2017	7.22E-03	3.74E-03	-2.38E-03	1.69E-03
7/5/2017	6.89E-03	3.60E-03	0.00E+00	2.25E-03
8/8/2017	1.01E-02	5.08E-03	1.77E-03	1.77E-03
9/6/2017	9.35E-03	4.77E-03	1.63E-03	1.65E-03
10/3/2017	1.37E-02	4.98E-03	1.69E-03	1.73E-03
11/7/2017	1.60E-02	6.13E-03	-5.54E-06	3.32E-04
12/5/2017	9.43E-03	4.26E-03	1.86E-03	2.17E-03
1/2/2018	1.08E-02	4.51E-03	-1.81E-06	1.07E-04

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	4.49E+00	2.97E-01	8.32E-01	1.70E-01
3/7/2017	5.03E+00	3.12E-01	7.35E-01	1.64E-01
4/4/2017	6.00E+00	3.50E-01	1.99E+00	2.80E-01
5/2/2017	1.91E+00	2.32E-01	6.68E-01	1.58E-01
6/6/2017	1.48E+00	2.23E-01	6.97E-02	8.33E-02
7/5/2017	2.18E+00	2.42E-01	6.78E-01	1.61E-01
8/8/2017	1.70E+00	2.28E-01	4.73E-01	1.50E-01
9/6/2017	1.96E+00	2.44E-01	9.35E-01	1.83E-01
10/3/2017	1.26E+00	1.96E-01	5.08E-01	1.45E-01
11/7/2017	2.26E+00	2.65E-01	1.29E+00	2.16E-01
12/5/2017	5.68E+00	4.06E-01	3.97E+00	4.27E-01
1/2/2018	6.59E+00	3.68E-01	4.32E+00	3.61E-01

Table 23 Radionuclides in Stream Water (continued)

Stream: Identified as Miscellaneous (continued)

Location: Mary's Branch

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	1.18E+04	3.49E+02	-1.31E+00	2.23E+00	5.84E-01	2.03E+00
3/7/2017	1.16E+04	3.53E+02	-2.23E+00	1.79E+00	-3.46E+00	2.07E+00
4/4/2017	1.07E+04	3.39E+02	2.51E+00	2.07E+00	2.12E+00	2.13E+00
5/2/2017	9.76E+03	3.31E+02	3.11E+00	2.04E+00	-3.22E+00	2.13E+00
6/6/2017	1.08E+04	3.64E+02	8.30E-01	1.98E+00	-2.14E+00	2.02E+00
7/5/2017	1.19E+04	3.86E+02	1.88E+00	1.93E+00	3.14E+00	2.10E+00
8/8/2017	1.19E+04	3.38E+02	3.35E+00	2.13E+00	-4.49E+00	2.11E+00
9/6/2017	1.24E+04	3.43E+02	-3.73E+00	1.91E+00	-9.14E-01	2.19E+00
10/3/2017	1.33E+04	3.42E+02	4.46E-01	1.94E+00	2.52E+00	2.16E+00
11/7/2017	1.27E+04	3.49E+02	2.97E+00	2.09E+00	6.92E-01	2.14E+00
12/5/2017	1.20E+04	3.44E+02	1.45E+00	2.31E+00	-4.14E-02	2.02E+00
1/3/2018	1.16E+04	3.45E+02	8.78E-01	2.05E+00	2.44E+00	2.06E+00

Sample Date	U-234		U-235		U-238	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	1.31E-01	2.47E-02	5.35E-03	6.56E-03	7.19E-02	1.91E-02
3/7/2017	7.97E-02	1.91E-02	8.68E-03	6.16E-03	1.09E-01	2.15E-02
4/4/2017	4.22E-02	1.28E-02	4.00E-03	4.02E-03	3.89E-02	1.22E-02
5/2/2017	9.54E-02	1.96E-02	3.89E-03	4.19E-03	9.00E-02	1.85E-02
6/6/2017	9.51E-01	8.44E-02	3.35E-02	1.22E-02	8.73E-01	7.81E-02
7/5/2017	7.49E-02	1.71E-02	-5.78E-05	1.72E-03	8.89E-02	2.02E-02
8/8/2017	3.95E-02	1.24E-02	1.21E-02	7.15E-03	2.73E-02	1.06E-02
9/6/2017	2.23E-02	1.03E-02	0.00E+00	4.38E-03	3.62E-02	1.36E-02
10/3/2017	4.08E-02	1.22E-02	7.76E-03	5.60E-03	5.32E-02	1.43E-02
11/7/2017	1.10E-01	2.01E-02	5.14E-03	6.03E-03	5.92E-02	1.40E-02
12/5/2017	1.22E-01	2.24E-02	9.46E-03	7.66E-03	1.06E-01	2.01E-02
1/3/2018	4.43E-02	1.50E-02	0.00E+00	4.36E-03	6.03E-02	1.61E-02

Table 23 Radionuclides in Stream Water (continued)

Stream: Identified as Miscellaneous (continued)

Location: Mary's Branch (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	2.51E-01	2.15E-01	3.19E+00	3.02E-01
3/7/2017	5.49E+00	3.45E-01	1.20E+01	5.73E-01
4/4/2017	1.22E+00	2.12E-01	3.41E+00	3.15E-01
5/2/2017	7.38E-01	2.78E-01	7.03E+00	4.45E-01
6/6/2017	9.19E+01	1.31E+00	1.76E+02	2.51E+00
7/5/2017	1.03E+01	4.76E-01	4.00E+01	1.07E+00
8/8/2017	7.68E-01	1.69E-01	1.90E+00	2.37E-01
9/6/2017	1.21E+00	1.90E-01	2.31E+00	2.60E-01
10/3/2017	1.97E+00	2.28E-01	3.41E+00	3.08E-01
11/7/2017	1.02E+00	2.62E-01	4.30E+00	3.45E-01
12/5/2017	1.43E+00	2.10E-01	4.43E+00	3.60E-01
1/3/2018	4.59E-01	3.27E-01	1.39E+00	3.53E-01

Location: McQueens Branch

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/13/2017	1.59E+03	1.76E+02	1.72E+00	2.06E+00	-1.93E+00	1.98E+00
3/13/2017	1.37E+03	1.70E+02	-1.96E+00	1.85E+00	-1.71E+00	2.07E+00
4/10/2017	1.40E+03	1.79E+02	-1.68E+00	1.89E+00	8.16E-01	2.09E+00
5/8/2017	1.61E+03	1.77E+02	-2.48E+00	2.26E+00	1.54E+00	2.29E+00
6/12/2017	1.43E+03	1.95E+02	-5.00E-01	1.68E+00	-2.46E+00	2.04E+00
7/10/2017	1.75E+03	1.93E+02	1.61E+00	1.87E+00	1.11E-01	2.05E+00
8/14/2017	1.24E+03	1.61E+02	3.43E+00	1.97E+00	1.11E-01	1.87E+00
9/18/2017	1.22E+03	1.89E+02	8.14E-01	2.00E+00	6.08E-01	2.18E+00
10/9/2017	1.49E+03	1.76E+02	3.38E+00	1.85E+00	2.31E+00	1.96E+00
11/13/2017	1.18E+03	1.64E+02	1.44E+00	1.93E+00	2.95E+00	2.13E+00
12/11/2017	1.11E+03	1.68E+02	-3.19E+00	1.84E+00	4.57E-01	1.81E+00
1/8/2018	1.40E+03	1.62E+02	-1.93E+00	2.19E+00	-1.89E+00	1.93E+00

Table 23 Radionuclides in Stream Water (continued)

Stream: Identified as Miscellaneous (continued)

Location: McQueens Branch (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/13/2017	8.51E-01	2.33E-01	2.64E-01	1.22E-01
3/13/2017	1.48E-01	2.37E-01	3.35E-01	1.84E-01
4/10/2017	4.46E-01	1.72E-01	2.97E-01	1.04E-01
5/8/2017	1.64E+00	3.97E-01	1.47E+00	3.68E-01
6/12/2017	1.40E+00	2.09E-01	1.62E+00	2.21E-01
7/10/2017	1.18E+00	3.24E-01	1.82E-01	1.51E-01
8/14/2017	1.07E+00	3.24E-01	1.07E-01	1.26E-01
9/18/2017	-5.19E-02	2.70E-01	1.40E+00	3.57E-01
10/9/2017	1.81E+00	3.62E-01	1.19E+00	3.36E-01
11/13/2017	1.02E+00	3.03E-01	8.35E-01	2.86E-01
12/11/2017	1.07E+00	3.08E-01	6.08E-01	2.41E-01
1/8/2018	1.35E+00	3.85E-01	1.39E+00	3.66E-01

Location: TNX-008

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017*	2.73E+02	1.27E+02				
3/7/2017	2.08E+02	1.36E+02	-2.12E+00	2.20E+00	5.03E-01	2.12E+00
4/4/2017	6.49E+01	1.56E+02	1.06E+00	1.93E+00	-1.39E+00	2.13E+00
5/2/2017	-1.12E+02	1.34E+02	8.89E-01	1.96E+00	-3.78E+00	2.20E+00
6/6/2017	1.92E+00	1.41E+02	4.84E-01	1.89E+00	3.92E+00	2.14E+00
7/5/2017	2.52E+02	1.37E+02	2.48E+00	1.73E+00	8.41E-01	2.09E+00
8/8/2017	-1.23E+02	1.46E+02	-6.70E-02	1.85E+00	6.41E-01	2.16E+00
9/6/2017	1.95E+02	1.39E+02	-5.54E-01	2.02E+00	-3.19E+00	2.10E+00
10/3/2017	4.41E+01	1.61E+02	2.04E+00	1.86E+00	-7.35E-01	1.95E+00
11/7/2017	7.38E+01	1.25E+02	2.63E+00	2.15E+00	7.59E-01	1.97E+00
12/5/2017	1.28E+02	1.40E+02	1.34E+00	2.00E+00	4.32E-01	2.02E+00
1/3/2018	3.59E+02	1.28E+02	1.03E-01	1.89E+00	1.12E+00	2.07E+00

NOTE: * Due to laboratory error, only tritium analysis performed on this sample.

Table 23 Radionuclides in Stream Water (continued)

Stream: Identified as Miscellaneous (continued)

Location: TNX-008 (continued)

Sample Date	U-234		U-235		U-238	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
3/7/2017	8.16E-02	1.43E-02	4.38E-03	3.11E-03	7.97E-02	1.39E-02
4/4/2017	2.31E-02	7.35E-03	0.00E+00	1.99E-03	1.15E-02	5.34E-03
5/2/2017	4.46E-02	1.05E-02	4.68E-03	4.04E-03	5.49E-02	1.09E-02
6/6/2017	4.46E-02	9.93E-03	-1.01E-05	6.01E-04	4.43E-02	1.05E-02
7/5/2017	4.35E-02	9.24E-03	-2.89E-05	1.72E-03	4.35E-02	1.15E-02
8/8/2017	4.19E-02	1.38E-02	-9.38E-06	6.35E-04	5.30E-02	1.53E-02
9/6/2017	3.78E-02	9.32E-03	2.78E-03	3.28E-03	2.08E-02	8.35E-03
10/3/2017	7.78E-02	1.32E-02	8.00E-03	4.14E-03	5.32E-02	1.10E-02
11/7/2017	5.76E-02	1.13E-02	7.81E-04	2.82E-03	5.19E-02	1.06E-02
12/5/2017	4.19E-02	1.05E-02	6.35E-03	3.86E-03	2.23E-02	6.40E-03
1/3/2018	7.30E-02	1.28E-02	-1.42E-03	1.42E-03	7.24E-02	1.24E-02

Sample Date	Pu-238		Pu-239	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
3/7/2017	3.27E-03	2.32E-03	0.00E+00	1.89E-03
4/4/2017	8.81E-03	4.98E-03	1.88E-03	1.89E-03
5/2/2017	6.62E-03	4.19E-03	-1.54E-05	1.03E-03
6/6/2017	3.73E-03	2.66E-03	-6.24E-04	2.30E-03
7/5/2017	4.76E-03	4.10E-03	-1.19E-03	1.19E-03
8/8/2017	-2.56E-06	1.69E-04	-1.66E-03	1.77E-03
9/6/2017	-2.43E-03	1.73E-03	-2.50E-05	1.67E-03
10/3/2017	4.65E-03	1.76E-03	5.16E-04	1.88E-03
11/7/2017	0.00E+00	1.94E-03	-1.11E-03	1.11E-03
12/5/2017	-6.30E-04	2.11E-03	6.22E-04	2.35E-03
1/3/2018	3.32E-03	2.64E-03	0.00E+00	2.13E-03

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
1/30/2017	Tc-99	2.07E-01	7.79E-01

Table 23 Radionuclides in Stream Water (continued)

Stream: Identified as Miscellaneous (continued)

Location: TNX-008 (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
3/7/2017	4.30E+00	3.07E-01	1.65E+00	2.62E-01
4/4/2017	4.68E+00	3.33E-01	2.17E+00	2.99E-01
5/2/2017	4.92E+00	3.34E-01	1.34E+00	2.34E-01
6/6/2017	5.16E+00	3.29E-01	1.42E+00	2.39E-01
7/5/2017	5.89E+00	3.34E-01	7.05E-01	1.77E-01
8/8/2017	6.16E+00	3.42E-01	1.00E+00	2.06E-01
9/6/2017	6.27E+00	3.54E-01	5.89E-01	1.65E-01
10/3/2017	6.46E+00	3.52E-01	1.22E+00	2.20E-01
11/7/2017	5.68E+00	3.55E-01	1.28E+00	2.35E-01
12/5/2017	5.81E+00	3.35E-01	5.65E-01	1.61E-01
1/3/2018	3.62E+00	3.00E-01	2.89E-01	1.26E-01

Location: U3R-0

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	3.08E+02	1.31E+02	4.46E-01	1.85E+00	-9.19E-01	2.19E+00
3/7/2017	-3.49E+01	1.30E+02	4.46E-01	1.87E+00	-7.46E-01	2.30E+00
4/3/2017	-1.10E+02	1.52E+02	-1.41E+00	1.84E+00	-3.49E+00	2.13E+00
5/1/2017	6.16E+01	1.30E+02	2.37E-01	2.24E+00	-9.19E-01	2.11E+00
6/6/2017	3.84E+00	1.41E+02	-2.63E+00	1.88E+00	2.27E+00	2.11E+00
7/5/2017	1.28E+02	1.31E+02	-6.78E-02	1.75E+00	-3.27E-01	2.25E+00
8/7/2017	-5.22E+01	1.48E+02	2.76E+00	2.23E+00	-8.70E-01	2.11E+00
9/6/2017	1.55E+02	1.36E+02	5.49E-01	2.05E+00	-8.24E-01	1.98E+00
10/3/2017	2.56E+01	1.60E+02	-6.38E-01	1.87E+00	1.80E+00	2.14E+00
11/7/2017	2.31E+01	1.24E+02	1.39E-01	2.13E+00	-1.27E+00	2.11E+00
12/5/2017	-1.95E+02	1.25E+02	4.65E-01	1.90E+00	1.17E+00	2.21E+00
1/3/2018	1.32E+02	1.20E+02	-4.49E-01	2.07E+00	-1.01E-01	2.11E+00

Table 23 Radionuclides in Stream Water (continued)

Stream: Identified as Miscellaneous (continued)

Location: U3R-0 (continued)

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
1/30/2017	Sr-89/90	4.73E-01	4.77E-01
	I-129	-1.76E-01	2.86E-01
	U-234	1.55E-01	3.89E-02
	U-235	-4.78E-05	5.61E-04
	U-238	8.14E-02	2.80E-02
	Pu-238	-1.06E-02	5.39E-03
	Pu-239	7.76E-03	5.89E-03
	Am-241	1.64E-02	8.67E-03
	Cm-244	0.00E+00	6.60E-03
	Tc-99	-1.31E+00	7.60E-01

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
2/7/2017	8.84E-01	2.35E-01	2.95E+00	2.90E-01
3/7/2017	2.26E+00	2.44E-01	3.43E+00	3.07E-01
4/3/2017	2.81E+00	3.25E-01	6.19E+00	4.16E-01
5/1/2017	2.12E+00	2.45E-01	4.22E+00	3.46E-01
6/6/2017	4.32E+00	3.12E-01	5.89E+00	4.10E-01
7/5/2017	1.05E+01	4.50E-01	1.33E+01	6.05E-01
8/7/2017	2.14E+00	2.26E-01	2.44E+00	2.70E-01
9/6/2017	1.55E+00	2.22E-01	2.31E+00	2.55E-01
10/3/2017	1.79E+00	2.19E-01	2.51E+00	2.65E-01
11/7/2017	1.31E+00	2.55E-01	3.08E+00	2.96E-01
12/5/2017	1.94E+00	2.26E-01	3.54E+00	3.21E-01
1/3/2018	4.76E-01	3.74E-01	3.22E+00	5.28E-01

Table 24 Radionuclides in River Water

Location: River Mile 118.8

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/10/2017	2.32E+02	4.73E+01	-5.16E-01	3.43E-01	4.41E-01	3.59E-01
1/17/2017	5.16E+02	5.14E+01	-2.89E-02	4.07E-01	-1.03E-01	4.51E-01
1/24/2017	5.46E+02	5.16E+01	2.70E-01	2.74E-01	-2.78E-01	2.81E-01
1/31/2017	3.65E+02	4.86E+01	2.06E-02	1.91E-01	1.04E-01	2.26E-01
2/7/2017	5.32E+02	4.91E+01	-2.01E-01	2.61E-01	1.04E-01	2.61E-01
2/14/2017	1.93E+03	6.40E+01	-2.92E-01	4.02E-01	2.22E-01	4.49E-01
2/21/2017	6.62E+02	5.10E+01	8.35E-02	2.91E-01	3.81E-01	3.40E-01
2/28/2017	1.10E+03	5.66E+01	4.24E-01	3.05E-01	4.00E-01	3.12E-01
3/7/2017	7.89E+02	5.29E+01	1.26E-01	2.92E-01	1.39E-01	2.76E-01
3/14/2017	1.98E+02	4.82E+01	-3.24E-01	3.24E-01	2.16E-01	3.14E-01
3/21/2017	4.59E+02	5.14E+01	-2.07E-01	2.95E-01	7.92E-02	3.01E-01
3/28/2017	5.70E+02	4.98E+01	3.35E-01	3.24E-01	-1.05E-01	2.91E-01
4/4/2017	4.49E+02	5.14E+01	1.79E-02	3.06E-01	-1.29E-01	4.05E-01
4/10/2017	9.32E+02	5.70E+01	7.00E-02	2.61E-01	-5.35E-01	3.09E-01
4/18/2017	5.68E+02	5.06E+01	-3.27E-01	2.21E-01	1.19E-01	2.21E-01
4/25/2017	6.03E+02	5.06E+01	4.35E-01	2.70E-01	1.18E-02	2.91E-01
5/2/2017	6.38E+02	5.23E+01	1.35E-01	2.00E-01	2.73E-01	2.21E-01
5/9/2017	2.33E+02	4.63E+01	1.48E-01	2.18E-01	1.45E-01	2.53E-01
5/16/2017	8.43E+02	5.41E+01	6.59E-02	2.74E-01	9.65E-02	3.06E-01
5/25/2017	2.68E+02	5.05E+01	-2.33E-01	2.77E-01	3.97E-01	2.87E-01
5/30/2017	2.81E+02	4.80E+01	-6.41E-01	4.59E-01	2.97E-04	4.19E-01
6/6/2017	5.68E+02	5.21E+01	2.86E-01	1.95E-01	2.25E-01	2.09E-01
6/13/2017	3.08E+02	4.86E+01	2.84E-01	2.73E-01	-1.00E-01	3.99E-01
6/20/2017	3.27E+02	4.92E+01	7.59E-02	2.91E-01	2.97E-01	2.90E-01
6/27/2017	1.95E+02	4.80E+01	3.73E-01	3.80E-01	8.32E-01	4.74E-01
7/3/2017	3.54E+02	4.96E+01	3.11E-01	4.13E-01	-4.70E-01	4.37E-01
7/11/2017	2.29E+02	4.75E+01	-1.20E-01	2.69E-01	-8.14E-02	2.65E-01
7/18/2017	1.88E+02	4.69E+01	1.19E-01	3.29E-01	1.74E-01	3.09E-01
7/25/2017	2.52E+02	4.59E+01	-1.76E-01	2.95E-01	-1.86E-01	3.31E-01
8/1/2017	4.65E+02	4.88E+01	1.70E-01	3.69E-01	-3.46E-01	4.02E-01
8/8/2017	1.17E+03	5.52E+01	-2.35E-01	2.02E-01	1.76E-01	2.49E-01
8/15/2017	1.35E+03	1.70E+02	-2.53E-01	2.77E-01	5.32E-01	2.90E-01
8/22/2017	1.38E+03	5.94E+01	2.23E-02	2.63E-01	-4.65E-01	2.76E-01
8/29/2017	1.21E+03	5.67E+01	2.81E-01	2.25E-01	2.42E-01	2.64E-01
9/5/2017	1.72E+03	6.22E+01	2.10E-01	3.08E-01	-5.27E-01	3.21E-01
9/13/2017	8.11E+02	5.29E+01	-1.04E-01	1.79E-01	9.57E-02	2.00E-01
9/19/2017	5.35E+02	4.95E+01	-1.36E-01	3.01E-01	1.51E-01	3.63E-01
9/26/2017	7.22E+02	5.40E+01	1.27E-01	2.32E-01	-3.84E-01	2.35E-01
10/3/2017	9.19E+02	5.06E+01	4.05E-02	2.00E-01	-7.95E-02	2.25E-01

Table 24 Radionuclides in River Water (continued)

Location: River Mile 118.8 (continued)

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
10/10/2017	1.81E+02	4.46E+01	2.92E-01	2.49E-01	-1.73E-01	3.02E-01
10/17/2017	5.14E+02	4.74E+01	-1.56E-02	1.96E-01	2.36E-01	2.37E-01
10/24/2017	3.68E+02	5.00E+01	-4.73E-02	2.55E-01	-6.27E-02	3.20E-01
10/31/2017	1.57E+02	4.70E+01	-3.51E-02	1.85E-01	2.32E-01	2.65E-01
11/7/2017	3.38E+02	5.14E+01	1.40E-01	2.06E-01	-3.08E-01	2.78E-01
11/14/2017	3.30E+02	5.11E+01	-3.00E-01	3.15E-01	-6.57E-01	3.29E-01
11/20/2017	1.83E+02	4.87E+01	5.08E-01	2.86E-01	4.05E-01	2.73E-01
11/28/2017	3.70E+02	4.95E+01	3.11E-01	3.15E-01	3.54E-01	3.36E-01
12/5/2017	3.38E+02	4.92E+01	3.86E-01	2.62E-01	-3.38E-01	2.77E-01
12/12/2017	3.19E+02	5.01E+01	-1.90E-02	2.58E-01	-3.32E-01	3.14E-01
12/19/2017	5.14E+02	5.18E+01	-4.84E-01	3.29E-01	1.48E-01	3.93E-01
12/27/2017	2.76E+02	5.09E+01	9.24E-06	2.02E-01	-5.41E-02	2.38E-01
1/2/2018	1.48E+02	4.81E+01	1.02E-01	2.67E-01	3.24E-01	3.30E-01

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
1/31/2017	Sr-89/90	5.84E-02	4.78E-01
	U-234	1.42E-01	3.74E-02
	U-235	1.37E-02	1.62E-02
	U-238	1.16E-01	3.39E-02
	Pu-238	-7.92E-05	1.03E-03
	Pu-239	1.71E-02	1.41E-02
	Am-241	2.69E-02	1.59E-02
	Cm-244	0.00E+00	1.01E-02
	Tc-99	5.24E-01	7.74E-01

Table 24 Radionuclides in River Water (continued)

Location: River Mile 118.8 (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/10/2017	1.81E+00	2.13E-01	3.78E-01	1.25E-01
1/17/2017	1.88E+00	2.28E-01	1.78E-01	9.71E-02
1/24/2017	1.82E+00	2.35E-01	1.83E-01	1.02E-01
1/31/2017	1.94E+00	2.18E-01	2.42E-01	1.05E-01
2/7/2017	2.45E+00	2.55E-01	1.52E-01	9.93E-02
2/14/2017	1.63E+00	2.31E-01	5.22E-01	1.48E-01
2/21/2017	1.55E+00	2.25E-01	1.85E-01	1.03E-01
2/28/2017	1.78E+00	2.11E-01	1.33E-01	8.32E-02
3/7/2017	2.02E+00	2.20E-01	6.38E-02	6.75E-02
3/14/2017	1.70E+00	2.08E-01	3.03E-01	1.12E-01
3/21/2017	1.72E+00	2.32E-01	2.57E-01	1.16E-01
3/28/2017	1.82E+00	2.13E-01	2.00E-01	9.56E-02
4/4/2017	1.67E+00	2.31E-01	1.74E-01	1.04E-01
4/10/2017	2.17E+00	2.36E-01	3.73E-01	1.24E-01
4/18/2017	1.53E+00	2.18E-01	7.51E-02	7.53E-02
4/25/2017	1.34E+00	2.12E-01	7.78E-02	7.79E-02
5/2/2017	2.08E+00	2.43E-01	-3.27E-02	6.02E-02
5/9/2017	1.71E+00	2.19E-01	1.82E-01	9.56E-02
5/16/2017	1.54E+00	2.25E-01	1.05E-01	9.09E-02
5/25/2017	1.53E+00	2.19E-01	7.68E-02	7.69E-02
5/30/2017	1.55E+00	2.14E-01	1.88E-01	9.89E-02
6/6/2017	2.11E+00	2.39E-01	1.46E-01	9.09E-02
6/13/2017	1.42E+00	2.23E-01	1.82E-01	1.08E-01
6/20/2017	2.11E+00	2.45E-01	-3.46E-02	6.34E-02
6/27/2017	1.95E+00	2.35E-01	1.50E-01	1.01E-01
7/3/2017	1.95E+00	2.17E-01	1.23E-01	8.92E-02
7/11/2017	2.02E+00	2.40E-01	2.30E-01	1.12E-01
7/18/2017	2.15E+00	2.41E-01	8.32E-02	8.92E-02
7/25/2017	2.08E+00	2.38E-01	8.11E-02	8.67E-02
8/1/2017	1.87E+00	3.60E-01	5.05E-02	1.11E-01
8/8/2017	1.98E+00	2.18E-01	2.65E-01	1.14E-01
8/15/2017	2.34E+00	2.31E-01	2.33E-01	1.10E-01
8/22/2017	2.09E+00	2.22E-01	2.25E-01	1.07E-01
8/29/2017	1.68E+00	2.25E-01	8.27E-02	8.84E-02
9/5/2017	2.09E+00	2.22E-01	2.73E-01	1.17E-01
9/13/2017	1.59E+00	2.22E-01	1.70E-02	7.63E-02
9/19/2017	2.07E+00	2.45E-01	5.43E-01	1.53E-01
9/26/2017	1.51E+00	2.05E-01	6.27E-02	7.60E-02
10/3/2017	2.13E+00	2.29E-01	2.42E-02	7.73E-02

Table 24 Radionuclides in River Water (continued)

Location: River Mile 118.8 (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
10/10/2017	1.58E+00	2.32E-01	1.25E-01	9.52E-02
10/17/2017	2.29E+00	2.35E-01	5.73E-02	8.43E-02
10/24/2017	2.03E+00	2.25E-01	6.41E-02	7.81E-02
10/31/2017	1.73E+00	2.15E-01	3.51E-01	1.29E-01
11/7/2017	2.08E+00	3.79E-01	2.42E-02	1.12E-01
11/14/2017	2.19E+00	2.53E-01	1.26E-01	9.63E-02
11/20/2017	2.26E+00	2.33E-01	2.39E-02	7.65E-02
11/28/2017	2.00E+00	2.25E-01	3.95E-01	1.36E-01
12/5/2017	2.04E+00	2.70E-01	1.33E-01	1.10E-01
12/12/2017	2.07E+00	2.45E-01	3.11E-01	1.26E-01
12/19/2017	2.19E+00	2.50E-01	3.84E-01	1.36E-01
12/27/2017	2.64E+00	2.74E-01	2.19E-01	1.26E-01
1/2/2018	2.10E+00	2.56E-01	1.48E-01	1.15E-01

Table 24 Radionuclides in River Water (continued)

Location: River Mile 141.5

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/10/2017	2.69E+02	6.09E+01	1.81E-01	2.49E-01	-4.95E-01	3.02E-01
1/17/2017	6.16E+02	6.36E+01	-8.57E-02	2.16E-01	2.39E-02	2.73E-01
1/24/2017	6.49E+02	6.42E+01	3.62E-02	2.55E-01	4.65E-01	2.91E-01
1/31/2017	4.57E+02	6.04E+01	-2.27E-02	2.19E-01	-1.59E-01	2.39E-01
2/7/2017	5.81E+02	6.15E+01	8.65E-02	2.03E-01	1.12E-01	2.48E-01
2/14/2017	2.02E+03	7.27E+01	7.00E-01	3.00E-01	2.59E-02	3.61E-01
2/21/2017	6.03E+02	6.25E+01	2.03E-01	2.58E-01	-2.12E-01	2.58E-01
2/28/2017	1.19E+03	6.67E+01	4.43E-01	3.33E-01	-4.27E-01	3.11E-01
3/7/2017	1.26E+03	6.79E+01	-1.71E-01	2.63E-01	1.64E-01	2.72E-01
3/14/2017	7.30E+02	6.54E+01	-2.13E-01	2.90E-01	1.31E-01	3.61E-01
3/21/2017	4.05E+02	6.33E+01	9.11E-02	2.45E-01	-1.56E-01	2.62E-01
3/28/2017	6.24E+02	6.31E+01	2.76E-01	1.86E-01	9.32E-02	2.02E-01
4/4/2017	6.54E+02	6.34E+01	3.54E-02	3.36E-01	-3.38E-01	4.06E-01
4/10/2017	8.57E+02	6.86E+01	2.59E-01	3.53E-01	2.43E-01	3.38E-01
4/18/2017	6.05E+02	6.34E+01	4.41E-01	2.42E-01	-1.02E-01	2.41E-01
4/25/2017	6.14E+02	6.33E+01	2.12E-01	2.67E-01	7.95E-02	2.67E-01
5/2/2017	7.27E+02	6.57E+01	-3.43E-01	1.92E-01	-3.38E-01	2.18E-01
5/9/2017	3.46E+02	6.23E+01	1.67E-01	1.53E-01	-8.92E-02	1.65E-01
5/16/2017	8.54E+02	6.79E+01	4.62E-02	2.11E-01	-1.36E-01	2.44E-01
5/25/2017	3.24E+02	6.42E+01	2.73E-01	1.85E-01	2.38E-01	2.11E-01
5/30/2017	4.38E+02	6.52E+01	-9.22E-02	2.77E-01	3.41E-01	3.28E-01
6/6/2017	5.05E+02	6.56E+01	-2.03E-01	4.75E-01	-8.24E-01	5.60E-01
6/13/2017	3.08E+02	6.28E+01	4.68E-02	3.52E-01	1.55E-01	3.68E-01
6/20/2017	5.03E+02	6.46E+01	2.92E-01	1.98E-01	-9.49E-02	2.21E-01
6/27/2017	3.11E+02	6.28E+01	1.12E-01	2.78E-01	-1.07E-01	3.06E-01
7/3/2017	2.16E+02	6.49E+01	1.62E-01	3.87E-01	4.73E-01	4.48E-01
7/11/2017	2.89E+02	6.23E+01	8.92E-02	2.70E-01	-5.68E-02	2.99E-01
7/18/2017	2.55E+02	6.23E+01	2.89E-02	2.91E-01	2.57E-01	2.68E-01
7/25/2017	2.19E+02	6.25E+01	3.35E-01	1.83E-01	-3.78E-02	2.77E-01
8/1/2017	2.41E+02	5.99E+01	-3.92E-01	2.56E-01	2.06E-01	2.72E-01
8/8/2017	1.08E+03	6.49E+01	-1.42E-01	1.90E-01	-1.68E-03	2.12E-01
8/15/2017	1.03E+03	6.56E+01	2.06E-01	2.89E-01	2.43E-01	3.40E-01
8/22/2017	1.52E+03	6.79E+01	1.12E-01	1.44E-01	1.76E-01	1.77E-01
8/29/2017	1.10E+03	6.71E+01	6.08E-01	2.66E-01	7.81E-02	3.21E-01
9/5/2017	1.72E+03	7.20E+01	6.76E-01	2.63E-01	4.84E-01	2.90E-01
9/13/2017	8.89E+02	6.65E+01	1.69E-01	1.87E-01	4.86E-02	2.05E-01
9/19/2017	5.08E+02	6.17E+01	-1.26E-01	1.46E-01	1.32E-01	1.62E-01
9/26/2017	7.65E+02	6.06E+01	-9.89E-02	1.94E-01	-1.64E-01	2.08E-01
10/3/2017	9.05E+02	6.18E+01	3.68E-02	1.67E-01	1.10E-01	2.08E-01

Table 24 Radionuclides in River Water (continued)

Location: River Mile 141.5 (continued)

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
10/10/2017	4.32E+02	4.82E+01	1.55E-01	1.82E-01	1.40E-01	2.34E-01
10/17/2017	4.86E+02	5.75E+01	7.38E-02	1.94E-01	-2.73E-01	2.12E-01
10/24/2017	3.65E+02	4.83E+01	-3.11E-01	1.98E-01	-9.49E-02	2.21E-01
10/31/2017	2.68E+02	4.65E+01	-7.51E-02	5.55E-01	-8.30E-02	6.06E-01
11/7/2017	3.08E+02	4.74E+01	-1.69E-01	2.51E-01	3.86E-01	3.30E-01
11/14/2017	2.89E+02	4.74E+01	1.50E-01	3.06E-01	4.11E-01	3.32E-01
11/20/2017	2.14E+02	4.70E+01	2.46E-01	3.11E-01	-4.35E-01	3.41E-01
11/28/2017	2.84E+02	4.71E+01	4.22E-01	2.37E-01	-5.78E-02	3.12E-01
12/5/2017	2.66E+02	4.78E+01	-6.19E-01	3.77E-01	8.22E-01	4.22E-01
12/12/2017	2.97E+02	4.71E+01	-2.28E-01	2.41E-01	7.62E-02	2.78E-01
12/19/2017	3.62E+02	4.80E+01	1.97E-01	2.39E-01	-4.30E-01	2.57E-01
12/27/2017	2.61E+02	4.73E+01	3.57E-03	1.79E-01	1.74E-01	2.13E-01
1/2/2018	4.00E+02	5.32E+01	4.84E-03	1.80E-01	-1.08E-01	2.05E-01

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
1/31/2017	Sr-89/90	6.92E-01	5.00E-01
	U-234	8.05E-02	3.01E-02
	U-235	2.14E-02	1.53E-02
	U-238	7.16E-02	2.85E-02
	Pu-238	-5.11E-03	5.08E-03
	Pu-239	1.49E-02	1.10E-02
	Am-241	1.88E-02	1.52E-02
	Cm-244	-2.69E-03	1.11E-02
	Tc-99	-3.86E-01	7.59E-01

Table 24 Radionuclides in River Water (continued)

Location: River Mile 141.5 (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/10/2017	2.14E+00	2.25E-01	2.11E-01	1.01E-01
1/17/2017	2.03E+00	2.32E-01	1.37E-01	8.67E-02
1/24/2017	2.00E+00	2.32E-01	2.95E-01	1.11E-01
1/31/2017	1.96E+00	2.18E-01	2.69E-01	1.07E-01
2/7/2017	1.93E+00	2.17E-01	2.31E-01	1.00E-01
2/14/2017	1.86E+00	2.36E-01	1.51E-01	9.78E-02
2/21/2017	1.74E+00	2.30E-01	1.42E-02	6.77E-02
2/28/2017	2.22E+00	2.28E-01	2.00E-01	9.56E-02
3/7/2017	1.36E+00	2.18E-01	2.15E-01	1.06E-01
3/14/2017	2.59E+00	2.52E-01	2.39E-01	1.05E-01
3/21/2017	1.36E+00	2.15E-01	-8.51E-02	3.63E-02
3/28/2017	2.12E+00	2.24E-01	2.65E-01	1.06E-01
4/4/2017	1.61E+00	2.30E-01	3.08E-01	1.23E-01
4/10/2017	1.77E+00	2.27E-01	7.54E-02	7.57E-02
4/18/2017	1.38E+00	2.12E-01	3.89E-02	6.39E-02
4/25/2017	1.66E+00	2.32E-01	2.73E-01	1.17E-01
5/2/2017	1.80E+00	2.28E-01	7.46E-02	7.48E-02
5/9/2017	1.98E+00	2.28E-01	1.14E-01	8.17E-02
5/16/2017	1.79E+00	2.33E-01	9.76E-02	8.53E-02
5/25/2017	1.87E+00	2.30E-01	1.74E-01	9.32E-02
5/30/2017	2.06E+00	2.30E-01	-7.41E-02	2.40E-02
6/6/2017	1.79E+00	2.23E-01	2.59E-01	1.11E-01
6/13/2017	1.60E+00	2.30E-01	3.38E-01	1.26E-01
6/20/2017	1.78E+00	2.34E-01	1.04E-01	9.04E-02
6/27/2017	2.09E+00	2.38E-01	1.59E-02	7.21E-02
7/3/2017	2.22E+00	2.43E-01	1.81E-01	1.05E-01
7/11/2017	1.91E+00	2.15E-01	1.92E-01	1.02E-01
7/18/2017	1.67E+00	2.25E-01	2.81E-01	1.20E-01
7/25/2017	1.88E+00	2.31E-01	1.11E-01	9.04E-02
8/1/2017	1.68E+00	2.25E-01	3.38E-01	1.26E-01
8/8/2017	2.19E+00	2.42E-01	1.48E-01	9.97E-02
8/15/2017	1.87E+00	2.13E-01	8.59E-02	8.06E-02
8/22/2017	1.72E+00	2.07E-01	1.20E-01	8.72E-02
8/29/2017	1.73E+00	2.31E-01	3.05E-01	1.25E-01
9/5/2017	1.94E+00	2.34E-01	1.15E-01	9.40E-02
9/13/2017	1.56E+00	2.02E-01	2.32E-01	1.09E-01
9/19/2017	2.36E+00	2.50E-01	1.57E-01	9.89E-02
9/26/2017	1.72E+00	2.12E-01	9.49E-02	8.11E-02
10/3/2017	2.31E+00	2.35E-01	2.50E-01	1.14E-01

Table 24 Radionuclides in River Water (continued)

Location: River Mile 141.5 (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
10/10/2017	2.18E+00	2.31E-01	1.55E-01	1.00E-01
10/17/2017	2.41E+00	2.38E-01	1.20E-01	9.36E-02
10/24/2017	2.50E+00	2.41E-01	9.86E-02	8.50E-02
10/31/2017	2.78E+00	2.52E-01	6.51E-01	1.63E-01
11/7/2017	2.49E+00	2.42E-01	8.97E-02	9.00E-02
11/14/2017	1.73E+00	2.37E-01	1.54E-01	9.74E-02
11/20/2017	2.55E+00	2.43E-01	1.85E-01	1.05E-01
11/28/2017	1.90E+00	2.42E-01	-1.48E-02	6.37E-02
12/5/2017	2.43E+00	2.40E-01	3.16E-01	1.23E-01
12/12/2017	2.29E+00	2.34E-01	2.76E-02	6.82E-02
12/19/2017	2.54E+00	2.60E-01	2.14E-01	1.13E-01
12/27/2017	2.54E+00	2.61E-01	4.16E-01	1.40E-01
1/2/2018	1.92E+00	2.50E-01	1.13E-01	1.07E-01

Table 24 Radionuclides in River Water (continued)

Location: River Mile 150.0

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/10/2017	1.51E+02	5.98E+01	3.46E-01	2.96E-01	4.08E-01	3.28E-01
1/17/2017	2.97E+02	6.10E+01	-3.76E-01	2.86E-01	2.59E-01	3.55E-01
1/24/2017	3.81E+02	6.24E+01	-8.32E-03	2.54E-01	-4.32E-01	2.95E-01
1/31/2017	2.69E+02	5.92E+01	-3.76E-02	2.87E-01	9.24E-02	3.36E-01
2/7/2017	4.78E+02	6.04E+01	2.38E-01	2.58E-01	2.73E-01	3.19E-01
2/14/2017	3.78E+02	6.13E+01	-3.16E-01	2.52E-01	-2.76E-02	2.92E-01
2/21/2017	3.81E+02	6.09E+01	4.32E-01	2.58E-01	-9.22E-02	3.09E-01
2/28/2017	3.78E+02	6.01E+01	4.38E-01	3.28E-01	-1.63E-01	3.53E-01
3/7/2017	3.41E+02	6.12E+01	-2.13E-01	2.47E-01	1.62E-01	2.57E-01
3/14/2017	1.82E+02	6.09E+01	2.56E-02	2.94E-01	3.78E-01	2.92E-01
3/21/2017	3.43E+02	6.22E+01	-3.76E-02	2.38E-01	-2.42E-01	2.87E-01
3/28/2017	3.11E+02	6.06E+01	-1.12E-01	3.01E-01	4.57E-02	3.05E-01
4/4/2017	3.70E+02	6.20E+01	-2.45E-01	3.14E-01	1.21E-01	3.27E-01
4/10/2017	3.03E+02	6.46E+01	2.15E-01	2.32E-01	-1.29E-02	2.55E-01
4/18/2017	3.57E+02	6.07E+01	-1.52E-01	1.98E-01	-3.41E-01	2.30E-01
4/25/2017	2.73E+02	6.07E+01	4.00E-02	2.36E-01	1.24E-01	2.39E-01
5/2/2017	3.95E+02	6.27E+01	-9.73E-02	1.93E-01	1.91E-01	2.21E-01
5/9/2017	4.14E+02	6.23E+01	1.54E-01	2.39E-01	3.11E-02	2.63E-01
5/16/2017	2.81E+02	6.29E+01	-1.48E-01	2.44E-01	3.57E-02	3.17E-01
5/25/2017	3.70E+02	6.41E+01	-5.16E-02	1.67E-01	-7.08E-03	1.95E-01
5/30/2017	3.57E+02	6.37E+01	-2.78E-01	3.08E-01	-1.31E-01	3.52E-01
6/6/2017	2.81E+02	6.38E+01	-1.41E-01	1.95E-01	1.98E-01	2.47E-01
6/13/2017	3.86E+02	6.38E+01	3.76E-01	2.27E-01	5.73E-01	2.37E-01
6/20/2017	3.03E+02	6.24E+01	-9.08E-02	1.67E-01	2.73E-01	2.11E-01
6/27/2017	3.51E+02	6.23E+01	1.48E-01	2.25E-01	-2.49E-01	2.62E-01
7/3/2017	2.49E+02	6.45E+01	-4.62E-01	2.50E-01	6.54E-01	2.99E-01
7/11/2017	3.46E+02	6.27E+01	-1.77E-02	2.14E-01	-3.19E-02	2.22E-01
7/18/2017	3.35E+02	6.27E+01	-3.46E-01	2.21E-01	-7.57E-03	2.51E-01
7/25/2017	2.97E+02	6.32E+01	2.95E-01	2.14E-01	1.11E-01	2.43E-01
8/1/2017	1.95E+02	5.92E+01	1.05E-01	2.63E-01	5.24E-01	2.73E-01
8/8/2017	4.92E+02	6.03E+01	5.24E-01	2.07E-01	5.22E-01	2.27E-01
8/15/2017	4.16E+02	6.04E+01	4.11E-01	2.46E-01	3.32E-01	2.89E-01
8/22/2017	5.14E+02	6.06E+01	1.22E-01	2.57E-01	-2.13E-01	2.85E-01
8/29/2017	2.19E+02	5.96E+01	-2.57E-01	2.85E-01	2.02E-01	3.25E-01
9/5/2017	1.84E+02	5.98E+01	9.70E-02	2.11E-01	3.62E-01	2.89E-01
9/13/2017	2.01E+02	5.93E+01	-2.09E-01	1.52E-01	1.90E-01	1.87E-01
9/19/2017	2.58E+02	6.03E+01	-8.41E-03	1.55E-01	4.86E-02	1.69E-01
9/26/2017	3.24E+02	5.76E+01	2.08E-01	1.71E-01	-3.43E-01	2.00E-01
10/3/2017	3.03E+02	5.72E+01	2.13E-01	1.46E-01	4.41E-01	1.73E-01

Table 24 Radionuclides in River Water (continued)

Location: River Mile 150.0 (continued)

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
10/10/2017	4.11E+02	4.78E+01	-2.42E-02	1.52E-01	-5.05E-03	1.62E-01
10/17/2017	4.08E+02	5.77E+01	2.62E-02	1.73E-01	3.97E-02	1.98E-01
10/24/2017	3.16E+02	4.79E+01	-5.43E-02	2.01E-01	3.32E-01	2.15E-01
10/31/2017	2.97E+02	4.66E+01	7.70E-02	1.99E-01	1.84E-01	2.19E-01
11/7/2017	2.84E+02	4.71E+01	2.56E-01	1.97E-01	-2.92E-01	2.08E-01
11/14/2017	3.51E+02	4.78E+01	7.73E-02	1.88E-01	1.15E-01	1.95E-01
11/20/2017	3.59E+02	4.86E+01	3.57E-02	1.82E-01	-1.60E-01	2.20E-01
11/28/2017	4.00E+02	4.81E+01	4.05E-01	2.05E-01	1.58E-01	2.30E-01
12/5/2017	3.78E+02	4.88E+01	7.86E-02	1.42E-01	-5.24E-02	2.08E-01
12/12/2017	4.32E+02	4.83E+01	2.29E-01	1.94E-01	4.89E-01	2.24E-01
12/19/2017	4.89E+02	4.93E+01	6.70E-02	2.21E-01	2.38E-01	2.45E-01
12/27/2017	3.59E+02	4.82E+01	-2.70E-02	1.76E-01	7.97E-02	1.72E-01
1/2/2018	4.57E+02	5.14E+01	-7.95E-02	1.92E-01	4.30E-01	2.07E-01

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
1/31/2017	Sr-89/90	6.92E-01	5.17E-01
	U-234	9.78E-02	3.35E-02
	U-235	2.08E-02	1.48E-02
	U-238	6.68E-02	2.58E-02
	Pu-238	8.27E-03	8.49E-03
	Pu-239	-2.92E-03	1.16E-02
	Am-241	4.68E-02	1.95E-02
	Cm-244	-5.16E-03	5.18E-03
	Tc-99	3.05E-01	7.76E-01

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/10/2017	1.93E+00	2.17E-01	4.59E-01	1.32E-01
1/17/2017	2.13E+00	2.36E-01	1.06E-01	8.12E-02
1/24/2017	2.11E+00	2.45E-01	2.78E-01	1.16E-01
1/31/2017	1.98E+00	2.18E-01	3.51E-01	1.16E-01
2/7/2017	1.69E+00	2.30E-01	1.82E-01	1.01E-01
2/14/2017	1.98E+00	2.41E-01	3.16E-01	1.22E-01
2/21/2017	1.23E+00	2.12E-01	1.13E-01	8.76E-02
2/28/2017	1.74E+00	2.09E-01	1.59E-01	8.52E-02
3/7/2017	1.61E+00	2.05E-01	2.31E-01	1.00E-01
3/14/2017	1.94E+00	2.17E-01	2.02E-01	9.63E-02

Table 24 Radionuclides in River Water (continued)

Location: River Mile 150.0 (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
3/21/2017	1.85E+00	2.34E-01	4.70E-02	7.53E-02
3/28/2017	2.12E+00	2.24E-01	6.32E-02	6.69E-02
4/4/2017	1.96E+00	2.42E-01	2.70E-01	1.17E-01
4/10/2017	2.30E+00	2.39E-01	1.14E-01	8.19E-02
4/18/2017	1.60E+00	2.21E-01	1.44E-01	8.96E-02
4/25/2017	1.45E+00	2.15E-01	7.41E-02	7.41E-02
5/2/2017	2.36E+00	2.52E-01	3.41E-02	7.51E-02
5/9/2017	1.82E+00	2.23E-01	1.46E-01	8.80E-02
5/16/2017	1.76E+00	2.31E-01	1.68E-03	6.42E-02
5/25/2017	1.78E+00	2.27E-01	1.41E-01	8.76E-02
5/30/2017	2.12E+00	2.33E-01	1.42E-01	8.55E-02
6/6/2017	1.62E+00	2.22E-01	4.03E-02	6.67E-02
6/13/2017	1.74E+00	2.32E-01	1.33E-01	9.36E-02
6/20/2017	1.89E+00	2.36E-01	-3.22E-02	5.96E-02
6/27/2017	2.12E+00	2.39E-01	7.97E-02	8.54E-02
7/3/2017	2.27E+00	2.28E-01	2.84E-01	1.13E-01
7/11/2017	2.28E+00	2.48E-01	1.92E-01	1.05E-01
7/18/2017	1.88E+00	2.32E-01	4.00E-01	1.33E-01
7/25/2017	2.01E+00	2.36E-01	1.43E-01	9.63E-02
8/1/2017	2.06E+00	3.72E-01	-5.11E-02	3.84E-02
8/8/2017	2.12E+00	2.22E-01	2.19E-01	1.04E-01
8/15/2017	2.14E+00	2.24E-01	2.62E-01	1.13E-01
8/22/2017	1.66E+00	2.05E-01	8.46E-02	7.92E-02
8/29/2017	2.29E+00	2.45E-01	8.11E-02	8.72E-02
9/5/2017	1.86E+00	2.13E-01	2.92E-01	1.16E-01
9/13/2017	1.71E+00	2.26E-01	8.19E-02	8.76E-02
9/19/2017	1.79E+00	2.33E-01	3.84E-01	1.30E-01
9/26/2017	1.96E+00	2.21E-01	2.64E-02	6.46E-02
10/3/2017	1.64E+00	2.11E-01	1.83E-01	1.03E-01
10/10/2017	1.82E+00	2.39E-01	5.43E-02	7.97E-02
10/17/2017	2.21E+00	2.32E-01	2.18E-01	1.09E-01
10/24/2017	2.08E+00	2.26E-01	1.64E-01	9.52E-02
10/31/2017	1.98E+00	2.24E-01	1.88E-01	1.06E-01
11/7/2017	2.02E+00	3.75E-01	1.20E-01	1.46E-01
11/14/2017	2.05E+00	2.48E-01	1.87E-01	1.03E-01
11/20/2017	2.20E+00	2.31E-01	1.20E-01	9.32E-02
11/28/2017	2.50E+00	2.42E-01	2.23E-01	1.12E-01
12/5/2017	2.76E+00	3.01E-01	1.82E-01	1.20E-01
12/12/2017	2.29E+00	2.52E-01	2.11E-01	1.11E-01
12/19/2017	1.97E+00	2.42E-01	1.74E-02	7.91E-02
12/27/2017	1.95E+00	2.52E-01	2.47E-01	1.27E-01
1/2/2018	1.75E+00	2.43E-01	-2.05E-02	8.33E-02

Table 24 Radionuclides in River Water (continued)

Location: River Mile 150.4

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/10/2017	5.30E+02	5.11E+01	3.43E-01	2.56E-01	3.70E-01	3.00E-01
1/17/2017	8.51E+02	5.49E+01	5.41E-01	3.87E-01	4.89E-01	3.90E-01
1/24/2017	1.65E+03	6.26E+01	2.51E-01	2.97E-01	3.35E-01	3.17E-01
1/31/2017	2.95E+02	4.80E+01	2.52E-01	2.00E-01	-1.31E-01	2.26E-01
2/7/2017	4.62E+02	4.82E+01	-3.59E-01	1.83E-01	-1.68E-01	2.38E-01
2/14/2017	3.24E+03	7.49E+01	3.14E-02	2.43E-01	3.59E-01	3.05E-01
2/21/2017	7.49E+02	5.19E+01	-1.07E-01	2.68E-01	-2.35E-01	3.01E-01
2/28/2017	1.46E+03	6.03E+01	-2.76E-01	2.72E-01	-3.00E-01	2.41E-01
3/7/2017	1.73E+03	6.23E+01	-3.43E-02	2.61E-01	3.27E-01	2.61E-01
3/14/2017	6.00E+02	5.28E+01	8.95E-02	3.96E-01	1.92E-01	3.83E-01
3/21/2017	1.60E+02	4.76E+01	5.57E-02	3.39E-01	-2.07E-01	3.81E-01
3/28/2017	6.19E+02	5.11E+01	-3.57E-02	2.36E-01	-2.86E-01	2.78E-01
4/4/2017	6.05E+02	5.30E+01	5.46E-01	2.31E-01	-3.89E-02	2.51E-01
4/10/2017	1.04E+03	5.83E+01	7.27E-02	2.86E-01	4.86E-01	2.94E-01
4/18/2017	7.73E+02	5.27E+01	-2.70E-02	1.85E-01	7.41E-04	1.92E-01
4/25/2017	7.89E+02	5.29E+01	7.41E-02	3.43E-01	-3.73E-01	2.83E-01
5/2/2017	6.92E+02	5.33E+01	1.59E-01	1.69E-01	1.45E-01	2.02E-01
5/9/2017	1.89E+02	4.59E+01	-1.86E-01	3.71E-01	4.51E-02	3.60E-01
5/16/2017	8.41E+02	5.41E+01	8.03E-01	2.94E-01	-5.19E-01	2.52E-01
5/25/2017	2.22E+02	4.97E+01	3.62E-02	2.90E-01	-1.08E-01	3.25E-01
5/30/2017	3.49E+02	4.85E+01	3.86E-02	2.91E-01	-3.05E-01	3.33E-01
6/6/2017	1.19E+03	5.93E+01	-5.86E-02	4.84E-01	2.20E-01	5.65E-01
6/13/2017	4.05E+02	5.01E+01	-3.00E-02	3.16E-01	-3.11E-01	4.10E-01
6/20/2017	7.03E+02	5.32E+01	8.59E-02	2.07E-01	-1.17E-01	2.32E-01
6/27/2017	1.62E+02	4.73E+01	1.43E-01	2.83E-01	1.66E-01	2.97E-01
7/3/2017	4.22E+02	5.02E+01	3.03E-01	2.65E-01	1.15E-01	2.94E-01
7/11/2017	1.30E+02	4.63E+01	6.08E-02	2.40E-01	2.58E-01	2.42E-01
7/18/2017	1.39E+02	4.61E+01	2.73E-01	2.92E-01	3.59E-01	3.19E-01
7/25/2017	2.24E+02	4.55E+01	-2.38E-03	2.77E-01	5.54E-01	3.21E-01
8/1/2017	1.64E+03	6.14E+01	2.54E-01	2.45E-01	-2.34E-01	2.77E-01
8/8/2017	3.16E+03	7.33E+01	3.14E-01	2.40E-01	-7.41E-01	2.90E-01
8/15/2017	3.43E+03	7.57E+01	2.41E-01	2.70E-01	4.11E-01	3.19E-01
8/22/2017	4.00E+03	8.15E+01	4.54E-01	2.54E-01	3.38E-01	3.02E-01
8/29/2017	3.35E+03	7.56E+01	3.70E-01	3.05E-01	-3.81E-02	3.74E-01
9/5/2017	6.22E+03	9.56E+01	4.51E-01	3.16E-01	8.14E-01	3.58E-01
9/13/2017	3.19E+03	7.51E+01	-1.57E-01	1.59E-01	-6.03E-02	1.71E-01
9/19/2017	1.35E+03	5.90E+01	-1.84E-01	1.65E-01	-1.23E-01	1.98E-01
9/26/2017	2.45E+03	6.90E+01	-1.27E-01	1.69E-01	-7.51E-02	1.91E-01
10/3/2017	2.26E+03	6.37E+01	2.11E-02	1.71E-01	-2.42E-01	1.94E-01

Table 24 Radionuclides in River Water (continued)

Location: River Mile 150.4 (continued)

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
10/10/2017	7.70E+02	5.12E+01	1.56E-01	1.67E-01	-1.85E-02	1.97E-01
10/17/2017	1.18E+03	5.48E+01	-1.18E-02	1.67E-01	3.89E-02	1.96E-01
10/24/2017	8.78E+02	5.53E+01	3.00E-01	2.21E-01	7.78E-02	2.41E-01
10/31/2017	1.34E+02	4.69E+01	2.59E-01	1.88E-01	2.02E-01	2.10E-01
11/7/2017	6.24E+02	5.36E+01	-2.30E-01	1.46E-01	-4.51E-02	1.87E-01
11/14/2017	2.11E+02	4.95E+01	3.43E-01	1.90E-01	1.55E-02	2.11E-01
11/20/2017	2.21E+02	4.55E+01	-7.27E-02	1.98E-01	-9.30E-02	2.40E-01
11/28/2017	5.49E+02	5.14E+01	1.01E-01	1.91E-01	1.63E-01	2.26E-01
12/5/2017	2.89E+02	4.84E+01	5.00E-01	2.32E-01	-3.43E-01	2.66E-01
12/12/2017	2.15E+02	4.88E+01	4.08E-01	2.36E-01	-2.97E-01	2.53E-01
12/19/2017	2.86E+02	4.88E+01	7.32E-02	2.44E-01	-4.11E-01	2.86E-01
12/27/2017	2.76E+02	5.06E+01	3.14E-01	2.09E-01	-4.84E-02	2.18E-01
1/2/2018	1.48E+02	5.09E+01	4.35E-01	2.03E-01	-1.08E-01	2.46E-01

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
1/31/2017	Sr-89/90	2.49E-01	4.87E-01
	U-234	1.19E-01	3.35E-02
	U-235	-3.32E-03	1.35E-02
	U-238	6.59E-02	2.64E-02
	Pu-238	-7.92E-05	1.03E-03
	Pu-239	-1.45E-04	1.90E-03
	Am-241	3.24E-02	1.66E-02
	Cm-244	-5.41E-03	5.42E-03
	Tc-99	-3.08E-01	7.68E-01

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/10/2017	1.95E+00	2.18E-01	3.54E-01	1.17E-01
1/17/2017	2.42E+00	2.46E-01	2.68E-01	1.09E-01
1/24/2017	2.14E+00	2.48E-01	4.54E-01	1.40E-01
1/31/2017	1.64E+00	2.06E-01	4.51E-01	1.29E-01
2/7/2017	1.83E+00	2.33E-01	4.68E-02	7.48E-02
2/14/2017	1.66E+00	2.30E-01	3.46E-01	1.24E-01
2/21/2017	1.89E+00	2.37E-01	2.12E-01	1.05E-01
2/28/2017	2.23E+00	2.28E-01	2.27E-01	9.86E-02
3/7/2017	2.12E+00	2.23E-01	-3.97E-02	2.99E-02
3/14/2017	2.18E+00	2.26E-01	1.33E-01	8.33E-02
3/21/2017	1.45E+00	2.20E-01	4.86E-02	7.67E-02

Table 24 Radionuclides in River Water (continued)

Location: River Mile 150.4 (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
3/28/2017	1.74E+00	2.10E-01	1.31E-01	8.17E-02
4/4/2017	1.98E+00	2.39E-01	1.44E-03	6.77E-02
4/10/2017	2.34E+00	2.41E-01	2.39E-01	1.03E-01
4/18/2017	1.93E+00	2.32E-01	-2.76E-02	4.31E-02
4/25/2017	1.90E+00	2.31E-01	7.41E-02	7.45E-02
5/2/2017	1.58E+00	2.27E-01	1.36E-01	9.56E-02
5/9/2017	2.23E+00	2.37E-01	2.41E-01	1.03E-01
5/16/2017	1.45E+00	2.21E-01	6.68E-02	7.98E-02
5/25/2017	2.02E+00	2.36E-01	1.41E-01	8.80E-02
5/30/2017	1.70E+00	2.18E-01	1.10E-01	7.91E-02
6/6/2017	2.73E+00	2.60E-01	2.86E-01	1.15E-01
6/13/2017	1.88E+00	2.40E-01	3.46E-01	1.29E-01
6/20/2017	1.86E+00	2.37E-01	1.04E-01	9.04E-02
6/27/2017	2.11E+00	2.39E-01	1.79E-01	1.04E-01
7/3/2017	2.04E+00	2.19E-01	2.21E-01	1.04E-01
7/11/2017	2.00E+00	2.38E-01	1.25E-01	9.36E-02
7/18/2017	1.79E+00	2.29E-01	3.00E-01	1.19E-01
7/25/2017	1.84E+00	2.30E-01	1.73E-01	1.00E-01
8/1/2017	1.55E+00	3.39E-01	4.46E-01	2.25E-01
8/8/2017	2.57E+00	2.38E-01	-1.91E-02	5.29E-02
8/15/2017	1.84E+00	2.12E-01	8.70E-02	8.15E-02
8/22/2017	1.67E+00	2.06E-01	1.55E-01	9.40E-02
8/29/2017	2.06E+00	2.38E-01	8.24E-02	8.84E-02
9/5/2017	2.09E+00	2.22E-01	1.56E-01	9.48E-02
9/13/2017	2.08E+00	2.38E-01	1.13E-01	9.21E-02
9/19/2017	1.99E+00	2.36E-01	2.38E-02	7.22E-02
9/26/2017	1.94E+00	2.21E-01	9.32E-02	8.00E-02
10/3/2017	1.84E+00	2.19E-01	1.82E-01	1.03E-01
10/10/2017	2.08E+00	2.51E-01	3.35E-01	1.28E-01
10/17/2017	2.62E+00	2.46E-01	8.95E-02	8.96E-02
10/24/2017	2.47E+00	2.41E-01	3.19E-01	1.24E-01
10/31/2017	2.09E+00	2.28E-01	1.89E-01	1.06E-01
11/7/2017	2.61E+00	4.11E-01	2.34E-02	1.09E-01
11/14/2017	2.04E+00	2.47E-01	1.54E-01	9.74E-02
11/20/2017	1.84E+00	2.19E-01	2.18E-01	1.10E-01
11/28/2017	2.53E+00	2.43E-01	3.19E-01	1.24E-01
12/5/2017	2.19E+00	2.77E-01	7.97E-02	9.56E-02
12/12/2017	2.14E+00	2.47E-01	1.15E-01	9.71E-02
12/19/2017	2.65E+00	2.64E-01	2.49E-01	1.19E-01
12/27/2017	2.09E+00	2.55E-01	4.73E-02	1.00E-01
1/2/2018	2.02E+00	2.52E-01	1.21E-02	8.96E-02

Table 24 Radionuclides in River Water (continued)

Location: River Mile 160.0

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/10/2017	2.73E+01	5.90E+01	-2.59E-01	2.18E-01	2.64E-01	2.21E-01
1/17/2017	8.95E+00	5.86E+01	-1.46E-01	3.29E-01	-5.97E-01	3.46E-01
1/24/2017	4.51E+00	5.97E+01	-4.11E-02	2.33E-01	-2.21E-01	2.42E-01
1/31/2017	3.84E+01	5.70E+01	1.74E-01	1.98E-01	1.58E-01	2.17E-01
2/7/2017	1.79E+02	5.78E+01	1.92E-01	2.14E-01	2.26E-01	2.39E-01
2/14/2017	7.27E+01	5.81E+01	5.51E-01	2.62E-01	-1.37E-01	2.61E-01
2/21/2017	1.31E+02	5.92E+01	-6.84E-02	2.21E-01	6.11E-02	2.54E-01
2/28/2017	4.03E+01	5.77E+01	1.27E-01	1.92E-01	3.46E-02	2.00E-01
3/7/2017	2.40E+01	5.85E+01	-9.24E-02	2.69E-01	1.50E-01	2.57E-01
3/14/2017	-2.69E+01	5.98E+01	-4.03E-01	2.61E-01	-1.77E-01	2.58E-01
3/21/2017	9.08E+01	6.01E+01	-1.53E-01	2.41E-01	4.08E-01	2.50E-01
3/28/2017	1.07E+02	5.90E+01	2.42E-01	1.88E-01	8.76E-02	2.14E-01
4/4/2017	1.74E+02	5.93E+01	5.89E-01	2.40E-01	1.91E-01	2.14E-01
4/10/2017	2.08E+01	6.24E+01	2.56E-01	2.82E-01	-2.84E-01	2.74E-01
4/18/2017	1.41E+02	5.95E+01	-2.81E-01	1.80E-01	2.70E-01	1.92E-01
4/25/2017	9.89E+01	5.93E+01	5.62E-02	2.36E-01	5.27E-02	2.49E-01
5/2/2017	3.41E+01	5.98E+01	2.58E-01	1.75E-01	-1.63E-01	2.00E-01
5/9/2017	1.68E+02	6.06E+01	2.54E-01	1.82E-01	1.84E-01	1.79E-01
5/16/2017	3.24E+01	6.08E+01	-9.41E-02	2.08E-01	1.62E-01	2.35E-01
5/25/2017	7.95E+01	6.20E+01	2.51E-01	1.93E-01	9.73E-02	2.34E-01
5/30/2017	9.68E+01	6.22E+01	2.15E-01	2.03E-01	2.41E-01	2.18E-01
6/6/2017	9.41E+00	6.19E+01	8.30E-01	4.31E-01	-6.54E-02	4.29E-01
6/13/2017	1.36E+02	6.17E+01	4.86E-01	1.05E+00	6.11E-01	6.45E-01
6/20/2017	9.38E+01	6.10E+01	-8.95E-02	1.98E-01	7.92E-02	2.01E-01
6/27/2017	1.21E+02	6.06E+01	1.69E-01	1.84E-01	-3.14E-02	2.17E-01
7/3/2017	1.45E+01	6.29E+01	1.98E-01	1.75E-01	1.48E-01	1.87E-01
7/11/2017	8.03E+01	6.13E+01	3.59E-01	2.60E-01	-1.64E-01	2.76E-01
7/18/2017	1.44E+02	6.08E+01	-1.40E-02	2.34E-01	-9.92E-02	2.31E-01
7/25/2017	2.50E+01	6.07E+01	-5.46E-02	1.90E-01	2.97E-01	2.48E-01
8/1/2017	1.05E+02	5.85E+01	2.58E-01	2.37E-01	3.54E-01	2.64E-01
8/8/2017	2.09E+02	5.77E+01	1.52E-01	1.65E-01	-1.12E-01	1.82E-01
8/15/2017	1.64E+02	5.85E+01	-2.47E-01	1.96E-01	1.87E-01	2.35E-01
8/22/2017	2.63E+02	5.80E+01	3.59E-01	2.05E-01	-3.16E-02	2.48E-01
8/29/2017	1.32E+02	5.93E+01	2.73E-01	2.00E-01	-2.15E-01	2.45E-01
9/5/2017	9.22E+01	5.98E+01	1.40E-02	2.17E-01	8.73E-02	2.18E-01
9/13/2017	7.54E+01	5.99E+01	1.93E-01	1.64E-01	1.83E-01	1.69E-01
9/19/2017	-7.84E+00	6.02E+01	3.38E-01	2.17E-01	-2.89E-01	2.69E-01
9/26/2017	1.28E+02	5.60E+01	3.08E-01	1.69E-01	2.37E-01	1.83E-01
10/3/2017	7.68E+01	5.54E+01	2.67E-01	1.48E-01	1.60E-01	1.71E-01

Table 24 Radionuclides in River Water (continued)

Location: River Mile 160.0 (continued)

Sample Date	H-3 (tritium)		Co-60		Cs-137	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
10/10/2017	1.34E+02	4.48E+01	-3.14E-01	1.81E-01	1.06E-01	2.01E-01
10/17/2017	1.46E+02	5.48E+01	-3.38E-01	1.68E-01	-5.95E-02	1.78E-01
10/24/2017	1.15E+02	4.66E+01	1.25E-01	1.91E-01	-1.36E-01	2.17E-01
10/31/2017	1.21E+02	4.45E+01	-3.68E-01	1.69E-01	1.35E-01	2.07E-01
11/7/2017	1.21E+02	4.52E+01	-3.19E-02	1.67E-01	-2.49E-01	2.05E-01
11/14/2017	6.78E+01	4.42E+01	1.20E-01	1.85E-01	4.00E-01	1.99E-01
11/20/2017	1.16E+02	4.55E+01	-3.00E-01	1.96E-01	-6.76E-02	2.56E-01
11/28/2017	1.28E+02	4.53E+01	1.78E-01	1.60E-01	3.49E-01	2.07E-01
12/5/2017	1.37E+02	4.62E+01	-3.08E-01	1.80E-01	1.69E-01	2.09E-01
12/12/2017	1.72E+02	4.48E+01	-8.14E-02	1.66E-01	1.26E-01	2.01E-01
12/19/2017	1.35E+02	4.51E+01	1.78E-01	2.29E-01	3.35E-01	2.57E-01
12/27/2017	1.21E+02	4.55E+01	-2.27E-01	1.77E-01	-3.43E-02	1.80E-01
1/2/2018	1.33E+02	5.10E+01	-7.97E-02	1.93E-01	2.30E-01	2.29E-01

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
1/31/2017	Sr-89/90	5.76E-01	5.21E-01
	U-234	7.54E-02	2.83E-02
	U-235	2.34E-02	1.88E-02
	U-238	6.46E-02	2.50E-02
	Pu-238	-5.41E-03	5.36E-03
	Pu-239	2.37E-02	1.42E-02
	Am-241	4.19E-02	1.91E-02
	Cm-244	2.78E-03	1.00E-02
	Tc-99	5.97E-01	7.78E-01

Table 24 Radionuclides in River Water (continued)

Location: River Mile 160.0 (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/10/2017	2.24E+00	2.28E-01	3.49E-01	1.15E-01
1/17/2017	2.47E+00	2.48E-01	2.37E-01	1.04E-01
1/24/2017	1.72E+00	2.31E-01	2.17E-01	1.08E-01
1/31/2017	2.20E+00	2.27E-01	4.57E-01	1.32E-01
2/7/2017	1.76E+00	2.32E-01	1.45E-01	9.40E-02
2/14/2017	1.89E+00	2.36E-01	1.46E-01	9.44E-02
2/21/2017	1.95E+00	2.38E-01	1.45E-01	9.40E-02
2/28/2017	1.86E+00	2.14E-01	9.62E-02	7.40E-02
3/7/2017	1.91E+00	2.16E-01	2.67E-01	1.06E-01
3/14/2017	2.08E+00	2.22E-01	2.00E-01	9.56E-02
3/21/2017	1.90E+00	2.36E-01	1.14E-01	8.92E-02
3/28/2017	1.87E+00	2.15E-01	1.64E-01	8.80E-02
4/4/2017	2.32E+00	2.53E-01	2.34E-01	1.11E-01
4/10/2017	2.21E+00	2.36E-01	1.76E-01	9.24E-02
4/18/2017	1.12E+00	2.02E-01	1.02E-01	7.66E-02
4/25/2017	1.40E+00	2.13E-01	5.86E-03	5.62E-02
5/2/2017	2.17E+00	2.49E-01	2.70E-01	1.18E-01
5/9/2017	1.99E+00	2.29E-01	8.16E-02	7.49E-02
5/16/2017	1.64E+00	2.28E-01	3.41E-02	7.28E-02
5/25/2017	1.84E+00	2.29E-01	4.00E-02	6.64E-02
5/30/2017	1.61E+00	2.15E-01	8.05E-02	7.40E-02
6/6/2017	2.11E+00	2.39E-01	1.83E-01	9.86E-02
6/13/2017	3.05E+00	2.76E-01	1.37E-01	9.78E-02
6/20/2017	2.24E+00	2.52E-01	4.03E-01	1.35E-01
6/27/2017	1.81E+00	2.29E-01	-4.78E-02	5.74E-02
7/3/2017	1.98E+00	2.17E-01	8.41E-02	7.89E-02
7/11/2017	2.33E+00	2.48E-01	2.38E-02	7.40E-02
7/18/2017	2.07E+00	2.38E-01	1.76E-01	1.03E-01
7/25/2017	1.74E+00	2.27E-01	8.11E-02	8.67E-02
8/1/2017	1.62E+00	3.42E-01	1.50E-01	1.48E-01
8/8/2017	2.49E+00	2.35E-01	8.41E-02	7.91E-02
8/15/2017	2.41E+00	2.33E-01	2.24E-01	1.06E-01
8/22/2017	1.84E+00	2.12E-01	1.20E-01	8.76E-02
8/29/2017	2.13E+00	2.40E-01	-1.61E-02	6.64E-02
9/5/2017	1.94E+00	2.16E-01	2.60E-01	1.12E-01
9/13/2017	2.64E+00	2.57E-01	8.19E-02	8.80E-02
9/19/2017	2.49E+00	2.55E-01	2.57E-01	1.14E-01
9/26/2017	1.78E+00	2.15E-01	-4.05E-02	4.39E-02
10/3/2017	1.99E+00	2.24E-01	8.68E-02	8.67E-02

Table 24 Radionuclides in River Water (continued)

Location: River Mile 160.0 (continued)

Sample Date	Gross Beta		Gross Alpha	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
10/10/2017	2.10E+00	2.49E-01	1.22E-01	9.32E-02
10/17/2017	1.79E+00	2.17E-01	2.39E-02	7.61E-02
10/24/2017	2.27E+00	2.33E-01	2.76E-02	6.79E-02
10/31/2017	2.39E+00	2.38E-01	1.54E-01	9.97E-02
11/7/2017	1.99E+00	3.73E-01	-7.38E-02	5.08E-02
11/14/2017	2.27E+00	2.56E-01	2.24E-01	1.10E-01
11/20/2017	2.39E+00	2.38E-01	1.21E-01	9.48E-02
11/28/2017	2.08E+00	2.27E-01	5.65E-02	8.28E-02
12/5/2017	2.21E+00	2.78E-01	7.86E-02	9.44E-02
12/12/2017	1.86E+00	2.38E-01	1.78E-02	8.05E-02
12/19/2017	2.27E+00	2.52E-01	1.82E-01	1.09E-01
12/27/2017	1.96E+00	2.52E-01	1.84E-01	1.20E-01
1/2/2018	2.36E+00	2.64E-01	1.13E-01	1.08E-01

Location: Beaver Dam Creek River Mouth

Sample Date	Radionuclide	Result (pCi/L)	Standard Dev. (pCi/L)
1/31/2017	H-3	7.73E+01	1.29E+02
	Co-60	-1.02E+00	1.88E+00
	Cs-137	-1.35E+00	2.10E+00
	Sr-89/90	6.16E-02	1.32E-01
	U-234	4.16E-02	8.96E-03
	U-235	6.84E-04	2.48E-03
	U-238	3.16E-02	7.78E-03
	Pu-238	0.00E+00	2.10E-03
	Pu-239	3.49E-03	2.58E-03
	Am-241	-1.27E-03	1.35E-03
	Cm-244	1.90E-03	1.90E-03
	Tc-99	5.51E-01	7.39E-01
	Gross B	2.59E+00	2.60E-01
	Gross A	1.00E-01	8.88E-02

Table 25 Summary of Savannah River Site Tritium Transport, 1960 -2017
(values are in curies)

Year	Based on Point-of-Release Conc. and Flow ^a	Based on Stream Conc. and Flow ^b	Based on Savannah River Conc. and Flow ^c
1960	64,000 ^b	69,600	73,700
1961	69,000 ^b	83,000	77,000
1962	58,000 ^b	64,000	63,000
1963	97,000 ^b	96,900	122,800
1964	111,000 ^b	131,600	143,000
1965	108,400	109,200	100,200
1966	84,900	97,800	78,300
1967	70,600	77,000	68,500
1968	63,800	67,200	61,800
1969	64,600	64,000	58,100
1970	36,900	43,200	31,800
1971	38,200	44,700	39,100
1972	46,800	47,300	45,300
1973	71,100	62,800	61,100
1974	59,900	54,600	46,000
1975	55,600	50,000	49,500
1976	59,600	47,400	51,100
1977	43,800	39,700	43,500
1978	37,600	35,300	36,600
1979	29,400	27,100	30,600
1980	24,900	28,800	30,700
1981	23,900	22,100	25,100
1982	32,200	31,300	30,600
1983	34,200	33,000	33,000
1984	32,800	32,600	33,200
1985	25,000	22,300	24,100
1986	27,800	22,300	22,100
1987	22,700	20,500	26,200
1988	19,300	18,300	14,600
1989	17,300	17,800	15,600

Year	Based on Point-of-Release Conc. and Flow ^a	Based on Stream Conc. and Flow ^b	Based on Savannah River Conc. and Flow ^c
1990	16,100	15,600	14,500
1991	27,400	26,600	26,300
1992	13,800	13,100	13,800
1993	11,300	12,700	12,200
1994	8,800	10,400	10,900
1995	9,900	11,400	10,700
1996	7,560	8,020	8,950
1997	8,350	8,550	7,700
1998	10,555	10,588	9,420
1999	6,111	6,292	5,810
2000	5,995	5,956	5,420
2001	4,423	4,315	4,815
2002	3,096	2,857	4,051
2003	4,319	4,139	5,910
2004	2,683	2,785	3,630
2005	2,506	2,378	4,480
2006	1,644	1,391	3,328
2007	1,317	1,025	1,938
2008	1,535	1,185	2,660
2009	1,559	1,271	2,350
2010	1,285	1,205	2,058
2011	942	776	2,092
2012	746	690	1,874
2013	1,082	1,057	2,482
2014	789	767	2,513
2015	807	856	2,394
2016	724	787	1,698
2017	539	608	2,436

Notes:

^a Includes direct releases to streams and migration from seepage basins and the Solid Waste Disposal Facility to streams.^b includes heat exchanger cooling water released from P-Area (of PAR pond origin) to Steel Creek.^c Beginning in 1986, this amount includes tritium released from Plant Vogtle (xxx Ci reported in 2017)

Table 26 Radionuclides in Savannah River Sediment

Location	Sample Date	Co-60 Result (pCi/g)	Standard Dev. (pCi/g)	Cs-137 Result (pCi/g)	Standard Dev. (pCi/g)
RM-118.7 Highway 301	3/22/2017	1.51E-02	1.82E-02	2.39E-01	3.30E-02
RM-129 Lower 3 Runs Mouth	3/22/2017	3.05E-03	1.41E-02	2.16E-01	2.52E-02
RM-134.0 Below Little Hell Landing	8/2/2017	8.70E-03	1.65E-02	1.42E-01	2.36E-02
RM-141.0 Steel Creek Landing	3/22/2017	1.36E-02	1.58E-02	1.39E-01	2.46E-02
RM-150.2 Below Four Mile Creek	3/22/2017	-4.70E-03	1.50E-02	8.89E-01	6.64E-02
RM-150.2 Below Four Mile Creek	3/22/2017	-1.07E-02	1.53E-02	1.05E+00	7.57E-02
RM-150.4 Sediment	8/2/2017	2.64E-02	1.87E-02	-2.05E-03	1.89E-02
RM-151 R-3A Above Vogtle	8/2/2017	-1.37E-02	1.29E-02	3.49E-02	2.09E-02
RM-152.1 Beaver Dam Creek	3/22/2017	5.70E-03	1.42E-02	4.51E-02	2.12E-02
RM-157.2 Upper 3 Runs Mouth	3/22/2017	6.08E-02	2.28E-02	2.02E-01	3.12E-02
RM-160.0 Sediment	8/2/2017	9.92E-03	1.26E-02	3.11E-02	1.25E-02
RM-160.5 Demier Landing	8/2/2017	7.49E-03	1.23E-02	5.05E-03	1.16E-02
RM-170.5 Jackson Boat Landing	6/27/2017	1.11E-02	1.26E-02	2.54E-02	1.70E-03
RM-170.5 Jackson Boat Landing	6/27/2017	7.16E-03	1.05E-02	6.44E-03	1.18E-02

Location	Sample Date	Sr-89/90 Result (pCi/g)	Standard Dev. (pCi/g)	U-234 Result (pCi/g)	Standard Dev. (pCi/g)
RM-118.7 Highway 301	3/22/2017	1.16E-02	3.81E-02	1.48E+00	1.14E-01
RM-129 Lower 3 Runs Mouth	3/22/2017	9.43E-02	4.39E-02	1.16E+00	9.00E-02
RM-134.0 Below Little Hell Landing	8/2/2017	4.95E-02	4.15E-02	1.39E+00	1.03E-01
RM-150.2 Below Four Mile Creek	3/22/2017	2.97E-02	4.39E-02	1.75E+00	1.34E-01
RM-150.4 Sediment	8/2/2017	3.16E-02	3.77E-02	1.78E+00	1.33E-01
RM-151 R-3A Above Vogtle	8/2/2017	1.28E-01	4.30E-02	1.39E+00	1.04E-01
RM-152.1 Beaver Dam Creek	3/22/2017	2.84E-02	3.38E-02	9.49E-01	7.94E-02
RM-157.2 Upper 3 Runs Mouth	3/22/2017	1.63E-02	4.61E-02	1.49E+00	1.12E-01
RM-160.0 Sediment	8/2/2017	-9.14E-03	4.22E-02	1.24E+00	1.00E-01
RM-160.5 Demier Landing	8/2/2017	-3.38E-03	4.29E-02	1.23E+00	9.63E-02

Table 26 Radionuclides in Savannah River Sediment (continued)

Location	Sample Date	U-235 Result (pCi/g)	Standard Dev. (pCi/g)	Np-237 Result (pCi/g)	Standard Dev. (pCi/g)
RM-118.7 Highway 301	3/22/2017	6.95E-02	1.50E-02	-8.43E-05	3.29E-04
RM-129 Lower 3 Runs Mouth	3/22/2017	5.73E-02	1.24E-02	-1.55E-04	1.51E-04
RM-134.0 Below Little Hell Landing	8/2/2017	5.78E-02	1.25E-02	2.28E-04	2.28E-04
RM-150.2 Below Four Mile Creek	3/22/2017	1.05E-01	1.90E-02	4.89E-04	3.52E-04
RM-150.4 Sediment	8/2/2017	7.32E-02	1.48E-02	8.24E-04	4.81E-04
RM-151 R-3A Above Vogtle	8/2/2017	6.54E-02	1.32E-02	4.38E-04	3.12E-04
RM-152.1 Beaver Dam Creek	3/22/2017	5.22E-02	1.29E-02	2.44E-04	2.50E-04
RM-157.2 Upper 3 Runs Mouth	3/22/2017	4.62E-02	1.16E-02	3.27E-04	3.91E-04
RM-160.0 Sediment	8/2/2017	5.65E-02	1.39E-02	7.95E-04	4.63E-04
RM-160.5 Demier Landing	8/2/2017	5.62E-02	1.35E-02	0.00E+00	4.07E-04

Location	Sample Date	U-238 Result (pCi/g)	Standard Dev. (pCi/g)	Pu-238 Result (pCi/g)	Standard Dev. (pCi/g)
RM-118.7 Highway 301	3/22/2017	1.36E+00	1.02E-01	2.20E-04	2.42E-04
RM-129 Lower 3 Runs Mouth	3/22/2017	1.20E+00	8.88E-02	5.08E-04	4.23E-04
RM-134.0 Below Little Hell Landing	8/2/2017	1.37E+00	9.86E-02	-7.57E-05	3.12E-04
RM-150.2 Below Four Mile Creek	3/22/2017	1.87E+00	1.36E-01	2.69E-03	8.59E-04
RM-150.4 Sediment	8/2/2017	1.65E+00	1.19E-01	1.31E-04	4.72E-04
RM-151 R-3A Above Vogtle	8/2/2017	1.31E+00	9.52E-02	3.84E-04	3.23E-04
RM-152.1 Beaver Dam Creek	3/22/2017	9.22E-01	7.48E-02	3.95E-04	4.92E-04
RM-157.2 Upper 3 Runs Mouth	3/22/2017	1.51E+00	1.09E-01	1.88E-03	8.03E-04
RM-160.0 Sediment	8/2/2017	1.27E+00	9.78E-02	4.76E-04	3.90E-04
RM-160.5 Demier Landing	8/2/2017	1.23E+00	9.32E-02	-1.55E-04	2.16E-04

Table 26 Radionuclides in Savannah River Sediment (continued)

Location	Sample Date	Pu-239 Result (pCi/g)	Standard Dev. (pCi/g)	Am-241 Result (pCi/g)	Standard Dev. (pCi/g)
RM-118.7 Highway 301	3/22/2017	2.13E-03	7.36E-04	2.38E-03	7.32E-04
RM-129 Lower 3 Runs Mouth	3/22/2017	1.34E-03	5.60E-04	2.50E-03	7.70E-04
RM-134.0 Below Little Hell Landing	8/2/2017	6.78E-04	3.95E-04	5.16E-03	1.19E-03
RM-150.2 Below Four Mile Creek	3/22/2017	1.22E-03	5.57E-04	2.52E-02	2.76E-03
RM-150.4 Sediment	8/2/2017	3.46E-04	4.29E-04	9.70E-04	5.26E-04
RM-151 R-3A Above Vogtle	8/2/2017	1.07E-03	4.98E-04	2.27E-03	7.31E-04
RM-152.1 Beaver Dam Creek	3/22/2017	1.06E-03	5.82E-04	2.53E-03	7.78E-04
RM-157.2 Upper 3 Runs Mouth	3/22/2017	6.65E-03	1.41E-03	4.89E-03	1.06E-03
RM-160.0 Sediment	8/2/2017	3.32E-04	4.13E-04	4.89E-03	1.11E-03
RM-160.5 Demier Landing	8/2/2017	1.65E-03	8.88E-04	2.97E-02	3.24E-03

Location	Sample Date	Cm-244 Result (pCi/g)	Standard Dev. (pCi/g)
RM-118.7 Highway 301	3/22/2017	8.76E-04	4.43E-04
RM-129 Lower 3 Runs Mouth	3/22/2017	1.15E-03	5.23E-04
RM-134.0 Below Little Hell Landing	8/2/2017	6.54E-03	1.32E-03
RM-150.2 Below Four Mile Creek	3/22/2017	8.11E-03	1.40E-03
RM-150.4 Sediment	8/2/2017	6.76E-04	3.92E-04
RM-151 R-3A Above Vogtle	8/2/2017	4.57E-04	3.23E-04
RM-152.1 Beaver Dam Creek	3/22/2017	2.29E-04	2.35E-04
RM-157.2 Upper 3 Runs Mouth	3/22/2017	1.44E-03	6.53E-04
RM-160.0 Sediment	8/2/2017	0.00E+00	2.83E-04
RM-160.5 Demier Landing	8/2/2017	7.73E-03	1.44E-03

Table 26 Radionuclides in Savannah River Sediment (continued)

Location	Sample Date	Gross Beta Result (pCi/g)	Standard Dev. (pCi/g)	Gross Alpha Result (pCi/g)	Standard Dev. (pCi/g)
RM-118.7 Highway 301	3/22/2017	1.94E+01	1.57E+00	1.09E+01	1.54E+00
RM-129 Lower 3 Runs Mouth	3/22/2017	1.59E+01	1.45E+00	6.43E+00	1.17E+00
RM-134.0 Below Little Hell Landing	8/2/2017	1.89E+01	2.18E+00	1.35E+01	2.32E+00
RM-141.0 Steel Creek Landing	3/22/2017	2.42E+01	2.37E+00	1.18E+01	2.23E+00
RM-150.2 Below Four Mile Creek	3/22/2017	2.86E+01	2.09E+00	5.03E+01	6.20E+00
RM-150.2 Below Four Mile Creek	3/22/2017	1.94E+01	2.17E+00	8.68E+00	1.90E+00
RM-150.4 Sediment	8/2/2017	2.45E+01	2.42E+00	1.28E+01	2.39E+00
RM-151 R-3A Above Vogtle	8/2/2017	2.95E+01	2.58E+00	1.14E+01	2.17E+00
RM-152.1 Beaver Dam Creek	3/22/2017	2.03E+01	1.58E+00	4.08E+00	9.52E-01
RM-157.2 Upper 3 Runs Mouth	3/22/2017	2.04E+01	1.60E+00	1.89E+01	1.93E+00
RM-160.0 Sediment	8/2/2017	2.13E+01	2.29E+00	1.94E+01	2.76E+00
RM-160.5 Demier Landing	8/2/2017	1.78E+01	2.13E+00	1.13E+01	2.11E+00
RM-170.5 Jackson Boat Landing	6/27/2017	1.95E+01	2.19E+00	7.96E+00	1.79E+00
RM-170.5 Jackson Boat Landing	6/27/2017	1.62E+01	2.06E+00	1.20E+01	2.17E+00

Table 27 Radionuclides in SRS Stream and Basin Sediments

Location	Sample Date	Co-60		Cs-137	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Beaver Dam Creek	3/20/2017	-1.59E-02	1.55E-02	7.49E-03	1.56E-02
E-05	3/22/2017	1.36E-02	1.15E-02	-4.11E-02	1.47E-02
E-06	3/20/2017	-8.57E-03	1.70E-02	-2.27E-02	1.96E-02
EAV Basin North (E-004)	3/20/2017	2.58E-03	1.69E-02	4.92E-02	2.12E-02
EAV Basin South (E-003)	8/14/2017	9.51E-03	1.12E-02	3.41E-02	1.39E-02
FM-2 at Road 4	10/23/2017	4.00E-03	8.36E-03	3.30E+00	2.18E-01
FM-3A Below F-Area Effluent	10/23/2017	6.81E-03	1.09E-02	1.02E+00	7.53E-02
FM-6 Sediment	6/27/2017	-4.11E-03	1.03E-02	2.64E-01	3.14E-02
Four Mile A-7A (Beaver Pond)	10/23/2017	2.23E-02	1.45E-02	1.09E+01	7.08E-01
Four Mile Creek Swamp Dischrg	10/24/2017	2.78E-02	1.47E-02	5.08E+00	3.35E-01
Four Mile Creek at Road A-7	10/23/2017	6.54E-03	7.50E-03	2.02E+00	1.36E-01
L3R-1A at Road B	6/27/2017	-1.96E-02	9.59E-03	4.19E-01	3.46E-02
L3R-2 Sediment	10/25/2017	3.32E-03	1.14E-02	3.70E+00	2.45E-01
MCQBR downstream of Z-Basin	11/13/2017	2.07E-02	1.15E-02	7.84E-02	2.27E-02
McQueen Branch at Monroe Road	3/20/2017	2.40E-02	1.78E-02	2.73E-01	3.66E-02
POND 400	8/14/2017	-2.36E-03	1.61E-02	3.32E-01	3.73E-02
Pen Branch at Road A	10/25/2017	5.25E-02	1.49E-02	4.35E-02	1.67E-02
Pen Branch Swamp Discharge	10/24/2017	-8.65E-03	2.08E-02	1.11E+00	9.21E-02
Steel Creek-River Mouth	3/22/2017	-7.69E-03	1.56E-02	1.58E+00	1.11E-01
SC-2A 1 mile above Road B	10/23/2017	2.86E-03	8.84E-03	1.51E+00	1.03E-01
SC-4 Steel Creek at Road A	6/27/2017	1.26E-02	1.38E-02	4.57E+00	3.02E-01
SWDF Basin North (E-002)	8/14/2017	2.84E-04	9.74E-03	-6.84E-04	1.17E-02
SWDF Basin South (E-001)	8/14/2017	-1.67E-03	9.71E-03	9.46E-02	1.86E-02
TB-5 Near Road C	3/20/2017	8.32E-03	1.02E-02	1.23E-02	1.31E-02
Tinker Creek 1	8/14/2017	5.00E-03	1.28E-02	-4.89E-04	1.64E-02
U3R-1A Treadway Bridge RD 8-1	8/14/2017	-1.23E-02	2.41E-02	9.92E-02	3.95E-02
U3R-3 Sediment	3/20/2017	-4.35E-03	8.90E-03	4.22E-02	1.20E-02
U3R-3 Sediment	3/20/2017	5.88E-03	1.08E-02	1.71E-02	1.32E-02
U3R-4 Sediment	8/14/2017	-1.96E-02	1.15E-02	8.11E-02	2.11E-02
U3R-USFS-RD2-1	3/20/2017	2.80E-02	2.20E-02	1.10E-01	2.81E-02
R-Area (Downstream of R-1)	11/13/2017	1.42E-02	1.32E-02	2.96E+01	2.24E-01
Z-Basin	11/13/2017	1.17E-03	1.61E-02	2.00E+03	2.08E+00

Table 27 Radionuclides in SRS Stream and Basin Sediments (continued)

Location	Sample Date	Sr-89/90		U-234	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
E-05	3/22/2017	2.76E-02	2.76E-02	1.05E+00	8.31E-02
E-06	3/20/2017	8.51E-02	3.68E-02	1.29E+00	1.03E-01
EAV Basin North (E-004)	3/20/2017	7.97E-02	3.66E-02	1.83E+00	1.39E-01
EAV Basin South (E-003)	8/14/2017	2.73E-03	2.99E-02	1.42E+00	1.08E-01
FM-2 at Road 4	10/23/2017	-5.62E-02	5.92E-02	9.65E-01	7.71E-02
FM-3A Below F-Area Effluent	10/23/2017	1.45E-01	5.54E-02	1.38E+00	1.03E-01
Four Mile A-7A (Beaver Pond)	10/23/2017	2.70E-01	8.09E-02	2.02E+00	1.45E-01
Four Mile Creek Swamp Dischrg	10/24/2017	2.69E-01	8.80E-02	1.37E+00	1.02E-01
Four Mile Creek at Road A-7	10/23/2017	3.08E-02	6.10E-02	7.49E-01	6.51E-02
L3R-1A at Road B	6/27/2017	9.43E-03	4.00E-02	3.24E+00	2.30E-01
L3R-2 Sediment	10/25/2017	1.73E-01	5.79E-02	1.10E+00	8.72E-02
MCQBR downstream of Z-Basin	11/13/2017	8.38E-02	5.70E-02	2.29E+00	1.68E-01
POND 400	8/14/2017	2.76E-02	3.61E-02	1.81E+00	1.37E-01
Pen Branch Swamp Discharge	10/24/2017	1.42E-01	5.33E-02	1.14E+00	8.63E-02
SC-2A 1 mile above Road B	10/23/2017	4.22E-02	5.85E-02	1.14E+00	8.63E-02
SC-4 Steel Creek at Road A	6/27/2017	2.61E+01	3.31E+01	1.01E+00	8.09E-02
SWDF Basin North (E-002)	8/14/2017	2.26E-03	4.10E-02	7.84E-01	6.39E-02
SWDF Basin South (E-001)	8/14/2017	5.78E-02	3.49E-02	1.28E+00	9.40E-02
TB-5 Near Road C	3/20/2017	5.84E-02	5.34E-02	2.92E+00	2.14E-01
Tinker Creek 1	8/14/2017	1.56E-02	3.78E-02	3.73E+00	2.76E-01
U3R-1A Treadway Bridge RD 8-1	8/14/2017	-2.48E-02	3.36E-02	1.99E+00	1.43E-01
U3R-4 Sediment	8/14/2017	6.22E-02	5.66E-02	1.36E+00	1.03E-01
R-Area (Downstream of R-1)	11/13/2017	-2.09E-02	2.67E-01	7.74E-01	7.10E-02
Z-Basin	11/13/2017	6.21E-01	3.13E-01	1.28E+00	8.40E-02

Table 27 Radionuclides in SRS Stream and Basin Sediments (continued)

Location	Sample Date	U-235		Np-237	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
E-05	3/22/2017	4.19E-02	1.06E-02	7.30E-05	2.80E-04
E-06	3/20/2017	7.38E-02	1.64E-02	-3.11E-04	3.07E-04
EAV Basin North (E-004)	3/20/2017	8.84E-02	1.78E-02	0.00E+00	2.89E-04
EAV Basin South (E-003)	8/14/2017	5.41E-02	1.26E-02	7.86E-05	3.39E-04
FM-2 at Road 4	10/23/2017	2.78E-02	8.92E-03	7.89E-03	1.78E-03
FM-3A Below F-Area Effluent	10/23/2017	8.05E-02	1.50E-02	0.00E+00	3.15E-04
Four Mile A-7A (Beaver Pond)	10/23/2017	1.13E-01	1.82E-02	3.11E-03	9.40E-04
Four Mile Creek Swamp Dischrg	10/24/2017	8.51E-02	1.54E-02	1.39E-03	8.16E-04
Four Mile Creek at Road A-7	10/23/2017	4.51E-02	1.18E-02	4.00E-04	4.03E-04
L3R-1A at Road B	6/27/2017	1.47E-01	2.25E-02	2.46E-04	2.46E-04
L3R-2 Sediment	10/25/2017	4.51E-02	1.11E-02	-3.03E-04	2.17E-04
MCQBR downstream of Z- Basin	11/13/2017	1.25E-01	2.09E-02	8.19E-05	2.95E-04
POND 400	8/14/2017	5.89E-02	1.45E-02	1.82E-04	4.64E-04
Pen Branch Swamp Discharge	10/24/2017	5.78E-02	1.22E-02	-2.19E-04	2.22E-04
SC-2A 1 mile above Road B	10/23/2017	5.46E-02	1.18E-02	0.00E+00	5.23E-04
SC-4 Steel Creek at Road A	6/27/2017	4.05E-02	1.09E-02	4.38E-04	3.24E-04
SWDF Basin North (E-002)	8/14/2017	3.03E-02	8.67E-03	0.00E+00	2.68E-04
SWDF Basin South (E-001)	8/14/2017	8.30E-02	1.44E-02	5.59E-04	5.61E-04
TB-5 Near Road C	3/20/2017	1.46E-01	2.43E-02	6.00E-04	4.32E-04
Tinker Creek 1	8/14/2017	1.56E-01	2.66E-02	-1.58E-04	1.60E-04
U3R-1A Treadway Bridge RD 8-1	8/14/2017	8.41E-02	1.52E-02	2.35E-04	2.35E-04
U3R-4 Sediment	8/14/2017	7.27E-02	1.44E-02	-1.41E-04	1.43E-04
R-Area (Downstream of R-1)	11/13/2017	6.34E-02	2.40E-02	-1.81E-03	7.20E-03
Z Basin	11/13/2017	1.13E-01	2.98E-02	1.89E-03	1.19E-02

Table 27 Radionuclides in SRS Stream and Basin Sediments (continued)

Location	Sample Date	U-238		Pu-238	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
E-05	3/22/2017	1.10E+00	8.26E-02	5.92E-05	2.80E-04
E-06	3/20/2017	1.21E+00	9.44E-02	-3.22E-04	3.05E-04
EAV Basin North (E-004)	3/20/2017	1.85E+00	1.36E-01	3.46E-03	9.74E-04
EAV Basin South (E-003)	8/14/2017	1.33E+00	9.82E-02	1.55E-02	2.46E-03
FM-2 at Road 4	10/23/2017	1.04E+00	7.92E-02	5.14E-01	5.16E-02
FM-3A Below F-Area Effluent	10/23/2017	1.34E+00	9.74E-02	3.86E-03	1.06E-03
Four Mile A-7A (Beaver Pond)	10/23/2017	2.39E+00	1.62E-01	1.75E-01	1.75E-02
Four Mile Creek Swamp Dischrg	10/24/2017	1.40E+00	1.00E-01	8.35E-02	1.15E-02
Four Mile Creek at Road A-7	10/23/2017	8.51E-01	7.01E-02	4.41E-02	6.60E-03
L3R-1A at Road B	6/27/2017	3.24E+00	2.20E-01	3.00E-05	3.02E-04
L3R-2 Sediment	10/25/2017	1.11E+00	8.40E-02	1.98E-03	7.19E-04
MCQBR downstream of Z-Basin	11/13/2017	2.25E+00	1.58E-01	1.74E-03	7.43E-04
POND 400	8/14/2017	1.81E+00	1.32E-01	7.14E-02	8.02E-03
Pen Branch Swamp Discharge	10/24/2017	1.26E+00	9.04E-02	2.61E-03	9.52E-04
SC-2A 1 mile above Road B	10/23/2017	1.05E+00	7.74E-02	4.16E-03	2.46E-03
SC-4 Steel Creek at Road A	6/27/2017	9.73E-01	7.55E-02	1.63E-02	2.28E-03
SWDF Basin North (E-002)	8/14/2017	7.32E-01	5.88E-02	5.11E-04	4.08E-04
SWDF Basin South (E-001)	8/14/2017	1.32E+00	9.32E-02	3.00E-01	3.87E-02
TB-5 Near Road C	3/20/2017	2.92E+00	2.07E-01	8.84E-04	5.32E-04
Tinker Creek 1	8/14/2017	3.27E+00	2.35E-01	6.57E-04	4.28E-04
U3R-1A Treadway Bridge RD 8-1	8/14/2017	2.06E+00	1.41E-01	1.11E-03	5.47E-04
U3R-4 Sediment	8/14/2017	1.44E+00	1.04E-01	2.73E-03	7.91E-04
R-Area (Downstream of R-1)	11/13/2017	7.50E-01	6.85E-02	1.13E-02	6.50E-03
Z-Basin	11/13/2017	1.30E+00	8.45E-02	1.35E-02	7.00E-03

Table 27 Radionuclides in SRS Stream and Basin Sediments (continued)

Location	Sample Date	Pu-239		Am-241	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
E-05	3/22/2017	9.22E-04	4.67E-04	8.27E-04	4.17E-04
E-06	3/20/2017	2.27E-03	1.05E-03	1.07E-03	5.40E-04
EAV Basin North (E-004)	3/20/2017	8.19E-04	5.23E-04	1.71E-03	6.56E-04
EAV Basin South (E-003)	8/14/2017	3.49E-02	4.13E-03	2.44E-02	2.73E-03
FM-2 at Road 4	10/23/2017	3.35E-02	4.68E-03	3.95E-02	4.25E-03
FM-3A Below F-Area Effluent	10/23/2017	1.42E-02	2.31E-03	6.19E-03	1.21E-03
Four Mile A-7A (Beaver Pond)	10/23/2017	7.65E-02	8.37E-03	1.01E-01	8.26E-03
Four Mile Creek Swamp Dischrg	10/24/2017	4.84E-02	7.32E-03	6.49E-02	5.74E-03
Four Mile Creek at Road A-7	10/23/2017	3.59E-02	5.54E-03	2.89E-02	3.28E-03
3R-1A at Road B	6/27/2017	7.14E-04	4.30E-04	3.11E-03	9.17E-04
L3R-2 Sediment	10/25/2017	9.00E-03	1.64E-03	8.89E-03	1.54E-03
MCQBR downstream of Z-Basin	11/13/2017	5.08E-03	1.21E-03	3.43E-03	9.36E-04
POND 400	8/14/2017	2.46E-01	2.43E-02	6.84E-02	5.58E-03
Pen Branch Swamp Discharge	10/24/2017	2.47E-02	3.74E-03	8.76E-03	1.50E-03
SC-2A 1 mile above Road B	10/23/2017	2.26E-03	1.24E-03	4.35E-03	1.14E-03
SC-4 Steel Creek at Road A	6/27/2017	2.04E-02	2.61E-03	9.03E-03	1.52E-03
SWDF Basin North (E-002)	8/14/2017	6.76E-03	1.35E-03	3.70E-03	9.71E-04
SWDF Basin South (E-001)	8/14/2017	2.27E-02	4.49E-03	6.78E-03	1.28E-03
TB-5 Near Road C	3/20/2017	5.97E-04	4.26E-04	0.00E+00	2.86E-04
Tinker Creek 1	8/14/2017	2.34E-03	7.79E-04	2.30E-03	9.24E-04
U3R-1A Treadway Bridge RD 8-1	8/14/2017	8.11E-03	1.56E-03	7.78E-03	1.46E-03
U3R-4 Sediment	8/14/2017	5.86E-03	1.22E-03	6.05E-03	1.88E-03
R-Area (Downstream of R-1)	11/13/2017	1.77E-02	8.50E-03	3.55E-02	1.74E-02
Z-Basin	11/13/2017	5.06E-03	6.00E-03	1.57E-02	1.39E-02

Table 27 Radionuclides in SRS Stream and Basin Sediments (continued)

Location	Sample Date	Cm-244	
		Result (pCi/g)	Standard Dev. (pCi/g)
E-05	3/22/2017	2.06E-04	2.11E-04
E-06	3/20/2017	3.81E-03	1.05E-03
EAV Basin North (E-004)	3/20/2017	3.32E-03	9.67E-04
EAV Basin South (E-003)	8/14/2017	1.49E-03	5.79E-04
FM-2 at Road 4	10/23/2017	6.08E-03	1.43E-03
FM-3A Below F-Area Effluent	10/23/2017	1.02E-02	1.59E-03
Four Mile A-7A (Beaver Pond)	10/23/2017	7.38E-02	6.41E-03
Four Mile Creek Swamp Dischrg	10/24/2017	4.92E-02	4.67E-03
Four Mile Creek at Road A-7	10/23/2017	2.49E-02	2.96E-03
3R-1A at Road B	6/27/2017	8.70E-05	3.14E-04
L3R-2 Sediment	10/25/2017	7.00E-04	4.06E-04
MCQBR downstream of Z-Basin	11/13/2017	5.68E-04	4.52E-04
POND 400	8/14/2017	1.10E-02	1.65E-03
Pen Branch Swamp Discharge	10/24/2017	1.06E-03	4.89E-04
SC-2A 1 mile above Road B	10/23/2017	3.27E-03	9.89E-04
SC-4 Steel Creek at Road A	6/27/2017	6.62E-04	5.58E-04
SWDF Basin North (E-002)	8/14/2017	4.41E-04	3.24E-04
SWDF Basin South (E-001)	8/14/2017	1.74E-03	6.58E-04
TB-5 Near Road C	3/20/2017	1.31E-03	5.92E-04
Tinker Creek 1	8/14/2017	-2.10E-04	2.10E-04
U3R-1A Treadway Bridge RD 8-1	8/14/2017	5.43E-03	1.17E-03
U3R-4 Sediment	8/14/2017	1.65E-03	9.67E-04
R-Area (Downstream of R-1)	11/13/2017	1.68E-02	1.21E-02
Z-Basin	11/13/2017	1.92E-02	1.56E-02

Table 27 Radionuclides in SRS Stream and Basin Sediments (continued)

Location	Sample Date	Gross Beta		Gross Alpha	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Beaver Dam Creek	10/20/2017	1.52E+01	1.99E+00	1.04E+01	2.07E+00
E-05	3/22/2017	4.73E+00	1.05E+00	8.49E+00	1.34E+00
E-06	3/20/2017	8.76E+00	1.23E+00	1.25E+01	1.67E+00
EAV Basin North (E-004)	3/20/2017	1.17E+01	1.35E+00	1.74E+01	2.02E+00
EAV Basin South (E-003)	8/14/2017	1.25E+01	1.91E+00	1.50E+01	2.51E+00
FM-2 at Road 4	10/23/2017	7.32E+00	1.11E+00	4.43E+00	8.88E-01
FM-3A Below F-Area Effluent	10/23/2017	1.00E+01	1.23E+00	1.34E+01	1.50E+00
FM-6 Sediment	6/27/2017	1.06E+01	1.80E+00	2.07E+01	2.63E+00
Four Mile A-7A (Beaver Pond)	10/23/2017	1.09E+01	1.24E+00	4.78E+00	9.40E-01
Four Mile Creek Swamp Dischrg	10/24/2017	1.73E+01	1.46E+00	8.97E+00	1.21E+00
Four Mile Creek at Road A-7	10/23/2017	5.38E+00	1.03E+00	4.43E+00	8.88E-01
L3R-1A at Road B	6/27/2017	1.75E+01	2.17E+00	2.97E+01	3.58E+00
L3R-2 Sediment	10/25/2017	9.49E+00	1.20E+00	8.95E+00	1.22E+00
MCQBR downstream of Z-Basin	11/13/2017	1.03E+01	1.24E+00	1.59E+01	1.61E+00
McQueen Branch at Monroe Road	3/20/2017	1.67E+01	2.06E+00	1.44E+01	2.44E+00
POND 400	8/14/2017	3.14E+01	2.67E+00	2.12E+01	2.96E+00
Pen Branch at Road A	10/25/2017	9.51E+00	1.21E+00	1.32E+01	1.44E+00
Pen Branch Swamp Discharge	10/24/2017	1.15E+01	1.28E+00	9.89E+00	1.39E+00
Steel Creek-River Mouth	3/22/2017	2.33E+01	2.37E+00	7.04E+00	1.76E+00
SC-2A 1 mile above Road B	10/23/2017	9.11E+00	1.19E+00	9.57E+00	1.28E+00
SC-4 Steel Creek at Road A	6/27/2017	1.58E+01	2.02E+00	9.73E+00	1.85E+00
SWDF Basin North (E-002)	8/14/2017	3.89E+00	1.39E+00	3.84E+00	1.22E+00
SWDF Basin South (E-001)	8/14/2017	1.25E+01	1.91E+00	1.58E+01	2.61E+00
TB-5 Near Road C	3/20/2017	1.19E+01	1.33E+00	1.85E+01	1.78E+00
Tinker Creek 1	8/14/2017	1.85E+01	2.20E+00	2.45E+01	3.25E+00
U3R-1A Treadway Bridge RD 8-1	8/14/2017	3.16E+01	2.69E+00	4.35E+01	3.76E+00
U3R-3 Sediment	3/20/2017	1.29E+01	1.87E+00	9.89E+00	1.93E+00
U3R-3 Sediment	3/20/2017	1.04E+01	1.80E+00	1.48E+01	2.23E+00
U3R-4 Sediment	8/14/2017	1.14E+01	1.83E+00	1.38E+01	2.13E+00
U3R-USFS-RD2-1	3/20/2017	2.46E+01	2.39E+00	2.28E+01	2.90E+00
R-Area (Downstream of R-1)	11/13/2017	3.49E+01	2.30E+00	8.38E+00	1.55E+00
Z-Basin	11/13/2017	1.93E+03	1.47E+01	1.60E+01	2.24E+00

Table 28 Radionuclides in SRS Onsite Drinking Water

Location	Sample Date	Tritium (H-3)		Co-60	
		Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
617-G	1/26/2017	7.14E+00	4.74E+01	2.01E+00	1.94E+00
681-3G Dom. Water Faucet	1/23/2017	-1.04E+01	4.58E+01	-1.88E-01	1.99E+00
704-16G	1/23/2017	-9.68E+01	4.45E+01	4.92E+00	2.33E+00
709-1G	1/23/2017	-1.25E+02	4.55E+01	-1.74E+00	1.99E+00
737-G	1/23/2017	-7.24E+01	4.59E+01	-9.27E-01	2.01E+00
782-3A	1/23/2017	-4.70E+01	4.72E+01	-1.10E+00	2.16E+00
782-3A	4/19/2017	-1.93E+01	4.59E+01	-4.65E-01	2.26E+00
782-3A	7/17/2017	9.81E+01	6.07E+01	4.76E-01	1.81E+00
782-3A	10/5/2017	1.02E+02	4.06E+01	-5.49E-02	2.18E+00
905-112G Well	1/31/2017	-2.08E+01	4.96E+01	2.43E+00	2.24E+00
905-113G Well	1/31/2017	-5.32E+01	4.97E+01	-3.35E+00	1.95E+00
905-125B	1/31/2017	-6.92E+01	4.94E+01	-1.30E+00	1.91E+00
905-67B	1/31/2017	-7.22E+01	4.91E+01	-3.38E+00	1.92E+00

Location	Sample Date	Cs-137	
		Result (pCi/L)	Standard Dev. (pCi/L)
617-G	1/26/2017	-5.03E-01	2.17E+00
681-3G Dom. Water Faucet	1/23/2017	1.11E-01	2.25E+00
704-16G	1/23/2017	2.35E+00	2.34E+00
709-1G	1/23/2017	-1.38E+00	2.27E+00
737-G	1/23/2017	3.27E+00	2.32E+00
782-3A	1/23/2017	-1.06E+00	2.18E+00
782-3A	4/19/2017	2.89E+00	2.12E+00
782-3A	7/17/2017	1.51E+00	2.13E+00
782-3A	10/5/2017	1.20E+00	1.98E+00
905-112G Well	1/31/2017	-4.62E+00	2.23E+00
905-113G Well	1/31/2017	-9.05E-01	2.31E+00
905-125B	1/31/2017	2.38E+00	2.21E+00
905-67B	1/31/2017	-1.28E+00	2.01E+00

Table 28 Radionuclides in SRS Onsite Drinking Water (continued)

Location	Sample Date	Sr-89/90		U-234	
		Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
617-G	1/26/2017	5.41E-03	8.31E-02	4.49E-02	1.39E-02
681-3G Dom. Water Faucet	1/23/2017	-2.16E-01	6.95E-02	3.65E-02	1.30E-02
704-16G	1/23/2017	6.35E-01	1.18E-01	6.35E-02	1.65E-02
709-1G	1/23/2017	-1.48E-02	8.24E-02	9.84E-02	2.05E-02
737-G	1/23/2017	-1.45E-02	8.05E-02	5.59E-02	1.60E-02
782-3A	1/23/2017	1.83E-01	9.40E-02	1.16E-01	2.29E-02
905-112G Well	1/31/2017	1.25E-01	8.84E-02	1.15E-01	2.31E-02
905-113G Well	1/31/2017	2.47E-02	8.84E-02	5.00E-02	1.59E-02
905-125B	1/31/2017	2.55E-02	8.43E-02	1.75E-01	2.78E-02
905-67B	1/31/2017	-3.81E-02	9.36E-02	5.27E-02	1.58E-02

Location	Sample Date	U-235		U-238	
		Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
617-G	1/26/2017	1.19E-02	7.16E-03	5.59E-02	1.60E-02
681-3G Dom. Water Faucet	1/23/2017	0.00E+00	4.80E-03	8.14E-02	1.88E-02
704-16G	1/23/2017	0.00E+00	5.57E-03	6.86E-02	1.71E-02
709-1G	1/23/2017	0.00E+00	5.22E-03	6.89E-02	1.76E-02
737-G	1/23/2017	2.95E-02	1.14E-02	2.07E-02	1.00E-02
782-3A	1/23/2017	1.92E-02	9.48E-03	1.17E-01	2.34E-02
905-112G Well	1/31/2017	1.32E-02	7.99E-03	1.02E-01	2.12E-02
905-113G Well	1/31/2017	1.91E-02	9.44E-03	6.89E-02	1.76E-02
905-125B	1/31/2017	1.83E-02	9.04E-03	2.01E-01	3.01E-02
905-67B	1/31/2017	6.08E-03	5.18E-03	1.13E-01	2.16E-02

Location	Sample Date	Pu-238		Pu-239	
		Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
617-G	1/26/2017	5.22E-03	5.24E-03	5.19E-03	4.65E-03
681-3G Dom. Water Faucet	1/23/2017	1.02E-02	6.11E-03	6.73E-03	6.89E-03
704-16G	1/23/2017	1.82E-03	5.29E-03	1.09E-02	6.77E-03
709-1G	1/23/2017	0.00E+00	5.21E-03	-1.99E-05	1.12E-03
737-G	1/23/2017	-3.43E-03	2.94E-03	1.69E-03	5.37E-03
782-3A	1/23/2017	0.00E+00	4.77E-03	-3.14E-03	2.81E-03
905-112G Well	1/31/2017	1.91E-03	5.87E-03	2.86E-02	1.12E-02
905-113G Well	1/31/2017	-3.70E-03	3.16E-03	-1.99E-05	1.12E-03
905-125B	1/31/2017	0.00E+00	5.47E-03	-1.99E-05	1.13E-03
905-67B	1/31/2017	1.08E-02	6.50E-03	-1.99E-05	1.13E-03

Table 28 Radionuclides in SRS Onsite Drinking Water (continued)

Location	Sample Date	Am-241 Result (pCi/L)	Standard Dev. (pCi/L)	Cm-244 Result (pCi/L)	Standard Dev. (pCi/L)
617-G	1/26/2017	2.34E-02	1.09E-02	-3.59E-03	5.14E-03
681-3G Dom. Water Faucet	1/23/2017	2.00E-02	1.14E-02	1.09E-02	6.61E-03
704-16G	1/23/2017	1.31E-02	9.04E-03	-3.76E-03	5.90E-03
709-1G	1/23/2017	2.54E-02	9.89E-03	-3.38E-03	5.20E-03
737-G	1/23/2017	2.59E-02	1.01E-02	-3.46E-03	5.11E-03
782-3A	1/23/2017	1.96E-02	1.07E-02	-5.70E-06	2.91E-04
905-112G Well	1/31/2017	1.89E-02	1.03E-02	-5.70E-06	2.89E-04
905-113G Well	1/31/2017	1.44E-02	9.89E-03	-5.70E-06	2.91E-04
905-125B	1/31/2017	4.00E-02	1.32E-02	-5.70E-06	2.90E-04
905-67B	1/31/2017	5.57E-03	4.89E-03	-5.70E-06	2.87E-04

Location	Sample Date	Gross Beta Result (pCi/L)	Standard Dev. (pCi/L)	Gross Alpha Result (pCi/L)	Standard Dev. (pCi/L)
617-G	1/26/2017	6.84E-01	1.63E-01	6.08E-02	6.35E-02
681-3G Dom. Water Faucet	1/23/2017	4.38E+00	3.09E-01	5.59E+00	4.00E-01
704-16G	1/23/2017	1.76E+00	2.28E-01	1.49E+00	2.37E-01
709-1G	1/23/2017	8.97E-01	3.44E-01	5.38E-01	2.37E-01
737-G	1/23/2017	1.36E+00	2.11E-01	3.70E-01	1.32E-01
782-3A	1/23/2017	1.05E+00	2.01E-01	1.02E+00	2.06E-01
782-3A	4/19/2017	9.57E-01	2.00E-01	5.11E-01	1.61E-01
782-3A	7/17/2017	1.02E+00	2.03E-01	6.00E-01	1.67E-01
782-3A	10/5/2017	9.97E-01	1.88E-01	1.18E+00	2.30E-01
905-112G Well	1/31/2017	1.19E+00	1.89E-01	1.81E+00	2.27E-01
905-113G Well	1/31/2017	1.52E+00	2.04E-01	2.08E+00	2.42E-01
905-125B	1/31/2017	1.52E+00	2.05E-01	2.48E+00	2.70E-01
905-67B	1/31/2017	9.22E-01	1.77E-01	1.35E+00	2.03E-01

Table 29 Radionuclides in Offsite Water Treatment Plants

SRS collects samples from two water treatment plants that use Savannah River water as the source of drinking water for their customers. One plant, the North Augusta Public Water Works (PWW), is located upriver from SRS. The second plant, Beaufort-Jasper Water and Sewer Authority's (BJWSA) Purrysburg water treatment plant, is located downriver from SRS. The collected samples are of finished drinking water. Each sample is a composite of a month of daily aliquots.

Radionuclide: H-3 (tritium)

Sample Date	BJWSA-Purrysburg		N. Augusta PWW	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/31/2017	2.86E+02	5.21E+01	1.26E+02	5.00E+01
2/28/2017	4.41E+02	5.32E+01	1.35E+02	4.95E+01
3/31/2017	8.05E+02	5.69E+01	1.59E+02	5.01E+01
4/30/2017	5.27E+02	6.47E+01	9.68E+01	4.74E+01
5/31/2017	7.22E+02	6.56E+01	4.57E+01	4.67E+01
6/30/2017	5.24E+02	6.40E+01	1.67E+02	6.11E+01
7/31/2017	3.49E+02	4.34E+01	1.69E+02	5.38E+01
8/31/2017	7.05E+02	4.77E+01	2.39E+02	5.37E+01
9/30/2017	8.65E+02	5.03E+01	1.88E+02	4.22E+01
10/31/2017	5.30E+02	4.84E+01	8.19E+01	4.44E+01
11/30/2017	2.86E+02	4.55E+01	1.24E+02	4.45E+01
12/31/2017	2.38E+02	4.46E+01	1.96E+02	4.42E+01

Radionuclide: Co-60

Sample Date	BJWSA-Purrysburg		N. Augusta PWW	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/31/2017	1.92E+00	1.83E+00	-1.17E+00	2.01E+00
2/28/2017	1.18E+00	2.17E+00	2.24E+00	1.95E+00
3/31/2017	5.73E-02	2.04E+00	1.90E+00	2.16E+00
4/30/2017	-1.54E-02	1.87E+00	-2.21E+00	1.97E+00
5/31/2017	4.41E-01	1.81E+00	-5.73E-01	2.01E+00
6/30/2017	2.50E+00	1.81E+00	1.70E-01	2.10E+00
7/31/2017	2.36E-01	1.85E+00	-8.08E-01	1.94E+00
8/31/2017	1.13E+00	1.81E+00	3.24E+00	2.24E+00
9/30/2017	4.76E+00	1.82E+00	-2.21E+00	2.07E+00
10/31/2017	-1.25E+00	2.24E+00	3.16E+00	2.26E+00
11/30/2017	-1.72E+00	1.93E+00	4.14E-01	1.87E+00
12/31/2017	-3.43E-01	1.96E+00	-7.95E-01	1.97E+00

Table 29 Radionuclides in Offsite Water Treatment Plants (continued)

Radionuclide: Cs-137

Sample Date	BJWSA-Purrysburg		N. Augusta PWW	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/31/2017	-9.51E-01	2.24E+00	-2.22E+00	2.02E+00
2/28/2017	-5.22E-01	2.10E+00	1.50E+00	2.10E+00
3/31/2017	1.22E+00	2.18E+00	5.62E+00	2.21E+00
4/30/2017	-1.17E+00	2.09E+00	-2.25E+00	2.01E+00
5/31/2017	-1.14E+00	2.00E+00	-1.52E-01	2.06E+00
6/30/2017	1.74E+00	2.03E+00	3.78E+00	2.10E+00
7/31/2017	-1.61E+00	2.04E+00	-1.79E-01	2.10E+00
8/31/2017	4.32E-01	2.19E+00	1.12E+00	2.03E+00
9/30/2017	-7.84E-01	2.05E+00	-2.30E+00	2.12E+00
10/31/2017	3.03E+00	1.95E+00	6.27E-02	2.16E+00
11/30/2017	-1.96E-01	2.00E+00	-3.65E+00	2.08E+00
12/31/2017	3.05E+00	2.18E+00	-1.39E+00	2.16E+00

Radionuclide: Gross-Beta

Sample Date	BJWSA-Purrysburg		N. Augusta PWW	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/31/2017	1.32E+00	2.12E-01	1.85E+00	2.32E-01
2/28/2017	8.43E-01	1.92E-01	1.78E+00	2.11E-01
3/31/2017	1.06E+00	2.03E-01	1.45E+00	2.16E-01
4/30/2017	1.34E+00	2.14E-01	1.65E+00	2.29E-01
5/31/2017	1.33E+00	2.14E-01	1.64E+00	2.29E-01
6/30/2017	1.94E+00	2.37E-01	1.77E+00	2.30E-01
7/31/2017	1.22E+00	2.21E-01	1.68E+00	2.05E-01
8/31/2017	1.58E+00	2.34E-01	1.71E+00	2.26E-01
9/30/2017	2.04E+00	2.51E-01	1.67E+00	2.34E-01
10/31/2017	1.92E+00	2.19E-01	1.59E+00	2.31E-01
11/30/2017	1.97E+00	2.21E-01	1.77E+00	2.34E-01
12/31/2017	1.82E+00	2.15E-01	2.09E+00	2.52E-01

Table 29 Radionuclides in Offsite Water Treatment Plants (continued)

Radionuclide: Gross Alpha

Sample Date	BJWSA-Purrysburg		N.Augusta PWW	
	Result (pCi/L)	Standard Dev. (pCi/L)	Result (pCi/L)	Standard Dev. (pCi/L)
1/31/2017	1.58E-01	9.78E-02	1.33E-02	6.44E-02
2/28/2017	6.86E-03	6.17E-02	-5.49E-03	4.54E-02
3/31/2017	5.05E-02	8.28E-02	6.03E-03	5.80E-02
4/30/2017	5.51E-02	9.09E-02	1.89E-01	9.89E-02
5/31/2017	1.32E-01	1.08E-01	1.59E-01	9.48E-02
6/30/2017	5.89E-02	9.74E-02	1.24E-01	9.24E-02
7/31/2017	1.07E-01	1.03E-01	1.59E-02	6.22E-02
8/31/2017	2.45E-02	8.59E-02	1.65E-02	7.39E-02
9/30/2017	6.70E-02	9.89E-02	5.38E-02	7.86E-02
10/31/2017	-4.81E-03	8.92E-02	5.35E-02	7.82E-02
11/30/2017	7.78E-02	1.03E-01	-7.97E-02	5.43E-02
12/31/2017	-4.73E-03	8.92E-02	-1.16E-01	5.81E-02

Table 30 Radionuclides in Freshwater Fish

SRS collects fish from the mouths of creeks that traverse SRS and flow into the Savannah River. All samples are from fish flesh, unless noted. Strontium-89/90 is analyzed in both fish flesh and fish bones and is reported separately. Bone samples are identified as “nonedible.” Beginning in 2017, tritium is no longer analyzed in fish flesh. See chapter 5 of the *2017 Savannah River Site Annual Site Environmental Report*.

Radionuclide: Co-60

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Dev. (pCi/g)
Augusta Lock and Dam	Bass	7/26/2017	-3.89E-03	4.38E-03
Augusta Lock and Dam	Bass	7/26/2017	-1.33E-03	4.14E-03
Augusta Lock and Dam	Bass	7/26/2017	-4.27E-03	4.00E-03
Augusta Lock and Dam	Catfish	7/26/2017	4.41E-03	4.62E-03
Augusta Lock and Dam	Catfish	7/26/2017	-8.78E-04	4.22E-03
Augusta Lock and Dam	Catfish	7/26/2017	-1.49E-03	4.16E-03
Augusta Lock and Dam	Panfish	7/26/2017	-4.05E-03	4.54E-03
Augusta Lock and Dam	Panfish	7/26/2017	-2.86E-03	4.81E-03
Augusta Lock and Dam	Panfish	7/26/2017	-3.62E-03	5.30E-03
Four Mile Creek River Mouth	Bass	3/29/2017	-4.43E-03	5.00E-03
Four Mile Creek River Mouth	Bass	3/29/2017	2.21E-03	4.68E-03
Four Mile Creek River Mouth	Bass	3/29/2017	4.78E-04	4.76E-03
Four Mile Creek River Mouth	Catfish	3/29/2017	-5.73E-04	4.46E-03
Four Mile Creek River Mouth	Catfish	3/29/2017	4.78E-03	4.32E-03
Four Mile Creek River Mouth	Catfish	3/29/2017	-2.00E-03	4.05E-03
Four Mile Creek River Mouth	Panfish	3/29/2017	7.46E-03	4.78E-03
Four Mile Creek River Mouth	Panfish	3/29/2017	2.28E-04	4.81E-03
Four Mile Creek River Mouth	Panfish	3/29/2017	-2.70E-03	4.76E-03
Hwy-301 Bridge Area	Bass	6/14/2017	4.81E-04	2.04E-03
Hwy-301 Bridge Area	Bass	6/14/2017	-1.06E-03	2.00E-03
Hwy-301 Bridge Area	Bass	6/14/2017	1.86E-03	1.80E-03
Hwy-301 Bridge Area	Catfish	6/14/2017	1.69E-03	2.16E-03
Hwy-301 Bridge Area	Catfish	6/14/2017	1.62E-03	1.87E-03
Hwy-301 Bridge Area	Catfish	6/14/2017	1.74E-03	1.91E-03
Hwy-301 Bridge Area	Panfish	6/14/2017	-3.14E-03	2.54E-03
Hwy-301 Bridge Area	Panfish	9/27/2017	-6.16E-04	2.44E-03
Hwy-301 Bridge Area	Panfish	9/27/2017	-2.29E-03	2.48E-03
L3R Creek River Mouth	Bass	8/16/2017	-5.51E-04	3.78E-03
L3R Creek River Mouth	Bass	8/16/2017	2.25E-03	3.86E-03
L3R Creek River Mouth	Bass	8/16/2017	3.78E-03	3.86E-03
L3R Creek River Mouth	Catfish	9/20/2017	-7.16E-03	3.95E-03
L3R Creek River Mouth	Catfish	9/20/2017	-1.14E-03	4.14E-03
L3R Creek River Mouth	Catfish	9/20/2017	-8.97E-03	4.22E-03

Table 30 Radionuclides in Freshwater Fish (continued)

Radionuclide: Co-60 (continued)

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Dev. (pCi/g)
L3R Creek River Mouth	Panfish	8/16/2017	-3.62E-04	4.89E-03
L3R Creek River Mouth	Panfish	8/16/2017	2.51E-04	5.00E-03
L3R Creek River Mouth	Panfish	8/16/2017	9.24E-04	4.97E-03
Steel Creek River Mouth	Bass	4/26/2017	2.52E-03	3.76E-03
Steel Creek River Mouth	Bass	4/26/2017	3.70E-03	3.84E-03
Steel Creek River Mouth	Bass	4/26/2017	9.62E-04	3.97E-03
Steel Creek River Mouth	Catfish	4/19/2017	7.27E-04	4.32E-03
Steel Creek River Mouth	Catfish	4/26/2017	-6.14E-04	4.19E-03
Steel Creek River Mouth	Catfish	4/26/2017	-1.09E-03	4.86E-03
Steel Creek River Mouth	Panfish	4/26/2017	3.08E-03	4.46E-03
Steel Creek River Mouth	Panfish	4/26/2017	-6.00E-03	4.97E-03
Steel Creek River Mouth	Panfish	4/26/2017	2.53E-03	4.89E-03
U3R Creek River Mouth	Bass	3/22/2017	2.26E-03	4.65E-03
U3R Creek River Mouth	Bass	3/22/2017	9.86E-03	4.73E-03
U3R Creek River Mouth	Bass	3/22/2017	6.57E-03	4.95E-03
U3R Creek River Mouth	Catfish	3/15/2017	7.24E-03	4.54E-03
U3R Creek River Mouth	Catfish	3/15/2017	-7.30E-03	4.65E-03
U3R Creek River Mouth	Catfish	4/19/2017	2.01E-03	4.89E-03
U3R Creek River Mouth	Panfish	3/15/2017	1.95E-03	5.59E-03
U3R Creek River Mouth	Panfish	3/15/2017	6.08E-03	5.32E-03
U3R Creek River Mouth	Panfish	3/15/2017	7.81E-04	5.54E-03

Radionuclide: Cs-137

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Dev. (pCi/g)
Augusta Lock and Dam	Bass	7/26/2017	3.03E-02	5.70E-03
Augusta Lock and Dam	Bass	7/26/2017	1.14E-02	6.49E-03
Augusta Lock and Dam	Bass	7/26/2017	1.81E-02	4.81E-03
Augusta Lock and Dam	Catfish	7/26/2017	1.40E-02	5.97E-03
Augusta Lock and Dam	Catfish	7/26/2017	4.41E-03	4.41E-03
Augusta Lock and Dam	Catfish	7/26/2017	1.92E-02	5.76E-03
Augusta Lock and Dam	Panfish	7/26/2017	2.55E-02	8.97E-03
Augusta Lock and Dam	Panfish	7/26/2017	6.78E-02	9.32E-03
Augusta Lock and Dam	Panfish	7/26/2017	2.17E-02	5.76E-03
Four Mile Creek River Mouth	Bass	3/29/2017	3.86E-02	9.00E-03
Four Mile Creek River Mouth	Bass	3/29/2017	5.54E-02	8.78E-03
Four Mile Creek River Mouth	Bass	3/29/2017	1.06E-01	1.10E-02
Four Mile Creek River Mouth	Catfish	3/29/2017	2.48E-02	5.57E-03

Table 30 Radionuclides in Freshwater Fish (continued)

Radionuclide: Cs-137 (continued)

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Dev. (pCi/g)
Four Mile Creek River Mouth	Catfish	3/29/2017	3.92E-02	6.14E-03
Four Mile Creek River Mouth	Catfish	3/29/2017	9.49E-03	4.24E-03
Four Mile Creek River Mouth	Panfish	3/29/2017	1.91E-02	5.32E-03
Four Mile Creek River Mouth	Panfish	3/29/2017	2.66E-02	8.11E-03
Four Mile Creek River Mouth	Panfish	3/29/2017	2.58E-02	8.57E-03
Hwy-301 Bridge Area	Bass	6/14/2017	6.51E-02	5.35E-03
Hwy-301 Bridge Area	Bass	6/14/2017	3.05E-02	3.32E-03
Hwy-301 Bridge Area	Bass	6/14/2017	2.54E-02	3.24E-03
Hwy-301 Bridge Area	Catfish	6/14/2017	2.70E-02	3.35E-03
Hwy-301 Bridge Area	Catfish	6/14/2017	2.16E-02	3.05E-03
Hwy-301 Bridge Area	Catfish	6/14/2017	2.51E-02	3.46E-03
Hwy-301 Bridge Area	Panfish	6/14/2017	7.05E-03	3.32E-03
Hwy-301 Bridge Area	Panfish	9/27/2017	1.49E-02	4.38E-03
Hwy-301 Bridge Area	Panfish	9/27/2017	1.05E-03	2.04E-03
L3R Creek River Mouth	Bass	8/16/2017	3.62E-02	7.68E-03
L3R Creek River Mouth	Bass	8/16/2017	7.73E-02	8.57E-03
L3R Creek River Mouth	Bass	8/16/2017	1.02E-01	1.07E-02
L3R Creek River Mouth	Catfish	9/20/2017	1.66E-01	1.41E-02
L3R Creek River Mouth	Catfish	9/20/2017	5.92E-01	3.59E-02
L3R Creek River Mouth	Catfish	9/20/2017	1.34E-01	1.11E-02
L3R Creek River Mouth	Panfish	8/16/2017	2.42E-02	8.05E-03
L3R Creek River Mouth	Panfish	8/16/2017	1.25E-02	5.41E-03
L3R Creek River Mouth	Panfish	8/16/2017	1.90E-02	5.59E-03
Steel Creek River Mouth	Bass	4/26/2017	5.11E-02	8.16E-03
Steel Creek River Mouth	Bass	4/26/2017	1.88E-01	1.41E-02
Steel Creek River Mouth	Bass	4/26/2017	7.81E-02	8.35E-03
Steel Creek River Mouth	Catfish	4/19/2017	8.49E-02	8.62E-03
Steel Creek River Mouth	Catfish	4/26/2017	9.62E-02	9.27E-03
Steel Creek River Mouth	Catfish	4/26/2017	1.17E-01	1.01E-02
Steel Creek River Mouth	Panfish	4/26/2017	3.05E-02	7.41E-03
Steel Creek River Mouth	Panfish	4/26/2017	1.91E-02	7.38E-03
Steel Creek River Mouth	Panfish	4/26/2017	1.32E-01	1.41E-02
U3R Creek River Mouth	Bass	3/22/2017	7.81E-02	1.02E-02
U3R Creek River Mouth	Bass	3/22/2017	3.65E-02	7.76E-03
U3R Creek River Mouth	Bass	3/22/2017	4.84E-02	1.03E-02
U3R Creek River Mouth	Catfish	3/15/2017	1.16E-01	1.13E-02
U3R Creek River Mouth	Catfish	3/15/2017	9.38E-02	9.89E-03
U3R Creek River Mouth	Catfish	4/19/2017	2.24E-02	6.89E-03
U3R Creek River Mouth	Panfish	3/15/2017	9.46E-03	5.03E-03
U3R Creek River Mouth	Panfish	3/15/2017	1.18E-01	1.35E-02
U3R Creek River Mouth	Panfish	3/15/2017	4.43E-02	9.05E-03

Table 30 Radionuclides in Freshwater Fish (continued)

Radionuclide: Sr-89/90 (edible)

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Dev. (pCi/g)
Augusta Lock and Dam	Bass	7/26/2017	3.78E-03	1.60E-03
Augusta Lock and Dam	Bass	7/26/2017	3.08E-03	1.40E-03
Augusta Lock and Dam	Bass	7/26/2017	1.88E-03	9.51E-04
Augusta Lock and Dam	Catfish	7/26/2017	2.49E-03	1.11E-03
Augusta Lock and Dam	Catfish	7/26/2017	4.00E-03	1.20E-03
Augusta Lock and Dam	Catfish	7/26/2017	4.00E-03	1.13E-03
Augusta Lock and Dam	Panfish	7/26/2017	5.14E-03	1.99E-03
Augusta Lock and Dam	Panfish	7/26/2017	2.73E-03	1.86E-03
Augusta Lock and Dam	Panfish	7/26/2017	2.69E-03	1.84E-03
Four Mile Creek River Mouth	Bass	3/29/2017	2.00E-03	9.92E-04
Four Mile Creek River Mouth	Bass	3/29/2017	5.81E-04	9.05E-04
Four Mile Creek River Mouth	Bass	3/29/2017	2.02E-03	1.07E-03
Four Mile Creek River Mouth	Catfish	3/29/2017	4.43E-03	1.43E-03
Four Mile Creek River Mouth	Catfish	3/29/2017	2.09E-03	1.37E-03
Four Mile Creek River Mouth	Catfish	3/29/2017	2.86E-03	1.15E-03
Four Mile Creek River Mouth	Panfish	3/29/2017	3.14E-04	1.65E-03
Four Mile Creek River Mouth	Panfish	3/29/2017	4.24E-03	1.96E-03
Four Mile Creek River Mouth	Panfish	3/29/2017	2.76E-03	1.82E-03
Hwy-301 Bridge Area	Bass	6/14/2017	1.45E-03	8.38E-04
Hwy-301 Bridge Area	Bass	6/14/2017	9.43E-04	8.24E-04
Hwy-301 Bridge Area	Bass	6/14/2017	2.19E-03	8.84E-04
Hwy-301 Bridge Area	Catfish	6/14/2017	3.76E-03	1.01E-03
Hwy-301 Bridge Area	Catfish	6/14/2017	1.80E-03	8.59E-04
Hwy-301 Bridge Area	Catfish	6/14/2017	5.19E-04	7.43E-04
Hwy-301 Bridge Area	Panfish	6/14/2017	1.36E-03	1.62E-03
Hwy-301 Bridge Area	Panfish	9/27/2017	-2.53E-04	1.40E-03
Hwy-301 Bridge Area	Panfish	9/27/2017	4.32E-03	1.84E-03
L3R Creek River Mouth	Bass	8/16/2017	5.92E-04	4.70E-04
L3R Creek River Mouth	Bass	8/16/2017	1.38E-03	4.86E-04
L3R Creek River Mouth	Bass	8/16/2017	1.11E-03	5.22E-04
L3R Creek River Mouth	Catfish	9/20/2017	2.56E-03	6.92E-04
L3R Creek River Mouth	Catfish	9/20/2017	1.45E-03	5.27E-04
L3R Creek River Mouth	Catfish	9/20/2017	1.89E-03	5.57E-04
L3R Creek River Mouth	Panfish	8/16/2017	5.19E-03	1.17E-03
L3R Creek River Mouth	Panfish	8/16/2017	3.76E-03	1.05E-03
L3R Creek River Mouth	Panfish	8/16/2017	4.22E-03	1.14E-03
Steel Creek River Mouth	Bass	4/26/2017	8.70E-04	8.76E-04
Steel Creek River Mouth	Bass	4/26/2017	1.51E-03	1.04E-03
Steel Creek River Mouth	Bass	4/26/2017	7.78E-04	9.89E-04

Table 30 Radionuclides in Freshwater Fish (continued)

Radionuclide: Sr-89/90 (edible) (continued)

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Dev. (pCi/g)
Steel Creek River Mouth	Catfish	4/19/2017	9.57E-04	1.03E-03
Steel Creek River Mouth	Catfish	4/26/2017	9.70E-04	9.76E-04
Steel Creek River Mouth	Catfish	4/26/2017	2.01E-03	1.06E-03
Steel Creek River Mouth	Panfish	4/26/2017	1.34E-03	1.70E-03
Steel Creek River Mouth	Panfish	4/26/2017	5.68E-03	2.22E-03
Steel Creek River Mouth	Panfish	4/26/2017	3.70E-03	1.84E-03
U3R Creek River Mouth	Bass	3/22/2017	2.38E-03	9.89E-04
U3R Creek River Mouth	Bass	3/22/2017	2.56E-05	7.89E-04
U3R Creek River Mouth	Bass	3/22/2017	1.49E-03	9.08E-04
U3R Creek River Mouth	Catfish	3/15/2017	1.88E-03	9.32E-04
U3R Creek River Mouth	Catfish	3/15/2017	2.92E-03	1.16E-03
U3R Creek River Mouth	Catfish	4/19/2017	9.30E-04	1.08E-03
U3R Creek River Mouth	Panfish	3/15/2017	5.70E-03	2.18E-03
U3R Creek River Mouth	Panfish	3/15/2017	5.03E-03	2.04E-03
U3R Creek River Mouth	Panfish	3/15/2017	5.65E-03	2.25E-03

Radionuclide: Sr-89/90 (nonedible) (bone)

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Dev. (pCi/g)
Augusta Lock and Dam	Bass	7/26/2017	6.62E-01	1.36E-01
Augusta Lock and Dam	Bass	7/26/2017	6.05E-01	1.26E-01
Augusta Lock and Dam	Bass	7/26/2017	8.24E-01	1.41E-01
Augusta Lock and Dam	Catfish	7/26/2017	1.04E+00	1.52E-01
Augusta Lock and Dam	Catfish	7/26/2017	9.11E-01	1.43E-01
Augusta Lock and Dam	Catfish	7/26/2017	7.84E-01	1.34E-01
Augusta Lock and Dam	Panfish	7/26/2017	6.65E-01	1.33E-01
Augusta Lock and Dam	Panfish	7/26/2017	8.14E-01	1.38E-01
Augusta Lock and Dam	Panfish	7/26/2017	1.12E+00	1.58E-01
Four Mile Creek River Mouth	Bass	3/29/2017	9.68E-01	1.42E-01
Four Mile Creek River Mouth	Bass	3/29/2017	1.38E+00	1.66E-01
Four Mile Creek River Mouth	Bass	3/29/2017	7.68E-01	1.27E-01
Four Mile Creek River Mouth	Catfish	3/29/2017	7.24E-01	1.20E-01
Four Mile Creek River Mouth	Catfish	3/29/2017	7.59E-01	1.37E-01
Four Mile Creek River Mouth	Catfish	3/29/2017	7.89E-01	1.25E-01
Four Mile Creek River Mouth	Panfish	3/29/2017	7.03E-01	1.28E-01
Four Mile Creek River Mouth	Panfish	3/29/2017	1.24E+00	1.59E-01
Four Mile Creek River Mouth	Panfish	3/29/2017	1.02E+00	1.39E-01
Hwy-301 Bridge Area	Bass	6/14/2017	7.41E-01	1.41E-01

Table 30 Radionuclides in Freshwater Fish (continued)

Radionuclide: Sr-89/90 (nonedible) (bone)

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Dev. (pCi/g)
Hwy-301 Bridge Area	Bass	6/14/2017	5.41E-01	1.15E-01
Hwy-301 Bridge Area	Bass	6/14/2017	6.03E-01	1.18E-01
Hwy-301 Bridge Area	Catfish	6/14/2017	6.49E-01	1.21E-01
Hwy-301 Bridge Area	Catfish	6/14/2017	4.92E-01	1.09E-01
Hwy-301 Bridge Area	Catfish	6/14/2017	7.19E-01	1.21E-01
Hwy-301 Bridge Area	Panfish	6/14/2017	4.32E-01	1.07E-01
Hwy-301 Bridge Area	Panfish	9/27/2017	6.24E-01	1.23E-01
Hwy-301 Bridge Area	Panfish	9/27/2017	7.41E-01	1.36E-01
L3R Creek River Mouth	Bass	8/16/2017	3.24E-01	9.68E-02
L3R Creek River Mouth	Bass	8/16/2017	5.68E-01	1.18E-01
L3R Creek River Mouth	Bass	8/16/2017	6.03E-01	1.37E-01
L3R Creek River Mouth	Catfish	9/20/2017	7.30E-01	1.29E-01
L3R Creek River Mouth	Catfish	9/20/2017	8.46E-01	1.32E-01
L3R Creek River Mouth	Catfish	9/20/2017	7.86E-01	1.29E-01
L3R Creek River Mouth	Panfish	8/16/2017	9.41E-01	1.49E-01
L3R Creek River Mouth	Panfish	8/16/2017	8.86E-01	1.40E-01
L3R Creek River Mouth	Panfish	8/16/2017	5.41E-01	1.19E-01
Steel Creek River Mouth	Bass	4/26/2017	6.32E-01	1.20E-01
Steel Creek River Mouth	Bass	4/26/2017	8.76E-01	1.42E-01
Steel Creek River Mouth	Bass	4/26/2017	6.38E-01	1.21E-01
Steel Creek River Mouth	Catfish	4/19/2017	9.08E-01	1.35E-01
Steel Creek River Mouth	Catfish	4/26/2017	8.89E-01	1.35E-01
Steel Creek River Mouth	Catfish	4/26/2017	7.00E-01	1.26E-01
Steel Creek River Mouth	Panfish	4/26/2017	8.16E-01	1.32E-01
Steel Creek River Mouth	Panfish	4/26/2017	8.73E-01	1.34E-01
Steel Creek River Mouth	Panfish	4/26/2017	7.86E-01	1.28E-01
U3R Creek River Mouth	Bass	3/22/2017	5.59E-01	1.09E-01
U3R Creek River Mouth	Bass	3/22/2017	5.41E-01	9.54E-02
U3R Creek River Mouth	Bass	3/22/2017	6.73E-01	1.06E-01
U3R Creek River Mouth	Catfish	3/15/2017	7.70E-01	1.08E-01
U3R Creek River Mouth	Catfish	3/15/2017	4.86E-01	1.04E-01
U3R Creek River Mouth	Catfish	4/19/2017	5.78E-01	1.19E-01
U3R Creek River Mouth	Panfish	3/15/2017	6.49E-01	1.02E-01
U3R Creek River Mouth	Panfish	3/15/2017	7.03E-01	1.28E-01
U3R Creek River Mouth	Panfish	3/15/2017	1.31E+00	1.42E-01

Table 30 Radionuclides in Freshwater Fish (continued)

Radionuclide: I-129

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Dev. (pCi/g)
Augusta Lock and Dam	Bass	7/26/2017	1.96E-03	2.01E-02
Augusta Lock and Dam	Bass	7/26/2017	-3.78E-02	2.23E-02
Augusta Lock and Dam	Bass	7/26/2017	-1.89E-02	2.10E-02
Augusta Lock and Dam	Catfish	7/26/2017	-2.64E-02	2.12E-02
Augusta Lock and Dam	Catfish	7/26/2017	-3.24E-02	2.09E-02
Augusta Lock and Dam	Catfish	7/26/2017	-8.51E-03	2.07E-02
Augusta Lock and Dam	Panfish	7/26/2017	-2.43E-02	2.49E-02
Augusta Lock and Dam	Panfish	7/26/2017	-1.14E-02	2.48E-02
Augusta Lock and Dam	Panfish	7/26/2017	-3.73E-02	2.65E-02
Four Mile Creek River Mouth	Bass	3/29/2017	-2.11E-02	2.03E-02
Four Mile Creek River Mouth	Bass	3/29/2017	2.54E-02	1.86E-02
Four Mile Creek River Mouth	Bass	3/29/2017	-2.97E-02	2.23E-02
Four Mile Creek River Mouth	Catfish	3/29/2017	8.22E-03	2.05E-02
Four Mile Creek River Mouth	Catfish	3/29/2017	2.27E-04	2.03E-02
Four Mile Creek River Mouth	Catfish	3/29/2017	-8.03E-03	2.02E-02
Four Mile Creek River Mouth	Panfish	3/29/2017	-9.19E-03	2.44E-02
Four Mile Creek River Mouth	Panfish	3/29/2017	7.92E-03	2.38E-02
Four Mile Creek River Mouth	Panfish	3/29/2017	-2.73E-02	2.51E-02
Hwy-301 Bridge Area	Bass	6/14/2017	-2.15E-03	2.04E-02
Hwy-301 Bridge Area	Bass	6/14/2017	2.03E-02	1.84E-02
Hwy-301 Bridge Area	Bass	6/14/2017	-2.92E-02	2.09E-02
Hwy-301 Bridge Area	Catfish	6/14/2017	-2.65E-02	2.13E-02
Hwy-301 Bridge Area	Catfish	6/14/2017	1.05E-02	1.91E-02
Hwy-301 Bridge Area	Catfish	6/14/2017	-3.89E-02	2.12E-02
Hwy-301 Bridge Area	Panfish	6/14/2017	2.73E-02	2.23E-02
Hwy-301 Bridge Area	Panfish	9/27/2017	1.53E-03	2.37E-02
Hwy-301 Bridge Area	Panfish	9/27/2017	-1.23E-02	2.51E-02
L3R Creek River Mouth	Bass	8/16/2017	6.92E-03	1.92E-02
L3R Creek River Mouth	Bass	8/16/2017	6.51E-03	1.97E-02
L3R Creek River Mouth	Bass	8/16/2017	-3.49E-02	2.24E-02
L3R Creek River Mouth	Catfish	9/20/2017	-2.21E-02	2.15E-02
L3R Creek River Mouth	Catfish	9/20/2017	-1.53E-03	1.86E-02
L3R Creek River Mouth	Catfish	9/20/2017	-2.89E-02	2.27E-02
L3R Creek River Mouth	Panfish	8/16/2017	-2.22E-02	2.46E-02
L3R Creek River Mouth	Panfish	8/16/2017	6.46E-04	2.37E-02
L3R Creek River Mouth	Panfish	8/16/2017	-4.49E-03	2.47E-02
Steel Creek River Mouth	Bass	4/26/2017	-2.20E-02	2.10E-02
Steel Creek River Mouth	Bass	4/26/2017	-2.84E-02	2.22E-02
Steel Creek River Mouth	Bass	4/26/2017	2.48E-02	1.91E-02

Table 30 Radionuclides in Freshwater Fish (continued)

Radionuclide: I-129 (continued)

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Dev. (pCi/g)
Steel Creek River Mouth	Catfish	4/19/2017	-3.92E-02	2.33E-02
Steel Creek River Mouth	Catfish	4/26/2017	-1.63E-02	2.20E-02
Steel Creek River Mouth	Catfish	4/26/2017	-1.94E-02	2.15E-02
Steel Creek River Mouth	Panfish	4/26/2017	-4.49E-03	2.41E-02
Steel Creek River Mouth	Panfish	4/26/2017	-5.00E-02	2.60E-02
Steel Creek River Mouth	Panfish	4/26/2017	-2.16E-02	2.59E-02
U3R Creek River Mouth	Bass	3/22/2017	-2.58E-02	2.20E-02
U3R Creek River Mouth	Bass	3/22/2017	-5.14E-02	2.16E-02
U3R Creek River Mouth	Bass	3/22/2017	1.28E-02	1.92E-02
U3R Creek River Mouth	Catfish	3/15/2017	1.48E-03	2.06E-02
U3R Creek River Mouth	Catfish	3/15/2017	-5.73E-02	2.29E-02
U3R Creek River Mouth	Catfish	4/19/2017	-8.16E-03	2.06E-02
U3R Creek River Mouth	Panfish	3/15/2017	4.05E-04	2.38E-02
U3R Creek River Mouth	Panfish	3/15/2017	2.14E-02	2.38E-02
U3R Creek River Mouth	Panfish	3/15/2017	2.35E-02	2.29E-02

Radionuclide: Tc-99

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Dev. (pCi/g)
Augusta Lock and Dam	Bass	7/26/2017	5.16E-02	2.38E-02
Augusta Lock and Dam	Bass	7/26/2017	4.19E-02	2.37E-02
Augusta Lock and Dam	Bass	7/26/2017	1.12E-02	2.33E-02
Augusta Lock and Dam	Catfish	7/26/2017	2.84E-02	2.36E-02
Augusta Lock and Dam	Catfish	7/26/2017	4.68E-02	2.41E-02
Augusta Lock and Dam	Catfish	7/26/2017	4.95E-02	2.39E-02
Augusta Lock and Dam	Panfish	7/26/2017	2.40E-02	2.35E-02
Augusta Lock and Dam	Panfish	7/26/2017	3.49E-02	2.36E-02
Augusta Lock and Dam	Panfish	7/26/2017	1.12E-02	2.34E-02
Four Mile Creek River Mouth	Bass	3/29/2017	5.97E-02	2.76E-02
Four Mile Creek River Mouth	Bass	3/29/2017	5.73E-02	2.76E-02
Four Mile Creek River Mouth	Bass	3/29/2017	7.65E-02	2.78E-02
Four Mile Creek River Mouth	Catfish	3/29/2017	8.89E-02	2.78E-02
Four Mile Creek River Mouth	Catfish	3/29/2017	8.81E-02	2.81E-02
Four Mile Creek River Mouth	Catfish	3/29/2017	4.65E-02	2.73E-02
Four Mile Creek River Mouth	Panfish	3/29/2017	1.66E-02	2.69E-02
Four Mile Creek River Mouth	Panfish	3/29/2017	4.97E-02	2.73E-02
Four Mile Creek River Mouth	Panfish	3/29/2017	7.81E-02	2.78E-02
Hwy-301 Bridge Area	Bass	6/14/2017	4.51E-03	2.59E-02

Table 30 Radionuclides in Freshwater Fish (continued)

Radionuclide: Tc-99 (continued)

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Dev. (pCi/g)
Hwy-301 Bridge Area	Bass	6/14/2017	-5.86E-03	2.57E-02
Hwy-301 Bridge Area	Bass	6/14/2017	3.70E-02	2.63E-02
Hwy-301 Bridge Area	Catfish	6/14/2017	7.68E-03	2.59E-02
Hwy-301 Bridge Area	Catfish	6/14/2017	3.30E-02	2.62E-02
Hwy-301 Bridge Area	Catfish	6/14/2017	2.70E-02	2.62E-02
Hwy-301 Bridge Area	Panfish	6/14/2017	5.84E-03	2.58E-02
Hwy-301 Bridge Area	Panfish	9/27/2017	5.95E-02	3.22E-02
Hwy-301 Bridge Area	Panfish	9/27/2017	4.54E-02	1.38E-02
L3R Creek River Mouth	Bass	8/16/2017	-1.45E-02	2.22E-02
L3R Creek River Mouth	Bass	8/16/2017	-1.08E-02	2.23E-02
L3R Creek River Mouth	Bass	8/16/2017	1.87E-02	2.28E-02
L3R Creek River Mouth	Catfish	9/20/2017	1.12E-02	2.26E-02
L3R Creek River Mouth	Catfish	9/20/2017	2.92E-03	2.25E-02
L3R Creek River Mouth	Catfish	9/20/2017	1.20E-02	2.26E-02
L3R Creek River Mouth	Panfish	8/16/2017	3.00E-02	2.29E-02
L3R Creek River Mouth	Panfish	8/16/2017	-6.24E-03	2.24E-02
L3R Creek River Mouth	Panfish	8/16/2017	1.12E-02	2.26E-02
Steel Creek River Mouth	Bass	4/26/2017	2.57E-02	2.40E-02
Steel Creek River Mouth	Bass	4/26/2017	6.22E-02	2.46E-02
Steel Creek River Mouth	Bass	4/26/2017	2.15E-02	2.40E-02
Steel Creek River Mouth	Catfish	4/19/2017	2.57E-02	2.41E-02
Steel Creek River Mouth	Catfish	4/26/2017	4.46E-02	2.43E-02
Steel Creek River Mouth	Catfish	4/26/2017	5.49E-02	2.47E-02
Steel Creek River Mouth	Panfish	4/26/2017	6.30E-02	2.46E-02
Steel Creek River Mouth	Panfish	4/26/2017	6.51E-02	2.51E-02
Steel Creek River Mouth	Panfish	4/26/2017	3.22E-02	2.41E-02
U3R Creek River Mouth	Bass	3/22/2017	3.41E-02	2.70E-02
U3R Creek River Mouth	Bass	3/22/2017	6.43E-02	2.76E-02
U3R Creek River Mouth	Bass	3/22/2017	4.00E-02	2.70E-02
U3R Creek River Mouth	Catfish	3/15/2017	5.62E-02	2.73E-02
U3R Creek River Mouth	Catfish	3/15/2017	8.65E-02	2.78E-02
U3R Creek River Mouth	Catfish	4/19/2017	8.49E-02	2.78E-02
U3R Creek River Mouth	Panfish	3/15/2017	4.97E-02	2.73E-02
U3R Creek River Mouth	Panfish	3/15/2017	4.73E-02	2.73E-02
U3R Creek River Mouth	Panfish	3/15/2017	4.41E-02	2.73E-02

Table 30 Radionuclides in Freshwater Fish (continued)

Radionuclide: Gross Beta

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Dev. (pCi/g)
Augusta Lock and Dam	Bass	7/26/2017	2.97E+00	2.33E-01
Augusta Lock and Dam	Bass	7/26/2017	2.26E+00	2.06E-01
Augusta Lock and Dam	Bass	7/26/2017	2.70E+00	2.23E-01
Augusta Lock and Dam	Catfish	7/26/2017	2.53E+00	2.17E-01
Augusta Lock and Dam	Catfish	7/26/2017	2.58E+00	2.18E-01
Augusta Lock and Dam	Catfish	7/26/2017	2.70E+00	2.23E-01
Augusta Lock and Dam	Panfish	7/26/2017	2.42E+00	2.12E-01
Augusta Lock and Dam	Panfish	7/26/2017	1.93E+00	1.92E-01
Augusta Lock and Dam	Panfish	7/26/2017	2.36E+00	2.09E-01
Four Mile Creek River Mouth	Bass	3/29/2017	2.51E+00	2.16E-01
Four Mile Creek River Mouth	Bass	3/29/2017	2.89E+00	2.30E-01
Four Mile Creek River Mouth	Bass	3/29/2017	2.39E+00	2.11E-01
Four Mile Creek River Mouth	Catfish	3/29/2017	2.13E+00	2.02E-01
Four Mile Creek River Mouth	Catfish	3/29/2017	2.61E+00	2.20E-01
Four Mile Creek River Mouth	Catfish	3/29/2017	2.03E+00	1.97E-01
Four Mile Creek River Mouth	Panfish	3/29/2017	1.86E+00	1.90E-01
Four Mile Creek River Mouth	Panfish	3/29/2017	1.57E+00	1.78E-01
Four Mile Creek River Mouth	Panfish	3/29/2017	1.67E+00	1.82E-01
Hwy-301 Bridge Area	Bass	6/14/2017	2.12E+00	1.96E-01
Hwy-301 Bridge Area	Bass	6/14/2017	2.35E+00	2.05E-01
Hwy-301 Bridge Area	Bass	6/14/2017	2.01E+00	1.91E-01
Hwy-301 Bridge Area	Catfish	6/14/2017	2.03E+00	1.92E-01
Hwy-301 Bridge Area	Catfish	6/14/2017	2.37E+00	2.06E-01
Hwy-301 Bridge Area	Catfish	6/14/2017	1.86E+00	1.85E-01
Hwy-301 Bridge Area	Panfish	6/14/2017	1.74E+00	1.79E-01
Hwy-301 Bridge Area	Panfish	9/27/2017	1.84E+00	1.91E-01
Hwy-301 Bridge Area	Panfish	9/27/2017	1.33E+00	1.68E-01
L3R Creek River Mouth	Bass	8/16/2017	2.73E+00	2.19E-01
L3R Creek River Mouth	Bass	8/16/2017	2.19E+00	1.99E-01
L3R Creek River Mouth	Bass	8/16/2017	2.14E+00	1.97E-01
L3R Creek River Mouth	Catfish	9/20/2017	2.58E+00	2.14E-01
L3R Creek River Mouth	Catfish	9/20/2017	2.89E+00	2.26E-01
L3R Creek River Mouth	Catfish	9/20/2017	2.97E+00	2.29E-01
L3R Creek River Mouth	Panfish	8/16/2017	2.41E+00	2.08E-01
L3R Creek River Mouth	Panfish	8/16/2017	2.21E+00	2.00E-01
L3R Creek River Mouth	Panfish	8/16/2017	2.28E+00	2.02E-01
Steel Creek River Mouth	Bass	4/26/2017	2.66E+00	2.21E-01
Steel Creek River Mouth	Bass	4/26/2017	2.95E+00	2.32E-01
Steel Creek River Mouth	Bass	4/26/2017	2.25E+00	2.06E-01

Table 30 Radionuclides in Freshwater Fish (continued)

Radionuclide: Gross Beta (continued)

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Dev. (pCi/g)
Steel Creek River Mouth	Catfish	4/19/2017	2.73E+00	2.25E-01
Steel Creek River Mouth	Catfish	4/26/2017	2.29E+00	2.08E-01
Steel Creek River Mouth	Catfish	4/26/2017	2.78E+00	2.26E-01
Steel Creek River Mouth	Panfish	4/26/2017	2.63E+00	2.22E-01
Steel Creek River Mouth	Panfish	4/26/2017	2.52E+00	2.17E-01
Steel Creek River Mouth	Panfish	4/26/2017	2.81E+00	2.29E-01
U3R Creek River Mouth	Bass	3/22/2017	2.92E+00	2.31E-01
U3R Creek River Mouth	Bass	3/22/2017	2.47E+00	2.15E-01
U3R Creek River Mouth	Bass	3/22/2017	2.68E+00	2.23E-01
U3R Creek River Mouth	Catfish	3/15/2017	2.21E+00	2.05E-01
U3R Creek River Mouth	Catfish	3/15/2017	2.35E+00	2.10E-01
U3R Creek River Mouth	Catfish	4/19/2017	2.21E+00	2.05E-01
U3R Creek River Mouth	Panfish	3/15/2017	1.79E+00	1.88E-01
U3R Creek River Mouth	Panfish	3/15/2017	2.61E+00	2.21E-01
U3R Creek River Mouth	Panfish	3/15/2017	2.24E+00	2.06E-01

Radionuclide: Gross Alpha

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Dev. (pCi/g)
Augusta Lock and Dam	Bass	7/26/2017	-2.92E-02	1.45E-02
Augusta Lock and Dam	Bass	7/26/2017	-2.73E-02	1.42E-02
Augusta Lock and Dam	Bass	7/26/2017	-2.78E-02	1.41E-02
Augusta Lock and Dam	Catfish	7/26/2017	1.00E-01	6.54E-02
Augusta Lock and Dam	Catfish	7/26/2017	4.16E-03	3.43E-02
Augusta Lock and Dam	Catfish	7/26/2017	3.59E-02	4.73E-02
Augusta Lock and Dam	Panfish	7/26/2017	-2.73E-02	1.40E-02
Augusta Lock and Dam	Panfish	7/26/2017	5.30E-03	3.43E-02
Augusta Lock and Dam	Panfish	7/26/2017	4.41E-03	3.38E-02
Four Mile Creek River Mouth	Bass	3/29/2017	2.95E-02	4.70E-02
Four Mile Creek River Mouth	Bass	3/29/2017	-3.54E-03	3.49E-02
Four Mile Creek River Mouth	Bass	3/29/2017	-3.49E-02	1.13E-02
Four Mile Creek River Mouth	Catfish	3/29/2017	2.95E-02	4.59E-02
Four Mile Creek River Mouth	Catfish	3/29/2017	-3.00E-03	3.43E-02
Four Mile Creek River Mouth	Catfish	3/29/2017	-3.38E-02	1.12E-02
Four Mile Creek River Mouth	Panfish	3/29/2017	2.97E-02	4.59E-02
Four Mile Creek River Mouth	Panfish	3/29/2017	-1.16E-03	3.59E-02
Four Mile Creek River Mouth	Panfish	3/29/2017	-1.35E-03	3.43E-02
Hwy-301 Bridge Area	Bass	6/14/2017	1.48E-02	3.46E-02

Table 30 Radionuclides in Freshwater Fish (continued)

Radionuclide: Gross Alpha

Location	Fish Type	Sample Date	Result (pCi/g)	Standard Dev. (pCi/g)
Hwy-301 Bridge Area	Bass	6/14/2017	1.46E-02	3.46E-02
Hwy-301 Bridge Area	Bass	6/14/2017	8.03E-02	5.78E-02
Hwy-301 Bridge Area	Catfish	6/14/2017	1.46E-02	3.41E-02
Hwy-301 Bridge Area	Catfish	6/14/2017	1.50E-02	3.57E-02
Hwy-301 Bridge Area	Catfish	6/14/2017	8.00E-02	5.76E-02
Hwy-301 Bridge Area	Panfish	6/14/2017	1.51E-02	3.49E-02
Hwy-301 Bridge Area	Panfish	9/27/2017	4.03E-03	3.49E-02
Hwy-301 Bridge Area	Panfish	9/27/2017	3.62E-02	4.59E-02
L3R Creek River Mouth	Bass	8/16/2017	3.76E-02	4.65E-02
L3R Creek River Mouth	Bass	8/16/2017	3.89E-02	4.76E-02
L3R Creek River Mouth	Bass	8/16/2017	7.08E-03	3.49E-02
L3R Creek River Mouth	Catfish	9/20/2017	6.92E-03	3.46E-02
L3R Creek River Mouth	Catfish	9/20/2017	1.01E-01	6.46E-02
L3R Creek River Mouth	Catfish	9/20/2017	7.00E-02	5.70E-02
L3R Creek River Mouth	Panfish	8/16/2017	7.46E-03	3.70E-02
L3R Creek River Mouth	Panfish	8/16/2017	7.24E-03	3.57E-02
L3R Creek River Mouth	Panfish	8/16/2017	-2.36E-02	1.59E-02
Steel Creek River Mouth	Bass	4/26/2017	-3.49E-02	1.12E-02
Steel Creek River Mouth	Bass	4/26/2017	6.14E-02	5.73E-02
Steel Creek River Mouth	Bass	4/26/2017	-2.37E-03	3.43E-02
Steel Creek River Mouth	Catfish	4/19/2017	-3.24E-03	3.43E-02
Steel Creek River Mouth	Catfish	4/26/2017	2.86E-02	4.54E-02
Steel Creek River Mouth	Catfish	4/26/2017	2.86E-02	4.65E-02
Steel Creek River Mouth	Panfish	4/26/2017	9.62E-02	6.73E-02
Steel Creek River Mouth	Panfish	4/26/2017	2.97E-02	4.73E-02
Steel Creek River Mouth	Panfish	4/26/2017	1.30E-01	7.54E-02
U3R Creek River Mouth	Bass	3/22/2017	-3.68E-02	1.17E-02
U3R Creek River Mouth	Bass	3/22/2017	3.08E-02	4.92E-02
U3R Creek River Mouth	Bass	3/22/2017	3.05E-02	4.92E-02
U3R Creek River Mouth	Catfish	3/15/2017	2.86E-02	4.51E-02
U3R Creek River Mouth	Catfish	3/15/2017	2.97E-02	4.70E-02
U3R Creek River Mouth	Catfish	4/19/2017	6.24E-02	5.73E-02
U3R Creek River Mouth	Panfish	3/15/2017	6.32E-02	5.73E-02
U3R Creek River Mouth	Panfish	3/15/2017	9.38E-02	6.54E-02
U3R Creek River Mouth	Panfish	3/15/2017	3.05E-02	4.81E-02

Table 31 Radionuclides in Saltwater Fish

SRS collects saltwater fish from the mouth of the Savannah River near Savannah, GA, between river miles 0 and 8. All samples are from fish flesh, unless noted. Strontium-89/90 is analyzed in both fish flesh and fish bones and is reported separately. Bone samples are identified as “nonedible.”

Fish Type	Sample Date	Co-60		Cs-137	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Marine Mullet	1/24/2017	3.11E-03	4.65E-03	5.41E-03	4.78E-03
Marine Mullet	1/24/2017	-3.30E-03	4.54E-03	3.14E-03	4.73E-03
Marine Mullet	1/24/2017	-3.22E-03	4.68E-03	1.05E-02	4.59E-03
Red Fish (drum)	1/24/2017	9.11E-03	5.27E-03	5.70E-03	4.41E-03
Red Fish (drum)	1/24/2017	4.16E-03	4.51E-03	1.66E-02	4.95E-03
Red Fish (drum)	1/24/2017	8.08E-04	4.84E-03	3.76E-03	4.84E-03
Sea Trout	12/13/2017	2.86E-03	4.19E-03	1.32E-03	3.57E-03
Sea Trout	12/13/2017	6.05E-03	3.92E-03	6.49E-03	3.59E-03
Sea Trout	12/13/2017	-7.68E-03	4.11E-03	2.95E-03	3.76E-03

Fish Type	Sample Date	Sr-89/90 (edible)		Sr-89/90 (nonedible) (bone)	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Marine Mullet	1/24/2017	1.66E-03	9.30E-04	1.68E-01	7.32E-02
Marine Mullet	1/24/2017	7.14E-04	8.59E-04	3.03E-01	8.30E-02
Marine Mullet	1/24/2017	2.37E-03	1.05E-03	1.78E-01	7.08E-02
Red Fish (drum)	1/24/2017	1.74E-03	9.81E-04	6.76E-02	6.95E-02
Red Fish (drum)	1/24/2017	4.97E-04	9.46E-04	9.81E-02	6.35E-02
Red Fish (drum)	1/24/2017	1.82E-03	1.17E-03	1.14E-01	6.78E-02
Sea Trout	12/13/2017	7.03E-04	8.86E-04	2.86E-01	1.08E-01
Sea Trout	12/13/2017	1.93E-03	5.51E-04	2.84E-01	1.06E-01
Sea Trout	12/13/2017	7.78E-04	9.05E-04	4.38E-02	8.41E-02

Table 31 Radionuclides in Saltwater Fish (continued)

Fish Type	Sample Date	I-129		Tc-99	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Marine Mullet	1/24/2017	2.02E-02	1.88E-02	5.68E-02	1.39E-02
Marine Mullet	1/24/2017	1.40E-02	1.97E-02	5.62E-02	3.22E-02
Marine Mullet	1/24/2017	-1.58E-03	1.86E-02	6.68E-02	3.22E-02
Red Fish (drum)	1/24/2017	-4.59E-04	2.02E-02	5.97E-02	3.22E-02
Red Fish (drum)	1/24/2017	3.24E-02	1.84E-02	7.89E-02	3.27E-02
Red Fish (drum)	1/24/2017	2.36E-02	1.79E-02	6.54E-02	3.22E-02
Sea Trout	12/13/2017	-1.01E-02	8.05E-03	5.11E-02	3.24E-02
Sea Trout	12/13/2017	-3.76E-02	2.11E-02	5.86E-02	3.24E-02
Sea Trout	12/13/2017	1.86E-02	9.08E-03	3.05E-02	2.45E-02

Fish Type	Sample Date	Gross Beta		Gross Alpha	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Marine Mullet	1/24/2017	2.22E+00	2.02E-01	1.11E-02	3.24E-02
Marine Mullet	1/24/2017	2.70E+00	2.21E-01	1.12E-02	3.35E-02
Marine Mullet	1/24/2017	2.06E+00	1.96E-01	1.15E-02	3.32E-02
Red Fish (drum)	1/24/2017	3.00E+00	2.32E-01	1.17E-02	3.59E-02
Red Fish (drum)	1/24/2017	2.53E+00	2.14E-01	4.41E-02	4.73E-02
Red Fish (drum)	1/24/2017	3.05E+00	2.33E-01	1.14E-02	3.49E-02
Sea Trout	12/13/2017	2.38E+00	2.07E-01	1.63E-01	7.81E-02
Sea Trout	12/13/2017	2.21E+00	2.00E-01	1.55E-01	7.41E-02
Sea Trout	12/13/2017	2.24E+00	2.01E-01	7.19E-03	3.57E-02

Table 32 Radionuclides in Shellfish

The shellfish SRS analyzes are from the mouth of the Savannah River near Savannah, GA, between river miles 0 and 8.

Shellfish Type	Crab		Shrimp	
Collection Date	8/23/2017		11/13/2017	
Radionuclide	Result (pCi/g)	Standard. Dev. (pCi/g)	Result (pCi/g)	Standard. Dev. (pCi/g)
Co-60	1.35E-01	2.01E+00	2.73E+00	2.25E+00
Cs-137	-2.89E+00	1.92E+00	5.92E-01	2.08E+00
Sr-89/90	2.25E+00	1.74E+00	9.41E+00	2.54E+00
I-129	-8.30E+00	1.90E+01	-3.95E+00	1.93E+01
Tc-99	6.05E+01	1.41E+01	-1.91E+01	2.38E+01
Gross Beta	8.27E+02	1.38E+02	2.05E+03	1.95E+02
Gross Alpha	6.78E+02	1.64E+02	2.86E+02	1.06E+02

The original gross alpha result for the crab sample was greater than the trigger value of 0.951 pCi/g. The sample was reanalyzed on several detectors with two of three results greater than the trigger value. The trigger value is the value that when exceeded results in additional analysis for alpha-emitting radionuclides. The results of that analysis are presented below.

Shellfish Type	Crab	Shrimp
Collection Date	8/23/2017	11/13/2017
Radionuclide	Result (pCi/g)	Standard. Dev. (pCi/g)
U-234	2.48E+00	2.59E-01
U-235	1.31E-01	5.70E-02
Np-237	-3.78E-02	2.24E-02
U-238	2.06E+00	2.25E-01
Pu-238	7.49E-02	3.79E-02
Pu-239	-3.16E-04	3.91E-04
Am-241	-1.18E-02	1.19E-02
Cm-244	1.06E-01	4.39E-02

Table 33 Radionuclides in Wildlife – Deer Flesh

Location	Sample Date	Co-60		Cs-137	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Wildlife Compartment # 10	11/15/2017	-1.09E-02	1.48E-02	5.70E-01	5.50E-02
Wildlife Compartment # 10	11/15/2017	-1.99E-02	1.36E-02	6.24E-01	5.94E-02
Wildlife Compartment # 13	12/9/2017	1.69E-04	1.53E-02	4.19E-01	5.16E-02
Wildlife Compartment # 13	12/9/2017	2.04E-02	1.22E-02	1.93E-01	3.12E-02
Wildlife Compartment # 13	12/9/2017	-3.35E-02	1.30E-02	1.09E+00	9.21E-02
Wildlife Compartment # 13	12/9/2017	1.86E-02	1.43E-02	2.64E+00	1.91E-01
Wildlife Compartment # 13	12/9/2017	1.22E-03	1.41E-02	6.11E-01	5.57E-02
Wildlife Compartment # 13	12/9/2017	-7.38E-03	1.42E-02	9.89E-01	8.20E-02
Wildlife Compartment # 13	12/9/2017	-1.44E-02	1.33E-02	1.16E+00	9.40E-02
Wildlife Compartment # 2	11/29/2017	1.86E-03	1.60E-02	1.11E+00	9.09E-02
Wildlife Compartment # 2	11/29/2017	-2.86E-02	1.49E-02	3.62E-01	4.73E-02
Wildlife Compartment # 2	11/29/2017	1.28E-02	1.53E-02	4.97E-01	4.86E-02
Wildlife Compartment # 20	12/1/2017	-1.80E-02	1.43E-02	8.76E-01	7.30E-02
Wildlife Compartment # 25	11/10/2017	1.51E-02	1.27E-02	2.28E-01	3.29E-02
Wildlife Compartment # 29	11/17/2017	-3.14E-03	1.42E-02	6.38E-01	5.61E-02
Wildlife Compartment # 3	11/8/2017	2.62E-02	1.66E-02	1.22E+00	9.63E-02
Wildlife Compartment # 3	11/8/2017	1.00E-02	1.49E-02	1.48E+00	1.11E-01
Wildlife Compartment # 3	11/8/2017	1.15E-02	1.30E-02	4.62E-01	4.82E-02
Wildlife Compartment # 32	11/3/2017	2.05E-02	1.40E-02	6.30E-01	5.91E-02
Wildlife Compartment # 32	11/3/2017	2.17E-02	1.29E-02	6.54E-01	5.93E-02
Wildlife Compartment # 33	11/3/2017	-2.00E-03	1.43E-02	2.73E-01	3.54E-02
Wildlife Compartment # 36	11/1/2017	5.41E-03	1.57E-02	2.86E-01	4.48E-02
Wildlife Compartment # 36	11/1/2017	1.65E-02	1.54E-02	7.70E-01	7.17E-02
Wildlife Compartment # 36	11/1/2017	4.38E-03	1.48E-02	9.22E-01	7.88E-02
Wildlife Compartment # 36	11/1/2017	-2.18E-02	1.55E-02	1.64E+00	1.26E-01
Wildlife Compartment # 4	11/8/2017	6.19E-03	1.54E-02	7.65E-01	6.61E-02
Wildlife Compartment # 4	11/8/2017	-1.38E-02	1.53E-02	9.24E-01	7.63E-02
Wildlife Compartment # 41	11/22/2017	3.46E-03	1.39E-02	2.73E-01	4.27E-02
Wildlife Compartment # 41	11/22/2017	-9.51E-03	1.36E-02	3.46E-01	4.42E-02
Wildlife Compartment # 41	11/22/2017	2.95E-02	1.26E-02	1.76E-01	3.06E-02
Wildlife Compartment # 43	12/1/2017	9.78E-03	1.31E-02	1.65E-01	3.03E-02
Wildlife Compartment # 45	11/1/2017	4.08E-03	1.46E-02	8.32E-01	7.84E-02
Wildlife Compartment # 46	11/22/2017	-2.78E-02	1.45E-02	5.11E-01	5.15E-02
Wildlife Compartment # 9	11/15/2017	-1.53E-02	1.40E-02	2.54E-01	3.20E-02
Wildlife Compartment # 9	11/15/2017	-2.06E-03	1.56E-02	2.59E-01	4.05E-02
Wildlife Compartment # 9	11/15/2017	-1.41E-03	1.37E-02	2.97E-01	3.60E-02
Wildlife Compartment # 9	11/15/2017	4.49E-03	1.33E-02	2.12E-01	2.80E-02
Wildlife Compartment # 9	11/15/2017	1.29E-02	1.26E-02	6.68E-01	5.92E-02
Wildlife Compartment # 9	11/15/2017	1.06E-02	1.44E-02	9.41E-01	8.05E-02
Wildlife Compartment # 9	11/15/2017	6.16E-03	1.22E-02	9.68E-01	8.14E-02

Table 33 Radionuclides in Wildlife – Deer Flesh (continued)

Location	Sample Date	Sr-90	
		Result (pCi/g)	Standard Dev. (pCi/g)
Wildlife Compartment # 10	11/15/2017	1.66E-03	1.80E-03
Wildlife Compartment # 10	11/15/2017	1.24E-03	1.72E-03
Wildlife Compartment # 13	12/9/2017	3.38E-03	2.43E-03
Wildlife Compartment # 13	12/9/2017	-7.41E-04	2.10E-03
Wildlife Compartment # 13	12/9/2017	-1.68E-03	2.19E-03
Wildlife Compartment # 13	12/9/2017	2.57E-03	2.43E-03
Wildlife Compartment # 13	12/9/2017	5.70E-04	2.03E-03
Wildlife Compartment # 13	12/9/2017	3.14E-03	2.26E-03
Wildlife Compartment # 13	12/9/2017	1.89E-03	2.40E-03
Wildlife Compartment # 2	11/29/2017	1.55E-03	1.34E-03
Wildlife Compartment # 2	11/29/2017	2.36E-03	1.50E-03
Wildlife Compartment # 2	11/29/2017	1.84E-02	2.59E-03
Wildlife Compartment # 20	12/1/2017	4.32E-03	1.63E-03
Wildlife Compartment # 25	11/10/2017	7.41E-04	1.34E-03
Wildlife Compartment # 29	11/17/2017	4.86E-03	1.64E-03
Wildlife Compartment # 3	11/8/2017	1.86E-03	1.87E-03
Wildlife Compartment # 3	11/8/2017	2.11E-03	1.88E-03
Wildlife Compartment # 3	11/8/2017	3.65E-04	1.73E-03
Wildlife Compartment # 32	11/3/2017	3.49E-03	1.92E-03
Wildlife Compartment # 32	11/3/2017	2.49E-03	1.79E-03
Wildlife Compartment # 33	11/3/2017	3.95E-03	1.89E-03
Wildlife Compartment # 36	11/1/2017	-4.49E-04	1.66E-03
Wildlife Compartment # 36	11/1/2017	3.49E-03	2.07E-03
Wildlife Compartment # 36	11/1/2017	2.95E-03	1.90E-03
Wildlife Compartment # 36	11/1/2017	4.32E-04	1.70E-03
Wildlife Compartment # 4	11/8/2017	1.50E-03	1.75E-03
Wildlife Compartment # 4	11/8/2017	-1.67E-04	1.69E-03
Wildlife Compartment # 41	11/22/2017	2.15E-03	1.50E-03
Wildlife Compartment # 41	11/22/2017	1.46E-03	1.42E-03
Wildlife Compartment # 41	11/22/2017	4.54E-03	1.57E-03
Wildlife Compartment # 43	12/1/2017	1.36E-03	1.35E-03
Wildlife Compartment # 45	11/1/2017	4.49E-03	2.03E-03
Wildlife Compartment # 46	11/22/2017	4.43E-03	1.71E-03
Wildlife Compartment # 9	11/15/2017	8.08E-03	2.14E-03
Wildlife Compartment # 9	11/15/2017	1.38E-03	1.76E-03
Wildlife Compartment # 9	11/15/2017	-1.35E-03	1.60E-03
Wildlife Compartment # 9	11/15/2017	1.82E-03	1.84E-03
Wildlife Compartment # 9	11/15/2017	4.89E-03	2.16E-03
Wildlife Compartment # 9	11/15/2017	-2.92E-04	1.73E-03
Wildlife Compartment # 9	11/15/2017	3.00E-03	1.92E-03

Table 33 Radionuclides in Wildlife – Deer Flesh (continued)

Location	Sample Date	Gross Beta		Gross Alpha	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Wildlife Compartment # 10	11/15/2017	2.78E+00	1.79E-01	2.84E-02	3.53E-02
Wildlife Compartment # 10	11/15/2017	1.96E+00	1.52E-01	-1.71E-02	1.14E-02
Wildlife Compartment # 13	12/9/2017	2.73E+00	1.77E-01	4.84E-02	3.96E-02
Wildlife Compartment # 13	12/9/2017	2.19E+00	1.60E-01	4.81E-02	3.93E-02
Wildlife Compartment # 13	12/9/2017	2.81E+00	1.79E-01	8.95E-02	4.89E-02
Wildlife Compartment # 13	12/9/2017	5.59E+00	2.49E-01	1.14E-01	5.54E-02
Wildlife Compartment # 13	12/9/2017	2.66E+00	1.75E-01	4.76E-02	3.90E-02
Wildlife Compartment # 13	12/9/2017	3.38E+00	1.96E-01	1.14E-01	5.48E-02
Wildlife Compartment # 13	12/9/2017	3.43E+00	1.97E-01	1.41E-01	6.14E-02
Wildlife Compartment # 2	11/29/2017	2.89E+00	1.82E-01	7.08E-02	4.55E-02
Wildlife Compartment # 2	11/29/2017	2.70E+00	1.77E-01	1.41E-01	6.11E-02
Wildlife Compartment # 2	11/29/2017	2.81E+00	1.80E-01	9.57E-02	5.22E-02
Wildlife Compartment # 20	12/1/2017	3.51E+00	2.00E-01	1.17E-01	5.64E-02
Wildlife Compartment # 25	11/10/2017	2.33E+00	1.65E-01	4.81E-03	2.51E-02
Wildlife Compartment # 29	11/17/2017	2.52E+00	1.71E-01	6.89E-02	4.44E-02
Wildlife Compartment # 3	11/8/2017	2.51E+00	1.71E-01	2.69E-02	3.34E-02
Wildlife Compartment # 3	11/8/2017	3.27E+00	1.93E-01	5.05E-02	4.16E-02
Wildlife Compartment # 3	11/8/2017	2.29E+00	1.64E-01	5.05E-02	4.13E-02
Wildlife Compartment # 32	11/3/2017	2.65E+00	1.75E-01	7.08E-02	4.55E-02
Wildlife Compartment # 32	11/3/2017	2.33E+00	1.64E-01	9.00E-02	4.90E-02
Wildlife Compartment # 33	11/3/2017	2.24E+00	1.61E-01	-1.73E-02	1.15E-02
Wildlife Compartment # 36	11/1/2017	2.04E+00	1.55E-01	4.78E-02	3.90E-02
Wildlife Compartment # 36	11/1/2017	2.25E+00	1.61E-01	4.70E-02	3.84E-02
Wildlife Compartment # 36	11/1/2017	2.68E+00	1.75E-01	2.60E-02	3.24E-02
Wildlife Compartment # 36	11/1/2017	4.24E+00	2.18E-01	4.19E-03	2.51E-02
Wildlife Compartment # 4	11/8/2017	2.86E+00	1.81E-01	4.86E-03	2.63E-02
Wildlife Compartment # 4	11/8/2017	2.48E+00	1.72E-01	8.97E-02	5.76E-02
Wildlife Compartment # 41	11/22/2017	3.00E+00	1.85E-01	2.73E-02	3.42E-02
Wildlife Compartment # 41	11/22/2017	2.86E+00	1.82E-01	7.35E-02	4.73E-02
Wildlife Compartment # 41	11/22/2017	3.14E+00	1.89E-01	1.16E-01	5.58E-02
Wildlife Compartment # 43	12/1/2017	2.46E+00	1.69E-01	5.03E-02	4.10E-02
Wildlife Compartment # 45	11/1/2017	2.05E+00	1.55E-01	4.65E-03	2.38E-02
Wildlife Compartment # 46	11/22/2017	2.86E+00	1.82E-01	9.54E-02	5.20E-02
Wildlife Compartment # 9	11/15/2017	2.11E+00	1.58E-01	5.03E-02	4.11E-02
Wildlife Compartment # 9	11/15/2017	2.63E+00	1.75E-01	2.81E-02	3.49E-02
Wildlife Compartment # 9	11/15/2017	2.54E+00	1.72E-01	5.14E-02	4.19E-02
Wildlife Compartment # 9	11/15/2017	2.81E+00	1.80E-01	4.78E-03	2.58E-02
Wildlife Compartment # 9	11/15/2017	2.42E+00	1.67E-01	-1.76E-02	1.17E-02
Wildlife Compartment # 9	11/15/2017	2.48E+00	1.70E-01	2.76E-02	3.41E-02
Wildlife Compartment # 9	11/15/2017	3.14E+00	1.90E-01	5.16E-02	4.25E-02

Table 34 Radionuclides in Wildlife – Deer Bone

Radionuclide: Sr-89/90			
Location	Sample Date	Result (pCi/g)	Standard Dev. (pCi/g)
Wildlife Compartment # 10	11/15/2017	4.65E+00	3.50E-01
Wildlife Compartment # 10	11/15/2017	3.46E+00	2.87E-01
Wildlife Compartment # 13	12/9/2017	3.43E+00	2.82E-01
Wildlife Compartment # 13	12/9/2017	2.44E+00	2.26E-01
Wildlife Compartment # 13	12/9/2017	3.78E+00	2.99E-01
Wildlife Compartment # 13	12/9/2017	2.92E+00	2.53E-01
Wildlife Compartment # 13	12/9/2017	3.24E+00	2.70E-01
Wildlife Compartment # 13	12/9/2017	3.57E+00	2.87E-01
Wildlife Compartment # 13	12/9/2017	3.95E+00	3.09E-01
Wildlife Compartment # 2	11/29/2017	6.89E+00	4.60E-01
Wildlife Compartment # 2	11/29/2017	5.22E+00	3.74E-01
Wildlife Compartment # 2	11/29/2017	3.30E+00	2.73E-01
Wildlife Compartment # 20	12/1/2017	2.59E+00	2.32E-01
Wildlife Compartment # 25	11/10/2017	1.83E+00	1.92E-01
Wildlife Compartment # 29	11/17/2017	2.22E+00	2.11E-01
Wildlife Compartment # 3	11/8/2017	3.70E+00	3.09E-01
Wildlife Compartment # 3	11/8/2017	7.03E+00	4.81E-01
Wildlife Compartment # 3	11/8/2017	4.57E+00	3.52E-01
Wildlife Compartment # 32	11/3/2017	3.16E+00	2.67E-01
Wildlife Compartment # 32	11/3/2017	3.14E+00	2.64E-01
Wildlife Compartment # 33	11/3/2017	4.57E+00	3.41E-01
Wildlife Compartment # 36	11/1/2017	1.14E+00	1.52E-01
Wildlife Compartment # 36	11/1/2017	3.05E+00	2.62E-01
Wildlife Compartment # 36	11/1/2017	2.68E+00	2.45E-01
Wildlife Compartment # 36	11/1/2017	4.22E+00	3.31E-01
Wildlife Compartment # 4	11/8/2017	3.43E+00	2.90E-01
Wildlife Compartment # 4	11/8/2017	4.81E+00	3.64E-01
Wildlife Compartment # 41	11/22/2017	3.54E+00	2.96E-01
Wildlife Compartment # 41	11/22/2017	3.11E+00	2.66E-01
Wildlife Compartment # 41	11/22/2017	1.39E+00	1.69E-01
Wildlife Compartment # 43	12/1/2017	1.54E+00	1.72E-01
Wildlife Compartment # 45	11/1/2017	3.43E+00	2.83E-01
Wildlife Compartment # 46	11/22/2017	2.67E+00	2.42E-01
Wildlife Compartment # 9	11/15/2017	1.58E+00	1.84E-01
Wildlife Compartment # 9	11/15/2017	3.57E+00	2.95E-01
Wildlife Compartment # 9	11/15/2017	2.60E+00	2.43E-01
Wildlife Compartment # 9	11/15/2017	2.51E+00	2.36E-01
Wildlife Compartment # 9	11/15/2017	2.39E+00	2.29E-01
Wildlife Compartment # 9	11/15/2017	2.53E+00	2.36E-01
Wildlife Compartment # 9	11/15/2017	3.05E+00	2.63E-01

Table 35 Radionuclides in Wildlife – Hog Flesh

Location	Sample Date	Co-60		Cs-137	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Wildlife Compartment # 32	11/3/2017	4.30E-02	1.43E-02	2.57E+00	1.84E-01
Wildlife Compartment # 36	10/27/2017	-2.02E-03	1.45E-02	7.32E-01	6.44E-02
Wildlife Compartment # 36	10/27/2017	3.19E-03	1.49E-02	1.74E+00	1.30E-01
Wildlife Compartment # 4	11/8/2017	-8.27E-03	1.53E-02	7.49E-01	6.56E-02
Wildlife Compartment # 44	10/27/2017	1.30E-02	1.47E-02	1.19E+00	9.67E-02
Wildlife Compartment # 44	12/9/2017	-3.11E-04	1.16E-02	4.92E+00	3.35E-01
Wildlife Compartment # 46	11/22/2017	3.76E-04	1.42E-02	8.62E-01	7.32E-02
Wildlife Compartment # 48	10/27/2017	-2.44E-03	1.67E-02	2.76E-01	4.20E-02
Wildlife Compartment # 48	11/29/2017	-4.49E-03	1.57E-02	3.38E-01	4.33E-02
Wildlife Compartment # 8	11/10/2017	1.76E-03	1.59E-02	1.08E+00	8.88E-02
Wildlife Compartment # 9	11/15/2017	-8.57E-03	1.55E-02	4.86E+00	3.33E-01

Location	Sample Date	Sr-89/90	
		Result (pCi/g)	Standard Dev. (pCi/g)
Wildlife Compartment # 32	11/3/2017	1.54E-04	1.67E-03
Wildlife Compartment # 36	10/27/2017	1.33E-03	1.67E-03
Wildlife Compartment # 36	10/27/2017	-1.23E-04	1.61E-03
Wildlife Compartment # 4	11/8/2017	2.05E-03	1.93E-03
Wildlife Compartment # 44	10/27/2017	-1.10E-03	1.53E-03
Wildlife Compartment # 44	12/9/2017	-4.30E-04	2.28E-03
Wildlife Compartment # 46	11/22/2017	2.89E-03	1.66E-03
Wildlife Compartment # 48	10/27/2017	1.31E-03	1.64E-03
Wildlife Compartment # 48	11/29/2017	3.81E-03	1.63E-03
Wildlife Compartment # 8	11/10/2017	1.63E-03	1.39E-03
Wildlife Compartment # 9	11/15/2017	3.49E-04	1.66E-03

Table 35 Radionuclides in Wildlife – Hog Flesh (continued)

Location	Sample Date	Gross Beta		Gross Alpha	
		Result (pCi/g)	Standard Dev. (pCi/g)	Result (pCi/g)	Standard Dev. (pCi/g)
Wildlife Compartment # 32	11/3/2017	4.00E+00	2.12E-01	2.68E-02	3.39E-02
Wildlife Compartment # 36	10/27/2017	2.86E+00	1.81E-01	7.14E-02	4.59E-02
Wildlife Compartment # 36	10/27/2017	3.41E+00	1.96E-01	4.78E-02	3.94E-02
Wildlife Compartment # 4	11/8/2017	2.56E+00	1.72E-01	7.30E-02	4.70E-02
Wildlife Compartment # 44	10/27/2017	3.03E+00	1.86E-01	-1.83E-02	1.20E-02
Wildlife Compartment # 44	12/9/2017	5.92E+00	2.56E-01	-1.83E-02	1.14E-02
Wildlife Compartment # 46	11/22/2017	3.35E+00	1.95E-01	2.70E-02	3.41E-02
Wildlife Compartment # 48	10/27/2017	2.84E+00	1.80E-01	4.76E-03	2.56E-02
Wildlife Compartment # 48	11/29/2017	2.81E+00	1.79E-01	-1.76E-02	1.16E-02
Wildlife Compartment # 8	11/10/2017	2.55E+00	1.72E-01	2.70E-02	3.38E-02
Wildlife Compartment # 9	11/15/2017	5.41E+00	2.45E-01	2.61E-02	3.35E-02

Table 36 Radionuclides in Wildlife – Hog Bone

Radionuclide: Sr-89/90

Location	Sample Date	Result (pCi/g)	Standard Dev. (pCi/g)
Wildlife Compartment # 32	11/3/2017	2.62E+00	2.38E-01
Wildlife Compartment # 36	10/27/2017	1.33E+00	1.63E-01
Wildlife Compartment # 36	10/27/2017	2.64E+00	2.37E-01
Wildlife Compartment # 4	11/8/2017	2.27E+00	2.30E-01
Wildlife Compartment # 44	10/27/2017	3.81E+00	3.00E-01
Wildlife Compartment # 44	12/9/2017	2.66E+00	2.36E-01
Wildlife Compartment # 46	11/22/2017	2.22E+00	2.17E-01
Wildlife Compartment # 48	10/27/2017	1.00E+00	1.40E-01
Wildlife Compartment # 48	11/29/2017	1.14E+00	1.50E-01
Wildlife Compartment # 8	11/10/2017	1.28E+00	1.59E-01
Wildlife Compartment # 9	11/15/2017	2.70E+00	2.49E-01

Table 37 Creek Plantation Comprehensive Sampling – Radionuclides in Soil

2016 Sampling Data from Trail 1

Location	Sample ID	Sample Date	Cs-137	
			Result (pCi/g)	Standard Dev. (pCi/g)
CP-TR1	16ANNUAL-0131	6/15/2016	2.50E+03	1.74E+02
CP-TR1-1175FT	16ANNUAL-0133	6/15/2016	5.29E+03	3.52E+02
CP-TR1-1300FT	16ANNUAL-0134	6/15/2016	2.72E+04	1.76E+03
CP-TR1-1600FT	16ANNUAL-0135	6/15/2016	5.16E+04	3.32E+03
CP-TR1-600FT	16ANNUAL-0132	6/15/2016	5.07E+04	3.27E+03
CP-TR1	16ANNUAL-0131	6/15/2016	2.50E+03	1.74E+02

2017 Sampling Data from all Trails

Location	Sample ID	Sample Date	Cs-137		Sr-89/90	
			Results (pCi/g)	Standard Dev. (pCi/g)	Results (pCi/g)	Standard Dev. (pCi/g)
Trail 1						
CP-TR1	CP2017-000001	2/28/2017	3.85E+03	2.57E+02	-6.17E+00	5.41E+01
CP-TR1-585FT	CP2017-000011	2/28/2017	3.57E+03	2.40E+02	-4.61E+01	5.03E+01
CP-TR1-585FT	CP2017-000012	2/28/2017	2.95E+03	2.03E+02	3.51E+01	5.54E+01
CP-TR1-585FT	CP2017-000013	2/28/2017	1.68E+03	1.19E+02	1.11E+02	6.60E+01
CP-TR1-1175FT	CP2017-000003	2/28/2017	2.49E+04	1.61E+03	6.65E+01	6.07E+01
CP-TR1-1175FT	CP2017-000004	2/28/2017	1.50E+04	9.69E+02	8.96E+01	6.44E+01
CP-TR1-1175FT	CP2017-000005	2/28/2017	7.90E+03	5.17E+02	1.11E+02	6.60E+01
CP-TR1-1600FT	CP2017-000007	2/28/2017	2.49E+04	1.61E+03	4.85E+01	6.07E+01
CP-TR1-1600FT	CP2017-000008	2/28/2017	1.61E+04	1.04E+03	1.20E+02	6.60E+01
CP-TR1-1600FT	CP2017-000009	2/28/2017	1.63E+04	1.06E+03	1.86E+02	7.23E+01
CP-TR1-1805FT	CP2017-000015	2/28/2017	1.94E+04	1.25E+03	2.57E+02	9.12E+01
CP-TR1-1805FT	CP2017-000016	2/28/2017	9.42E+03	6.14E+02	1.49E+02	8.67E+01
CP-TR1-1805FT	CP2017-000017	2/28/2017	1.64E+03	1.13E+02	2.40E+02	1.07E+02
CP-TR1-2150FT	CP2017-000019	2/28/2017	5.89E+03	3.87E+02	8.19E+01	7.97E+01
CP-TR1-2150FT	CP2017-000020	2/28/2017	3.30E+03	2.20E+02	6.01E+00	1.04E+02
CP-TR1-2150FT	CP2017-000021	2/28/2017	3.90E+02	3.37E+01	6.80E+01	1.05E+02
CP-TR1-2640FT	CP2017-000023	2/28/2017	3.02E+02	2.96E+01	1.66E+01	7.89E+01
Trail 2						
CP-TR2	CP2017-000117	2/27/2017	2.88E+02	3.89E+01	-5.17E+01	6.68E+01
CP-TR2-680FT	CP2017-000025	2/27/2017	4.09E+02	4.62E+01	4.00E+01	9.11E+01
CP-TR2-1330FT	CP2017-000027	2/27/2017	6.60E+02	5.45E+01	-2.48E+01	5.29E+01
CP-TR2-1960FT	CP2017-000029	2/27/2017	1.56E+03	1.14E+02	-3.95E+01	7.01E+01
CP-TR2-1960FT	CP2017-000030	2/27/2017	8.27E+02	6.39E+01	-2.06E+01	7.93E+01
CP-TR2-1960FT	CP2017-000031	2/27/2017	4.80E+02	4.33E+01	-2.94E+01	6.93E+01
CP-TR2-2620FT	CP2017-000033	2/27/2017	2.01E+04	1.30E+03	3.25E+01	7.40E+01

Data Tables Supporting the Radiological Environmental Monitoring Program

Location	Sample ID	Sample Date	Cs-137		Sr-89/90	
			Results (pCi/g)	Standard Dev. (pCi/g)	Results (pCi/g)	Standard Dev. (pCi/g)
Trail 3						
CP-TR3	CP2017-000119	2/27/2017	1.90E+02	3.75E+01	1.30E+02	7.82E+01
CP-TR3-920FT	CP2017-000039	2/27/2017	7.95E+01	2.49E+01	1.59E+02	8.50E+01
CP-TR3-920FT	CP2017-000040	2/27/2017	1.33E+02	3.64E+01	5.50E+01	7.69E+01
CP-TR3-920FT	CP2017-000041	2/27/2017	2.16E+02	3.35E+01	-6.41E+01	6.78E+01
CP-TR3-2055FT	CP2017-000043	2/27/2017	4.19E+01	1.77E+01	1.84E+02	9.28E+01
Trail 4						
CP-TR4	CP2017-000121	2/27/2017	7.48E+01	1.66E+01	-9.70E+00	2.70E+01
CP-TR4-960FT	CP2017-000045	2/27/2017	1.60E+03	1.14E+02	1.92E+02	1.18E+02
CP-TR4-1245FT	CP2017-000047	2/27/2017	8.56E+03	5.64E+02	2.65E+02	9.39E+01
CP-TR4-1900FT	CP2017-000049	2/27/2017	1.23E+04	8.07E+02	7.79E+01	8.38E+01
CP-TR4-1900FT	CP2017-000050	2/27/2017	1.66E+04	1.08E+03	4.90E+01	8.41E+01
CP-TR4-1900FT	CP2017-000051	2/27/2017	7.26E+03	4.76E+02	5.33E+01	8.21E+01
Trail 5						
CP-TR5	CP2017-000123	2/23/2017	7.87E+01	2.30E+01	4.86E+01	2.85E+01
CP-TR5-1750FT	CP2017-000053	2/23/2017	1.55E+04	1.00E+03	4.68E+00	8.09E+01
CP-TR5-1880FT	CP2017-000055	2/23/2017	1.62E+04	1.05E+03	4.43E+01	4.63E+01
CP-TR5-2100FT	CP2017-000057	2/23/2017	3.46E+03	2.31E+02	-3.77E+01	5.24E+01
CP-TR5-2100FT	CP2017-000058	2/23/2017	1.25E+03	8.91E+01	1.22E+01	4.47E+01
CP-TR5-2100FT	CP2017-000059	2/23/2017	1.21E+03	8.55E+01	-1.23E+01	4.25E+01
Trail 6						
CP-TR6	CP2017-000125	2/23/2017	4.65E+02	4.21E+01	7.25E+01	2.79E+01
CP-TR6-1800FT	CP2017-000061	2/23/2017	7.56E+03	5.02E+02	2.84E+01	4.48E+01
CP-TR6-2300FT	CP2017-000063	2/23/2017	4.63E+04	2.99E+03	4.23E+01	4.50E+01
CP-TR6-2530FT	CP2017-000065	2/23/2017	1.25E+04	8.19E+02	9.89E+01	5.10E+01
CP-TR6-2680FT	CP2017-000067	2/23/2017	2.96E+02	3.55E+01	5.26E+01	4.74E+01
CP-TR6-2680FT	CP2017-000068	2/23/2017	2.23E+02	3.32E+01	4.34E+01	4.71E+01
CP-TR6-2680FT	CP2017-000069	2/23/2017	9.65E+01	2.35E+01	5.29E+01	4.92E+01
CP-TR6-SPECIAL	CP2017-000071	2/23/2017	3.10E+04	2.00E+03	1.07E+02	5.19E+01
CP-TR6-SPECIAL	CP2017-000072	2/23/2017	1.94E+04	1.25E+03	1.46E+02	5.48E+01
CP-TR6-SPECIAL	CP2017-000073	2/23/2017	1.08E+04	7.07E+02	1.26E+02	5.41E+01
Trail 7						
CP-TR7	CP2017-000127	3/1/2017	2.66E+02	3.55E+01	1.49E+02	3.22E+01
CP-TR7-1900FT	CP2017-000075	3/1/2017	7.62E+02	6.68E+01	4.75E+01	8.16E+01
CP-TR7-2600FT	CP2017-000077	2/28/2017	2.00E+03	1.44E+02	4.78E+01	8.34E+01
CP-TR7-2700FT	CP2017-000079	2/28/2017	6.77E+03	4.48E+02	1.65E+01	7.84E+01
CP-TR7-2700FT	CP2017-000080	2/28/2017	3.87E+03	2.62E+02	-7.79E+01	7.16E+01
CP-TR7-2700FT	CP2017-000081	2/28/2017	1.62E+03	1.19E+02	3.12E+01	5.80E+01
CP-TR7-3100FT	CP2017-000083	2/28/2017	7.38E+03	4.84E+02	4.28E+01	6.11E+01
CP-TR7-3200FT	CP2017-000085	2/28/2017	3.43E+02	3.54E+01	4.37E+01	6.39E+01
Trail 8						
CP-TR8	CP2017-000129	3/1/2017	5.29E+01	1.73E+01	1.11E+02	3.04E+01

Data Tables Supporting the Radiological Environmental Monitoring Program

Location	Sample ID	Sample Date	Cs-137		Sr-89/90	
			Results (pCi/g)	Standard Dev. (pCi/g)	Results (pCi/g)	Standard Dev. (pCi/g)
CP-TR8-550FT	CP2017-000087	3/1/2017	5.59E+02	4.95E+01	3.32E+01	5.98E+01
CP-TR8-915FT	CP2017-000089	3/1/2017	5.23E+02	4.54E+01	1.47E+02	6.95E+01
CP-TR8-1460FT	CP2017-000091	3/1/2017	7.10E+02	5.98E+01	1.03E+02	6.50E+01
CP-TR8-2005FT	CP2017-000093	3/1/2017	1.12E+03	8.96E+01	1.74E+02	7.10E+01
CP-TR8-2670FT	CP2017-000095	3/1/2017	3.34E+03	2.29E+02	2.02E+01	6.01E+01
CP-TR8-2900FT	CP2017-000097	2/28/2017	7.58E+03	4.96E+02	6.18E+01	6.11E+01
CP-TR8-3000FT	CP2017-000099	2/28/2017	1.95E+02	2.91E+01	6.48E+01	6.52E+01
CP-TR8-3000FT	CP2017-000100	2/28/2017	1.28E+01	1.45E+01	6.18E+01	7.07E+01
CP-TR8-3000FT	CP2017-000101	2/28/2017	8.27E+00	1.37E+01	1.18E+02	8.06E+01
Trail 9						
CP-TR9	CP2017-000131	2/22/2017	2.24E+02	2.81E+01	1.85E+02	5.45E+01
CP-TR9-1680FT	CP2017-000103	2/22/2017	3.55E+03	2.39E+02	6.50E+01	5.60E+01
CP-TR9-2035FT	CP2017-000105	2/22/2017	1.17E+04	7.62E+02	-3.72E+01	7.52E+01
CP-TR9-2400FT	CP2017-000107	2/22/2017	1.55E+04	1.01E+03	-2.55E+01	7.75E+01
CP-TR9-2500FT	CP2017-000109	2/22/2017	1.39E+04	9.06E+02	9.61E+01	3.92E+01
CP-TR9-2500FT	CP2017-000110	2/22/2017	9.90E+03	6.46E+02	1.74E+02	3.34E+01
CP-TR9-2500FT	CP2017-000111	2/22/2017	3.93E+03	2.62E+02	2.93E+02	3.89E+01
Trail 10						
CP-TR10	CP2017-000133	2/22/2017	6.29E+03	4.15E+02	8.13E+02	6.61E+01
CP-TR10-240FT	CP2017-000113	2/22/2017	3.20E+02	3.71E+01	2.16E+02	3.68E+01
CP-TR10-240FT	CP2017-000114	2/22/2017	7.08E+01	2.20E+01	1.20E+02	3.85E+01
CP-TR10-240FT	CP2017-000115	2/22/2017	3.07E+01	1.75E+01	8.38E+01	3.78E+01

Table 38 Creek Plantation Comprehensive Sampling – Radionuclides in Vegetation

2017 Sampling Data from all Trails

Location	Sample ID	Sample Date	Cs-137		Sr-89/90	
			Results (pCi/g)	Standard Dev. (pCi/g)	Results (pCi/g)	Standard Dev. (pCi/g)
Trail 1						
CP-TR1	CP2017-000002	5/22/2017	4.12E+02	7.24E+01	1.31E+02	1.73E+01
CP-TR1-585FT	CP2017-000014	5/22/2017	3.13E+02	4.81E+01	5.38E+02	2.71E+01
CP-TR1-1175FT	CP2017-000006	5/22/2017	2.77E+03	2.23E+02	1.45E+02	1.93E+01
CP-TR1-1600FT	CP2017-000010	5/22/2017	5.21E+01	2.12E+01	3.08E+02	3.43E+01
CP-TR1-1805FT	CP2017-000018	5/22/2017	1.41E+03	1.11E+02	3.81E+02	3.17E+01
CP-TR1-2150FT	CP2017-000022	5/22/2017	1.85E+03	1.39E+02	3.56E+02	3.08E+01
CP-TR1-2640FT	CP2017-000024	5/22/2017	1.90E+03	1.37E+02	2.66E+02	2.55E+01
Trail 2						
CP-TR2	CP2017-000118	5/16/2017	7.83E+01	3.16E+01	8.05E+01	1.78E+01
CP-TR2-680FT	CP2017-000026	5/16/2017	1.20E+02	3.27E+01	6.90E+01	1.61E+01
CP-TR2-1330FT	CP2017-000028	5/16/2017	4.18E+01	2.98E+01	7.51E+01	1.57E+01
CP-TR2-1960FT	CP2017-000032	5/16/2017	3.00E+02	7.03E+01	5.43E+01	1.52E+01
CP-TR2-2620FT	CP2017-000034	5/16/2017	1.08E+03	1.04E+02	5.33E+01	1.69E+01
Trail 3						
CP-TR3	CP2017-000120	5/16/2017	8.93E-01	3.99E+01	4.98E+01	1.55E+01
CP-TR3-920FT	CP2017-000042	5/16/2017	3.09E+02	5.54E+01	6.34E+01	1.54E+01
CP-TR3-2055FT	CP2017-000044	5/16/2017	7.19E+00	2.94E+01	7.72E+01	1.73E+01
Trail 4						
CP-TR4	CP2017-000122	5/16/2017	4.54E+01	2.99E+01	5.84E+01	1.36E+01
CP-TR4-960FT	CP2017-000046	5/16/2017	2.28E+02	2.81E+01	1.52E+02	2.04E+01
CP-TR4-1245FT	CP2017-000048	5/16/2017	7.16E+02	8.88E+01	3.78E+02	5.34E+01
CP-TR4-1900FT	CP2017-000052	5/16/2017	1.54E+03	1.35E+02	7.99E+01	1.52E+01
Trail 5						
CP-TR5	CP2017-000124	5/17/2017	5.66E+01	2.81E+01	1.04E+02	1.81E+01
CP-TR5-1750FT	CP2017-000054	5/17/2017	2.12E+03	1.68E+02	1.10E+02	2.05E+01
CP-TR5-1880FT	CP2017-000056	5/17/2017	1.03E+04	6.95E+02	1.37E+02	2.43E+01
CP-TR5-2100FT	CP2017-000060	5/17/2017	2.40E+02	6.29E+01	9.88E+01	2.01E+01
Trail 6						
CP-TR6	CP2017-000126	5/17/2017	1.78E+01	2.92E+01	7.69E+01	1.53E+01
CP-TR6-1800FT	CP2017-000062	5/17/2017	1.03E+03	1.01E+02	6.67E+01	1.68E+01
CP-TR6-2300FT	CP2017-000064	5/17/2017	7.47E+03	5.12E+02	1.02E+02	1.87E+01
CP-TR6-2530FT	CP2017-000066	5/17/2017	1.45E+04	9.77E+02	9.91E+01	1.75E+01
CP-TR6-2680FT	CP2017-000070	5/17/2017	8.64E+01	4.70E+01	4.92E+01	1.55E+01
CP-TR6-SPECIAL	CP2017-000074	5/17/2017	4.05E+03	2.91E+02	6.80E+01	1.61E+01
Trail 7						
CP-TR7	CP2017-000128	5/18/2017	1.05E+02	2.34E+01	1.69E+02	1.98E+01
CP-TR7-1900FT	CP2017-000076	5/18/2017	1.17E+02	3.80E+01	8.73E+01	1.87E+01

Data Tables Supporting the Radiological Environmental Monitoring Program

Location	Sample ID	Sample Date	Cs-137		Sr-89/90	
			Results (pCi/g)	Standard Dev. (pCi/g)	Results (pCi/g)	Standard Dev. (pCi/g)
CP-TR7-2600FT	CP2017-000078	5/17/2017	2.27E+02	4.36E+01	2.61E+02	3.19E+01
CP-TR7-2700FT	CP2017-000082	5/17/2017	4.15E+02	5.33E+01	1.14E+02	2.66E+01
CP-TR7-3100FT	CP2017-000084	5/17/2017	6.58E+02	7.76E+01	7.41E+01	1.67E+01
CP-TR7-3200FT	CP2017-000086	5/17/2017	2.64E+01	1.82E+01	1.44E+02	1.99E+01
Trail 8						
CP-TR8	CP2017-000130	5/18/2017	1.32E+02	4.61E+01	9.97E+01	1.57E+01
CP-TR8-550FT	CP2017-000088	5/18/2017	8.30E+01	3.26E+01	1.56E+02	2.20E+01
CP-TR8-915FT	CP2017-000090	5/18/2017	1.69E+02	4.48E+01	1.24E+02	1.95E+01
CP-TR8-1460FT	CP2017-000092	5/18/2017	2.97E+02	5.03E+01	6.44E+01	1.41E+01
CP-TR8-2005FT	CP2017-000094	5/18/2017	7.60E+01	2.81E+01	1.25E+02	1.72E+01
CP-TR8-2670FT	CP2017-000096	5/18/2017	4.95E+02	6.33E+01	1.12E+02	1.28E+01
CP-TR8-2900FT	CP2017-000098	5/17/2017	3.19E+02	5.37E+01	1.25E+02	1.95E+01
CP-TR8-3000FT	CP2017-000102	5/17/2017	8.77E+01	2.63E+01	1.10E+02	1.86E+01
Trail 9						
CP-TR9	CP2017-000132	5/15/2017	5.19E+01	2.47E+01	6.01E+01	1.65E+01
CP-TR9-1680FT	CP2017-000104	5/15/2017	2.25E+02	3.26E+01	1.52E+02	2.08E+01
CP-TR9-2035FT	CP2017-000106	5/15/2017	7.91E+02	8.59E+01	6.22E+01	1.94E+01
CP-TR9-2400FT	CP2017-000108	5/15/2017	2.53E+03	1.84E+02	7.20E+01	1.89E+01
CP-TR9-2500FT	CP2017-000112	5/15/2017	3.03E+03	2.47E+02	7.75E+01	1.92E+01
Trail 10						
CP-TR10	CP2017-000134	5/15/2017	4.92E+02	8.24E+01	3.97E+01	1.36E+01
CP-TR10-240FT	CP2017-000116	5/15/2017	3.42E+01	2.54E+01	2.44E+02	2.52E+01

Table 39 Creek Plantation Comprehensive Sampling – Thermoluminescent Dosimeter (TLD) Data

Trail		Total Dose (mRem)	Start Date	End Date	Total Days	Daily Dose (mRem)
Trail #1	0'	27.263	2/28/2017	5/22/2017	83	0.328
Trail #1	585'	29.881	2/28/2017	5/22/2017	83	0.360
Trail #1	1175'	46.061	2/28/2017	5/22/2017	83	0.555
Trail #1	1600'	41.124	2/28/2017	5/22/2017	83	0.495
Trail #1	1805'	46.705	2/28/2017	5/22/2017	83	0.563
Trail #1	2150'	33.212	2/28/2017	5/22/2017	83	0.400
Trail #1	2640'	22.625	2/28/2017	5/22/2017	83	0.273
Trail #2	0'	25.000	2/27/2017	5/16/2017	78	0.321
Trail #2	680'	28.024	2/27/2017	5/16/2017	78	0.359
Trail #2	1330'	24.891	2/27/2017	5/16/2017	78	0.319
Trail #2	1960'	27.791	2/27/2017	5/16/2017	78	0.356
Trail #2	2620'	33.924	2/27/2017	5/16/2017	78	0.435
Trail #2	3100'	Lost	2/27/2017	5/16/2017	78	N/A
Trail #2	3200'	Lost	2/27/2017	5/16/2017	78	N/A
Trail #3	0'	25.165	2/27/2017	5/16/2017	78	0.323
Trail #3	920'	26.364	2/27/2017	5/16/2017	78	0.338
Trail #3	2055'	25.276	2/27/2017	5/16/2017	78	0.324
Trail #4	0'	27.471	2/27/2017	5/16/2017	78	0.352
Trail #4	960'	27.273	2/27/2017	5/16/2017	78	0.350
Trail #4	1245'	30.898	2/27/2017	5/16/2017	78	0.396
Trail #4	1900'	26.867	2/27/2017	5/16/2017	78	0.344
Trail #5	0'	26.897	2/23/2017	5/17/2017	83	0.324
Trail #5	1750'	32.135	2/23/2017	5/17/2017	83	0.387
Trail #5	1880'	36.886	2/23/2017	5/17/2017	83	0.444
Trail #5	2100'	31.647	2/23/2017	5/17/2017	83	0.381
Trail #6	0'	26.548	2/23/2017	5/17/2017	83	0.320
Trail #6	1800'	27.108	2/23/2017	5/17/2017	83	0.327
Trail #6	2300'	26.102	2/23/2017	5/17/2017	83	0.314
Trail #6	2530'	25.581	2/23/2017	5/17/2017	83	0.308
Trail #6	2680'	26.707	2/23/2017	5/17/2017	83	0.322
Trail #6	SPECIAL	36.071	2/23/2017	5/17/2017	83	0.435
Trail #7	0'	23.820	3/1/2017	5/18/2017	78	0.305
Trail #7	1900'	27.730	3/1/2017	5/18/2017	78	0.356
Trail #7	2600'	25.632	2/28/2017	5/17/2017	78	0.329
Trail #7	2700'	30.409	2/28/2017	5/17/2017	78	0.390
Trail #7	3100'	28.939	2/28/2017	5/17/2017	78	0.371
Trail #7	3200'	23.523	2/28/2017	5/17/2017	78	0.302
Trail #8	0'	24.615	3/1/2017	5/18/2017	78	0.316
Trail #8	550'	26.550	3/1/2017	5/18/2017	78	0.340
Trail #8	915'	27.882	3/1/2017	5/18/2017	78	0.357
Trail #8	1460'	25.763	3/1/2017	5/18/2017	78	0.330

Data Tables Supporting the Radiological Environmental Monitoring Program

Trail		Total Dose (mRem)	Start Date	End Date	Total Days	Daily Dose (mRem)
Trail #8	2005'	25.763	3/1/2017	5/18/2017	78	0.330
Trail #8	2670'	26.111	3/1/2017	5/18/2017	78	0.335
Trail #8	2900'	29.239	2/28/2017	5/17/2017	78	0.375
Trail #8	3000'	26.145	2/28/2017	5/17/2017	78	0.335
Trail #9	0'	26.988	2/22/2017	5/15/2017	82	0.329
Trail #9	1680'	24.023	2/22/2017	5/15/2017	82	0.293
Trail #9	2035'	31.348	2/22/2017	5/15/2017	82	0.382
Trail #9	2400'	28.526	2/22/2017	5/15/2017	82	0.348
Trail #9	2500'	31.737	2/22/2017	5/15/2017	82	0.387
Trail #10	0'	27.558	2/22/2017	5/15/2017	82	0.336
Trail #10	240'	23.681	2/22/2017	5/15/2017	82	0.289

Data Tables Supporting Quality Assurance

Table 40 Blind Sample Results for pH Field Measurements

Sample Identification	Measured Value (pH units)	Actual Value (pH units)	Difference	Difference $\leq$ 0.4 SU?
BpH-161201*	4.07	3.98	0.09	Yes
BpH-161202*	6.80	6.92	0.12	Yes
BpH-170201	4.04	4.05	0.01	Yes
BpH-170202	6.81	6.88	0.07	Yes
BpH-170302	4.01	4.04	0.03	Yes
BpH-170303	6.87	6.92	0.05	Yes
BpH-170302*	4.10	4.06	0.04	Yes
BpH-170303*	6.86	6.88	0.02	Yes
BpH-170501	4.00	4.09	0.09	Yes
BpH-170502	6.93	6.88	0.05	Yes
BpH-170601	4.17	4.08	0.09	Yes
BpH-170602	6.95	6.91	0.04	Yes
BpH-170601*	4.17	4.09	0.08	Yes
BpH-170602*	6.92	6.90	0.02	Yes
BpH-170801	4.08	4.00	0.08	Yes
BpH-170802	6.89	6.86	0.03	Yes
BpH-170901	3.98	4.02	0.04	Yes
BpH-170902	6.93	6.87	0.06	Yes
BpH-170901*	4.10	4.02	0.08	Yes
BpH-170902*	6.81	6.87	0.06	Yes
BpH-171101	4.13	3.86	0.27	Yes
BpH-171102	6.89	6.74	0.15	Yes
BpH-171101*	3.78	3.86	0.08	Yes
BpH-171102*	6.81	6.80	0.01	Yes

NOTE:

* The sample identification indicates the blind solution used. Blind solutions can be used up to 30 days after preparation; therefore, the sample identifications are the same.

Table 41 NPDES Blind Sample Results

Outfall Locations and Sample Dates where there was no flow

NPDES Site	Sample Date
F-02	1/25/2017
F-05	1/25/2017
F-08	2/13/2017
H-16	4/24/2017
D-01B	5/4/2017
K-06	5/3/2017
F-01	6/7/2017
F-02	7/3/2017
F-05	7/3/2017
H-07	10/31/2017
D-01B	11/2/2017
K-06	11/1/2017
F-01	12/14/2017

Table 41 NPDES Blind Sample Results (continued)

Analytical Results for Flowing Outfalls								
Sample Date	NPDES Site	Blind Sample ID	Laboratory*	Parameter	Units	Compliance Value	Blind Sample Value	Relative % Difference
1/3/2017	G-10	B1-JAN17-01	SES	Ammonia	mg/l	< 0.05	< 0.05	N/A
2/7/2017	A-01	B170201	CSWTF	Biochemical Oxygen Demand	mg/l	< 2	< 2	N/A
2/7/2017	A-01	B170201	EBL	Iron	µg/L	128	119	7.3
2/7/2017	A-01	B170201	SES	Oil & Grease	mg/l	< 1.6	< 1.6	N/A
2/7/2017	A-01	B170201	EBL	Total Suspended Solids	mg/l	1	1	N/A
2/6/2017	H-16	B170203	CSWTF	Biochemical Oxygen Demand	mg/l	< 2	< 2	N/A
2/6/2017	H-16	B170203	EBL	Cadmium	µg/L	< 0.05	< 0.05	N/A
2/6/2017	H-16	B170203	EBL	Chromium	µg/L	< 0.5	< 0.5	N/A
2/6/2017	H-16	B170203	EBL	Copper	µg/L	1.000	0.972	N/A
2/6/2017	H-16	B170203	EBL	Lead	µg/L	< 0.01	< 0.01	N/A
2/6/2017	H-16	B170203	EBL	Mercury	µg/L	< 0.02	< 0.02	N/A
2/6/2017	H-16	B170203	EBL	Nickel	µg/L	< 0.6	< 0.6	N/A
2/6/2017	H-16	B170203	EBL	Silver	µg/L	< 0.5	< 0.5	N/A
2/6/2017	H-16	B170203	EBL	Total Suspended Solids	mg/l	< 1	< 1	N/A
2/6/2017	H-16	B170203	EBL	Zinc	µg/L	6.69	6.45	3.7
3/22/2017	A-1A	B170301	SES	Trichloroethylene	µg/L	< 0.4	< 0.4	N/A
3/22/2017	A-1A	B170301	SES	Tetrachloroethylene	µg/L	< 0.4	< 0.4	N/A
3/15/2017	H-02	B170302	EBL	Copper	µg/L	3.97	4.02	1.3
3/15/2017	H-02	B170302	EBL	Lead	µg/L	< 0.01	0.15	N/A
3/15/2017	H-02	B170302	EBL	Zinc	µg/L	3.83	3.91	2.1
4/18/2017	A-11	B170401	CSWTF	Biochemical Oxygen Demand	mg/l	< 2	< 2	N/A
4/17/2017	A-11	B170401	EBL	Total Suspended Solids	mg/l	< 1	< 1	N/A
4/4/2017	G-10	B1-APR17-01	SES	Ammonia	mg/l	< 0.05	< 0.05	N/A
4/17/2017	H-12	B170402	EBL	Copper	µg/L	9.48	9.20	3.0

Table 41 NPDES Blind Sample Results (continued)

Analytical Results for Flowing Outfalls (continued)

Sample Date	NPDES Site	Blind Sample ID	Laboratory*	Parameter	Units	Compliance Value	Blind Sample Value	Relative % Difference
4/17/2017	H-12	B170402	EBL	Zinc	µg/L	33.3	33.2	0.3
5/1/2017	D-01	B170501	EBL	Aluminum	µg/L	50.3	21.4	80.6
5/1/2017	D-01	B170501	EBL	Manganese	µg/L	58.3	60.1	3.0
5/1/2017	D-01C	B170503	SES	Oil & Grease	mg/l	< 1.5	< 1.7	N/A
5/1/2017	D-01C	B170503	EBL	Total Suspended Solids	mg/l	2	2	N/A
6/5/2017	H-16	B170602	CSWTF	Biochemical Oxygen Demand	mg/l	< 2	< 2	N/A
6/5/2017	H-16	B170602	EBL	Cadmium	µg/L	< 0.05	0.10	N/A
6/5/2017	H-16	B170602	EBL	Chromium	µg/L	< 0.5	< 0.5	N/A
6/5/2017	H-16	B170602	EBL	Copper	µg/L	< 0.6	< 0.6	N/A
6/5/2017	H-16	B170602	EBL	Lead	µg/L	< 0.01	< 0.01	N/A
6/5/2017	H-16	B170602	EBL	Mercury	µg/L	< 0.02	< 0.02	N/A
6/5/2017	H-16	B170602	EBL	Nickel	µg/L	< 0.6	< 0.6	N/A
6/5/2017	H-16	B170602	EBL	Silver	µg/L	1.41	< 0.5	N/A
6/5/2017	H-16	B170602	EBL	Total Suspended Solids	mg/l	1	< 1	N/A
6/5/2017	H-16	B170602	EBL	Zinc	µg/L	2.19	2.14	N/A
6/6/2017	M-05	B170603	SES	Trichloroethylene	µg/L	< 0.4	< 0.4	N/A
6/6/2017	M-05	B170603	SES	Tetrachloroethylene	µg/L	< 0.4	< 0.4	N/A
7/6/2017	D-02	B170701	EBL	Copper	µg/L	1.82	1.82	N/A
7/6/2017	D-02	B170701	EBL	Nickel	µg/L	1.26	1.29	N/A
7/6/2017	D-02	B170701	SES	Oil & Grease	mg/l	< 1.7	< 1.7	N/A
7/6/2017	D-02	B170701	EBL	Total Suspended Solids	mg/l	7	8	13.3
7/6/2017	D-02	B170701	EBL	Zinc	µg/L	1.83	2.36	N/A
7/4/2017	G-10	B1-JUL17-01	SES	Ammonia	mg/l	< 0.02	< 0.02	N/A
8/2/2017	A-01	B170801	CSWTF	Biochemical Oxygen Demand	mg/l	< 2	< 2	N/A
8/2/2017	A-01	B170801	EBL	Iron	µg/L	640	612	4.5
8/2/2017	A-01	B170801	SES	Oil & Grease	mg/l	< 1.6	< 1.6	N/A
8/2/2017	A-01	B170801	EBL	Total Suspended Solids	mg/l	3	3	N/A

Table 41 NPDES Blind Sample Results (continued)

Analytical Results for Flowing Outfalls (continued)

Sample Date	NPDES Site	Blind Sample ID	Laboratory*	Parameter	Units	Compliance Value	Blind Sample Value	Relative % Difference
8/15/2017	F-08	B170802	EBL	Lead	µg/L	0.34	0.35	2.6
8/15/2017	F-08	B170802	EBL	Zinc	µg/L	74.6	72.1	3.4
8/1/2017	H-16	B170803	CSWTF	Biochemical Oxygen Demand	mg/l	< 2	< 2	N/A
8/1/2017	H-16	B170803	EBL	Cadmium	µg/L	< 0.05	0.12	N/A
8/1/2017	H-16	B170803	EBL	Chromium	µg/L	< 0.5	< 0.5	N/A
8/1/2017	H-16	B170803	EBL	Copper	µg/L	< 0.6	< 0.6	N/A
8/1/2017	H-16	B170803	EBL	Lead	µg/L	0.034	0.029	N/A
8/1/2017	H-16	B170803	EBL	Mercury	µg/L	< 0.02	< 0.02	N/A
8/1/2017	H-16	B170803	EBL	Nickel	µg/L	< 0.6	< 0.6	N/A
8/1/2017	H-16	B170803	EBL	Silver	µg/L	< 0.5	< 0.5	N/A
8/1/2017	H-16	B170803	EBL	Total Suspended Solids	mg/l	< 1	< 1	N/A
8/1/2017	H-16	B170803	EBL	Zinc	µg/L	3.70	3.93	N/A
9/13/2017	A-1A	B170901	SES	Trichloroethylene	µg/L	< 0.4	< 0.4	N/A
9/13/2017	A-1A	B170901	SES	Tetrachloroethylene	µg/L	< 0.4	< 0.4	N/A
9/19/2017	H-02	B170902	EBL	Copper	µg/L	6.11	5.93	3.0
9/19/2017	H-02	B170902	EBL	Lead	µg/L	0.130	0.168	25.5
9/19/2017	H-02	B170902	EBL	Zinc	µg/L	8.73	4.85	57.1
10/3/2017	A-11	B171001	CSWTF	Biochemical Oxygen Demand	mg/l	< 2	< 2	N/A
10/3/2017	A-11	B171001	EBL	Total Suspended Solids	mg/l	< 1	< 1	N/A
10/3/2017	G-10	B1-OCT17-01	SES	Ammonia	mg/l	< 0.02	< 0.02	N/A
10/12/2017	H-12	B171003	EBL	Copper	µg/L	21.0	21.8	3.7
10/12/2017	H-12	B171003	EBL	Zinc	µg/L	24.8	25.9	4.3
10/2/2017	H-16	B171004	CSWTF	Biochemical Oxygen Demand	mg/l	< 2	< 2	N/A
10/2/2017	H-16	B171004	EBL	Cadmium	µg/L	< 0.05	< 0.05	N/A
10/2/2017	H-16	B171004	EBL	Chromium	µg/L	0.79	0.96	N/A

Table 41 NPDES Blind Sample Results (continued)

Analytical Results for Flowing Outfalls (continued)

Sample Date	NPDES Site	Blind Sample ID	Laboratory*	Parameter	Units	Compliance Value	Blind Sample Value	Relative % Difference
10/2/2017	H-16	B171004	EBL	Copper	µg/L	< 0.6	< 0.6	N/A
10/2/2017	H-16	B171004	EBL	Lead	µg/L	< 0.01	< 0.01	N/A
10/2/2017	H-16	B171004	EBL	Mercury	µg/L	< 0.02	< 0.02	N/A
10/2/2017	H-16	B171004	EBL	Nickel	µg/L	< 0.6	< 0.6	N/A
10/2/2017	H-16	B171004	EBL	Silver	µg/L	< 0.5	< 0.5	N/A
10/2/2017	H-16	B171004	EBL	Total Suspended Solids	mg/l	< 1	< 1	N/A
10/2/2017	H-16	B171004	EBL	Zinc	µg/L	2.44	4.22	N/A
10/31/2017	K-18	B171005	EBL	Total Suspended Solids	mg/l	2	3	N/A
10/31/2017	L-07	B171006	EBL	Total Suspended Solids	mg/l	1	1	N/A
11/2/2017	D-01	B171101	EBL	Aluminum	µg/L	64.0	67.6	5.5
11/2/2017	D-01	B171101	EBL	Manganese	µg/L	26.0	25.9	0.4
11/2/2017	D-01C	B171103	SES	Oil & Grease	mg/l	< 1.7	< 1.6	N/A
11/2/2017	D-01C	B171103	EBL	Total Suspended Solids	mg/l	2	3	N/A
12/4/2017	H-16	B171202	CSWTF	Biochemical Oxygen Demand	mg/l	< 2	< 2	N/A
12/4/2017	H-16	B171202	EBL	Cadmium	µg/L	< 0.05	0.146	N/A
12/4/2017	H-16	B171202	EBL	Chromium	µg/L	1.040	0.955	N/A
12/4/2017	H-16	B171202	EBL	Copper	µg/L	< 0.6	< 0.6	N/A
12/4/2017	H-16	B171202	EBL	Lead	µg/L	0.025	0.027	N/A
12/4/2017	H-16	B171202	EBL	Mercury	µg/L	0.0409	0.0227	N/A
12/4/2017	H-16	B171202	EBL	Nickel	µg/L	< 0.6	< 0.6	N/A
12/4/2017	H-16	B171202	EBL	Silver	µg/L	< 0.5	< 0.5	N/A
12/4/2017	H-16	B171202	EBL	Total Suspended Solids	mg/l	< 1	< 1	N/A
12/4/2017	H-16	B171202	EBL	Zinc	µg/L	2.62	3.04	N/A
12/6/2017	M-05	B171203	SES	Trichloroethylene	µg/L	< 0.4	< 0.4	N/A
12/6/2017	M-05	B171203	SES	Tetrachloroethylene	µg/L	< 0.4	< 0.4	N/A

Note:

* Laboratory Acronyms: EBL = Environmental Bioassay Laboratory; SES = Shealy Environmental Services; CSWTF = Central Sanitary Wastewater Treatment Facility

Table 42 NPDES Duplicate Sample Results

Outfall Locations and Sample Dates where there was no flow

NPDES Site	Sample Date
F-08	1/17/2017
D-01	4/6/2017
D-01B	4/6/2017
D-01C	4/6/2017
H-07	4/17/2017
K-06	4/17/2017
F-01	5/3/2017
F-02	6/12/2017
F-05	6/12/2017
D-01	10/5/2017
D-01B	10/7/2017
D-01B	10/8/2017
D-01B	10/9/2017
D-01B	10/10/2017
D-01B	10/11/2017
D-01C	10/12/2017
D-01C	10/13/2017
K-06	10/11/2017
F-01	11/1/2017
F-02	12/14/2017
F-05	12/14/2017

Table 42 NPDES Duplicate Sample Results (continued)

Analytical Results for Flowing Outfalls							
Sample Date	NPDES Site	Laboratory	Parameter	Units	Outfall Value	Duplicate Value	Relative % Difference
1/9/2017	H-16	CSWTF	Biochemical Oxygen Demand	mg/L	< 2	< 2	N/A
1/9/2017	H-16	EBL	Cadmium	µg/L	< 0.05	< 0.05	N/A
1/9/2017	H-16	EBL	Chromium	µg/L	< 0.5	0.5	N/A
1/9/2017	H-16	EBL	Copper	µg/L	0.881	0.947	N/A
1/9/2017	H-16	EBL	Lead	µg/L	0.035	0.029	N/A
1/9/2017	H-16	EBL	Mercury	µg/L	< 0.02	< 0.02	N/A
1/9/2017	H-16	EBL	Nickel	µg/L	< 0.6	< 0.6	N/A
1/9/2017	H-16	EBL	Silver	µg/L	< 0.5	< 0.5	N/A
1/9/2017	H-16	EBL	Total Suspended Solids	mg/L	< 1	< 1	N/A
1/9/2017	H-16	EBL	Zinc	µg/L	8.74	7.73	12.3
1/18/2017	A-11	SES	Low Level Mercury	ng/L	2.44	2.04	17.9
1/10/2017	A-01	CSWTF	Biochemical Oxygen Demand	mg/L	< 2	< 2	N/A
1/10/2017	A-01	EBL	Iron	µg/L	167	115	36.9
1/10/2017	A-01	SES	Oil & Grease	mg/L	< 1.4	< 1.4	N/A
1/10/2017	A-01	EBL	Total Suspended Solids	mg/L	1	1	0.0
1/5/2017	D-02	EBL	Copper	µg/L	1.59	1.80	N/A
1/5/2017	D-02	EBL	Nickel	µg/L	0.924	1.050	N/A
1/5/2017	D-02	SES	Oil & Grease	mg/l	< 1.6	< 1.6	N/A
1/5/2017	D-02	EBL	Total Suspended Solids	mg/l	22	21	4.7
1/5/2017	D-02	EBL	Zinc	µg/L	< 1	< 1	N/A
2/7/2017	A-11	SES	Low Level Mercury	ng/L	1.7	1.6	6.1
2/14/2017	H-02	EBL	Copper	µg/L	5.47	5.68	3.8
2/14/2017	H-02	EBL	Lead	µg/L	0.099	0.099	0.0
2/14/2017	H-02	EBL	Zinc	µg/L	7.72	7.77	0.6
3/9/2017	K-18	EBL	pH	SU	7.0	6.9	1.4
3/9/2017	L-07	EBL	pH	SU	7.00	7.00	0.0
3/13/2017	H-16	CSWTF	Biochemical Oxygen Demand	mg/L	< 2	< 2	N/A
3/13/2017	H-16	EBL	Cadmium	µg/L	< 0.05	< 0.05	N/A
3/13/2017	H-16	EBL	Chromium	µg/L	< 0.5	< 0.5	N/A

Table 42 NPDES Duplicate Sample Results (continued)

Analytical Results for Flowing Outfalls (continued)							
Sample Date	NPDES Site	Laboratory	Parameter	Units	Outfall Value	Duplicate Value	Relative % Difference
3/13/2017	H-16	EBL	Copper	µg/L	0.801	0.779	2.8
3/13/2017	H-16	EBL	Lead	µg/L	< 0.010	< 0.010	N/A
3/13/2017	H-16	EBL	Mercury	µg/L	< 0.02	< 0.02	N/A
3/13/2017	H-16	EBL	Nickel	µg/L	< 0.6	< 0.6	N/A
3/13/2017	H-16	EBL	Silver	µg/L	< 0.5	< 0.5	N/A
3/13/2017	H-16	EBL	Total Suspended Solids	mg/L	< 1	< 1	N/A
3/13/2017	H-16	EBL	Zinc	µg/L	5.42	4.92	9.7
3/16/2017	H-12	EBL	Copper	µg/L	18.6	18.3	1.6
3/16/2017	H-12	EBL	Zinc	µg/L	22.8	22.7	0.4
3/13/2017	A-11	SES	Low Level Mercury	ng/L	2.37	2.39	0.8
3/21/2017	A-11	CSWTF	Biochemical Oxygen Demand	mg/L	< 2	< 2	N/A
3/21/2017	A-11	EBL	Total Suspended Solids	mg/L	< 1	< 1	N/A
3/22/2017	A-1A	SES	Trichloroethylene	µg/L	< 0.4	< 0.4	N/A
3/22/2017	A-1A	SES	Tetrachloroethylene	µg/L	< 0.4	< 0.4	N/A
4/3/2017	A-11	SES	Low Level Mercury	ng/L	1.68	1.77	5.2
5/17/2017	K-18	EBL	pH	SU	7.4	7.4	0.0
5/17/2017	K-18	EBL	Total Suspended Solids	mg/L	1	2	N/A
5/17/2017	L-07	EBL	pH	SU	7.0	7.0	0.0
5/17/2017	L-07	EBL	Total Suspended Solids	mg/L	1	1	N/A
5/4/2017	A-01	SES	Oil & Grease	mg/L	< 1.6	< 1.6	N/A
5/8/2017	A-11	SES	Low Level Mercury	ng/L	2.68	2.71	1.1
5/8/2017	H-16	CSWTF	Biochemical Oxygen Demand	mg/L	< 2	< 2	N/A
5/8/2017	H-16	EBL	Cadmium	µg/L	< 0.05	< 0.05	N/A
5/8/2017	H-16	EBL	Chromium	µg/L	< 0.5	< 0.5	N/A
5/8/2017	H-16	EBL	Copper	µg/L	1.37	1.30	N/A
5/8/2017	H-16	EBL	Lead	µg/L	0.051	0.049	4.0
5/8/2017	H-16	EBL	Mercury	µg/L	< 0.02	< 0.02	N/A
5/8/2017	H-16	EBL	Nickel	µg/L	< 0.6	< 0.6	N/A
5/8/2017	H-16	EBL	Silver	µg/L	< 0.5	< 0.5	N/A

Table 42 NPDES Duplicate Sample Results (continued)

Analytical Results for Flowing Outfalls (continued)

Sample Date	NPDES Site	Laboratory	Parameter	Units	Outfall Value	Duplicate Value	Relative % Difference
5/8/2017	H-16	EBL	Total Suspended Solids	mg/L	< 1	1	N/A
5/8/2017	H-16	EBL	Zinc	µg/L	5.12	5.86	13.5
5/9/2017	M-05	SES	Trichloroethylene	µg/L	< 0.4	< 0.4	N/A
5/9/2017	M-05	SES	Tetrachloroethylene	µg/L	< 0.4	< 0.4	N/A
6/5/2017	A-11	SES	Low Level Mercury	ng/L	1.56	1.48	5.3
7/19/2017	A-01	CSWTF	Biochemical Oxygen Demand	mg/L	< 2.0	< 2.0	N/A
7/19/2017	A-01	EBL	Iron	µg/L	604	564	6.8
7/19/2017	A-01	SES	Oil & Grease	mg/L	< 1.7	< 1.6	N/A
7/19/2017	A-01	EBL	Total Suspended Solids	mg/L	4	3	N/A
7/13/2017	A-11	SES	Low Level Mercury	ng/L	2.36	2.64	11.2
7/10/2017	H-16	CSWTF	Biochemical Oxygen Demand	mg/L	< 2	< 2	N/A
7/10/2017	H-16	EBL	Cadmium	µg/L	< 0.05	< 0.05	N/A
7/10/2017	H-16	EBL	Chromium	µg/L	< 0.5	< 0.5	N/A
7/10/2017	H-16	EBL	Copper	µg/L	< 0.6	< 0.6	N/A
7/10/2017	H-16	EBL	Lead	µg/L	0.020	0.047	N/A
7/10/2017	H-16	EBL	Mercury	µg/L	< 0.02	< 0.02	N/A
7/10/2017	H-16	EBL	Nickel	µg/L	< 0.6	< 0.6	N/A
7/10/2017	H-16	EBL	Silver	µg/L	< 0.5	< 0.5	N/A
7/10/2017	H-16	EBL	Total Suspended Solids	mg/L	< 1	< 1	N/A
7/10/2017	H-16	EBL	Zinc	µg/L	2	4	N/A
7/13/2017	F-08	EBL	Lead	µg/L	0.452	0.434	4.1
7/13/2017	F-08	EBL	Zinc	µg/L	83.7	82.0	2.1
8/16/2017	A-1A	SES	Trichloroethylene	µg/L	< 0.4	< 0.4	N/A
8/16/2017	A-1A	SES	Tetrachloroethylene	µg/L	< 0.4	< 0.4	N/A
8/1/2017	A-11	SES	Low Level Mercury	ng/L	1.90	1.87	1.6
8/16/2017	H-02	EBL	Copper	µg/L	4.68	4.52	3.5
8/16/2017	H-02	EBL	Lead	µg/L	0.111	0.128	14.2
8/16/2017	H-02	EBL	Zinc	µg/L	4.58	3.67	N/A
9/6/2017	A-11	SES	Low Level Mercury	ng/L	3.26	3.03	7.3

Table 42 NPDES Duplicate Sample Results (continued)

Analytical Results for Flowing Outfalls (continued)

Sample Date	NPDES Site	Laboratory	Parameter	Units	Outfall Value	Duplicate Value	Relative % Difference
9/6/2017	A-11	CSWTF	Biochemical Oxygen Demand	mg/L	< 2	< 2	N/A
9/6/2017	A-11	EBL	Total Suspended Solids	mg/L	1	1	N/A
9/19/2017	H-12	EBL	Copper	µg/L	20.8	20.7	0.5
9/19/2017	H-12	EBL	Zinc	µg/L	43.7	48.4	10.2
9/18/2017	H-16	CSWTF	Biochemical Oxygen Demand	mg/L	< 2	< 2	N/A
9/19/2017	H-12	EBL	Copper	µg/L	20.8	20.7	0.5
9/19/2017	H-12	EBL	Zinc	µg/L	43.7	48.4	10.2
9/18/2017	H-16	EBL	Cadmium	µg/L	< 0.05	< 0.05	N/A
9/18/2017	H-16	EBL	Chromium	µg/L	< 0.5	< 0.5	N/A
9/18/2017	H-16	EBL	Copper	µg/L	< 0.6	< 0.6	N/A
9/18/2017	H-16	EBL	Lead	µg/L	< 0.01	< 0.01	N/A
9/18/2017	H-16	EBL	Mercury	µg/L	0.033	0.033	N/A
9/18/2017	H-16	EBL	Nickel	µg/L	< 0.6	< 0.6	N/A
9/18/2017	H-16	EBL	Silver	µg/L	< 0.5	< 0.5	N/A
9/18/2017	H-16	EBL	Total Suspended Solids	mg/L	< 1	< 1	N/A
9/18/2017	H-16	EBL	Zinc	µg/L	7.85	11.70	39.4
10/16/2017	A-11	SES	Low Level Mercury	ng/L	2.2	2.1	3.7
10/31/2017	K-18	EBL	pH	SU	7.1	7.1	0.0
10/31/2017	L-07	EBL	pH	SU	7.1	7.1	0.0
11/6/2017	A-11	SES	Low Level Mercury	ng/L	1.64	1.63	0.6
11/8/2017	M-05	SES	Trichloroethylene	µg/L	< 0.4	< 0.4	N/A
11/8/2017	M-05	SES	Tetrachloroethylene	µg/L	< 0.4	< 0.4	N/A
11/28/2017	H-16	CSWTF	Biochemical Oxygen Demand	mg/L	< 2	< 2	N/A
11/28/2017	H-16	EBL	Cadmium	µg/L	0.055	< 0.05	N/A
11/28/2017	H-16	EBL	Chromium	µg/L	1.02	0.877	N/A
11/28/2017	H-16	EBL	Copper	µg/L	< 0.6	< 0.6	N/A
11/28/2017	H-16	EBL	Lead	µg/L	0.046	0.036	N/A
11/28/2017	H-16	EBL	Mercury	µg/L	< 0.02	< 0.02	N/A
11/28/2017	H-16	EBL	Nickel	µg/L	< 0.6	< 0.6	N/A

Table 42 NPDES Duplicate Sample Results (continued)

Analytical Results for Flowing Outfalls (continued)

Sample Date	NPDES Site	Laboratory	Parameter	Units	Outfall Value	Duplicate Value	Relative % Difference
11/28/2017	H-16	EBL	Silver	µg/L	< 0.5	< 0.5	N/A
11/28/2017	H-16	EBL	Total Suspended Solids	mg/L	< 1	< 1	N/A
11/28/2017	H-16	EBL	Zinc	µg/L	3.64	3.39	N/A
12/4/2017	A-11	SES	Low Level Mercury	ng/L	1.57	1.63	3.7

Table 43 Summary of SRS Stream Water Quality Duplicate Sample Results Detected

Reported parameters are those where both results were detected (this includes estimated values).

The following analytes are measured monthly at each sampled location: aluminum, beryllium, cadmium, chromium, copper, hardness (total), iron, lead, manganese, mercury, nickel, nitrate-nitrogen, nitrite-nitrogen, thallium, total organic carbon, phosphorus, total suspended solids, and zinc.

The following pesticides and herbicides are measured quarterly at one stream location: aldrin, aroclor 1016, aroclor 1221, aroclor 1232, aroclor 1242, aroclor 1248, aroclor 1254, aroclor 1260, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), chlordane, 4,4'-DDD, 4,4'-DDe, 4,4'-DDT, dieldrin, Endosulfan I, Endosulfan II, Endosulfan sulfate, endrin, endrin aldehyde, heptachlor, heptachlor epoxide, toxaphene, 2,4-D, and 2,4,5-TP (Silvex).

All pesticides and herbicides were not detected in the 2017 samples.

Date	Location	Analyte	Units	Result	Duplicate Result	Percent Difference
1/2017	FM-2B	Aluminum	µg/L	44.5	43.1	N/A
		Beryllium	µg/L	0.114	0.523	N/A
		Iron	µg/L	417	414	0.7
		Manganese	µg/L	13.8	13.3	3.7
		Nitrate-Nitrogen	mg/L	0.128	0.144	11.8
		Total Organic Carbon	mg/L	4.6	4.4	4.4
		Phosphorus	mg/L	0.076	0.044	53.3
		Total Suspended Solids	mg/L	2	1	N/A
		Zinc	µg/L	9.35	10.90	N/A
2/2017	FM-6	Hardness	mg/L	11	11	0.0
		Iron	µg/L	1030	1080	4.7
		Manganese	µg/L	40.9	42.7	4.3
		Nitrate-Nitrogen	mg/L	0.609	0.603	1.0
		Total Organic Carbon	mg/L	4.6	4.7	2.2
		Phosphorus	mg/L	0.110	0.110	0.0
		Total Suspended Solids	mg/L	3	2	N/A
		Zinc	µg/L	5.18	6.81	N/A
3/2017	L3R-2	Hardness	mg/L	27	25	7.7
		Iron	µg/L	613	630	2.7
		Manganese	µg/L	98.0	100.0	2.0
		Nitrate-Nitrogen	mg/L	0.0412	0.0411	NA
		Total Organic Carbon	mg/L	6.3	6.4	1.6
		Phosphorus	mg/L	0.030	0.028	6.9
		Total Suspended Solids	mg/L	5	6	N/A
		Zinc	µg/L	5.92	6.39	N/A

Table 43 Summary of SRS Stream Water Quality Duplicate Sample Results Detected
(continued)

Date	Location	Analyte	Units	Result	Duplicate Result	Percent Difference
4/2017	PB-3	Aluminum	µg/L	117.0	198.0	N/A
		Hardness	mg/L	19	21	10.0
		Iron	µg/L	1020	1010	1.0
		Manganese	µg/L	56.3	60.0	6.4
		Nitrate-Nitrogen	mg/L	0.127	0.128	0.8
		Total Organic Carbon	mg/L	6.6	6.5	1.5
		Phosphorus	mg/L	0.058	0.064	9.8
		Total Suspended Solids	mg/L	9	8	11.8
		Zinc	µg/L	5.14	6.16	N/A
5/2017	SC-4	Aluminum	µg/L	138.0	172.0	N/A
		Hardness	mg/L	20	20	0.0
		Iron	µg/L	486	531	8.8
		Manganese	µg/L	36.0	39.4	9.0
		Nitrate-Nitrogen	mg/L	0.277	0.206	29.4
		Nitrite-Nitrogen	mg/L	0.0106	0.0088	N/A
		Total Organic Carbon	mg/L	4.1	3.6	13.0
		Phosphorus	mg/L	0.097	0.092	5.3
		Total Suspended Solids	mg/L	13	9	36.4
		Zinc	µg/L	19.20	10.60	57.7
6/2017	TB-5	Aluminum	µg/L	111.0	123.0	N/A
		Iron	µg/L	3610	3380	6.6
		Manganese	µg/L	117.0	114.0	2.6
		Nitrate-Nitrogen	mg/L	0.102	0.0885	14.2
		Total Organic Carbon	mg/L	4.9	4.8	2.1
		Phosphorus	mg/L	0.120	0.130	8.0
		Total Suspended Solids	mg/L	11	11	0.0
		Zinc	µg/L	6.80	10.10	N/A
7/2017	TC-1	Aluminum	µg/L	256.0	180.0	N/A
		Hardness	mg/L	12	12	0.0
		Iron	µg/L	982	962	2.1
		Manganese	µg/L	52.6	49.1	6.9
		Nitrate-Nitrogen	mg/L	0.0947	0.172	58.0
		Nitrite-Nitrogen	mg/L	0.0037	0.0036	N/A
		Total Organic Carbon	mg/L	9.7	10.0	3.0
		Phosphorus	mg/L	0.110	0.150	30.8
		Total Suspended Solids	mg/L	14	10	33.3
		Zinc	µg/L	7.62	4.88	N/A

Table 43 Summary of SRS Stream Water Quality Duplicate Sample Results Detected
(continued)

Date	Location	Analyte	Units	Result	Duplicate Result	Percent Difference
8/2017	U3R-0	Aluminum	µg/L	188.0	182.0	N/A
		Iron	µg/L	491	519	5.5
		Manganese	µg/L	6.7	7.3	7.6
		Nitrate-Nitrogen	mg/L	0.520	0.505	2.9
		Nitrite-Nitrogen	mg/L	0.0035	0.0035	N/A
		Total Organic Carbon	mg/L	2.3	2.1	N/A
		Phosphorus	mg/L	0.100	0.098	2.0
		Total Suspended Solids	mg/L	9	9	0.0
		Zinc	µg/L	18.70	14.50	25.3
9/2017	U3R-4	Aluminum	µg/L	180.0	204.0	N/A
		Iron	µg/L	553	614	10.5
		Manganese	µg/L	17.6	17.3	1.7
		Nitrate-Nitrogen	mg/L	0.218	0.213	2.3
		Nitrite-Nitrogen	mg/L	0.0043	0.0052	N/A
		Total Organic Carbon	mg/L	4.0	4.1	2.5
		Phosphorus	mg/L	0.100	0.110	9.5
		Total Suspended Solids	mg/L	7	6	15.4
		Zinc	µg/L	13.10	17.40	28.2
10/2017	FMC-2	Iron	µg/L	6020	7330	19.6
		Manganese	µg/L	430.0	443.0	3.0
		Nitrate-Nitrogen	mg/L	0.0166	0.0499	N/A
		Total Organic Carbon	mg/L	10.0	11.0	9.5
		Phosphorus	mg/L	0.080	0.049	48.1
		Total Suspended Solids	mg/L	17	24	34.1
		Zinc	µg/L	3.40	5.16	N/A
11/2017	FM-2B	Aluminum	µg/L	133.0	225.0	N/A
		Hardness	mg/L	12	14	15.4
		Iron	µg/L	993	989	0.4
		Manganese	µg/L	33.2	33.8	1.8
		Nitrate-Nitrogen	mg/L	0.215	0.208	3.3
		Nitrite-Nitrogen	mg/L	0.0031	0.0037	N/A
		Total Organic Carbon	mg/L	4.5	4.6	2.2
		Phosphorus	mg/L	0.067	0.066	1.5
		Total Suspended Solids	mg/L	2	3	N/A
		Zinc	µg/L	6.68	5.01	N/A

Table 43 Summary of SRS Stream Water Quality Duplicate Sample Results Detected
(continued)

Date	Location	Analyte	Units	Result	Duplicate Result	Percent Difference
12/2017	FM-6	Aluminum	µg/L	81.7	112.0	N/A
		Hardness	mg/L	12	10	N/A
		Iron	µg/L	662	639	3.5
		Manganese	µg/L	34.7	32.5	6.5
		Nitrate-Nitrogen	mg/L	0.910	0.914	0.4
		Nitrite-Nitrogen	mg/L	0.0061	0.0033	N/A
		Total Organic Carbon	mg/L	3.8	3.7	2.7
		Phosphorus	mg/L	0.089	0.084	5.8
		Total Suspended Solids	mg/L	1	2	N/A
		Zinc	µg/L	7.16	6.98	N/A

Table 44 Summary of Savannah River Water Quality Duplicate Sample Results Detected

Reported parameters are those where both results were detected (this includes estimated values).

The following analytes are measured monthly at each sampled location: aluminum, beryllium, cadmium, chromium, copper, hardness (total), iron, lead, manganese, mercury, nickel, nitrate-nitrogen, nitrite-nitrogen, thallium, total organic carbon, phosphorus, total suspended solids, and zinc.

The following pesticides and herbicides are measured quarterly at one stream location: aldrin, aroclor 1016, aroclor 1221, aroclor 1232, aroclor 1242, aroclor 1248, aroclor 1254, aroclor 1260, alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), chlordane, 4,4'-DDD, 4,4'-DDe, 4,4'-DDT, dieldrin, Endosulfan I, Endosulfan II, Endosulfan sulfate, endrin, endrin aldehyde, heptachlor, heptachlor epoxide, toxaphene, 2,4-D, and 2,4,5-TP (Silvex). All pesticides and herbicides were not detected in the 2017 samples.

Date	Location	Analyte	Units	Result	Duplicate Result	Percent Difference
1/2017	RM-129.1	Aluminum	µg/L	98.1	87.1	N/A
		Hardness	mg/L	23	25	8.3
		Iron	µg/L	793	819	3.2
		Manganese	µg/L	22.5	27.4	19.6
		Nitrate-Nitrogen	mg/L	0.103	0.0912	12.2
		Total Organic Carbon	mg/L	7.9	7.7	2.6
		Phosphorus	mg/L	0.033	0.037	11.4
		Total Suspended Solids	mg/L	3	3	N/A
		Zinc	µg/L	8.49	6.93	N/A
2/2017	RM-141.5	Aluminum	µg/L	110.0	105.0	N/A
		Hardness	mg/L	19	18	5.4
		Iron	µg/L	689	710	3.0
		Manganese	µg/L	60.6	62.6	3.2
		Nitrate-Nitrogen	mg/L	1.110	0.213	134.8
		Nitrite-Nitrogen	mg/L	0.0075	0.0090	N/A
		Total Organic Carbon	mg/L	3.8	3.9	2.6
		Phosphorus	mg/L	0.110	0.110	0.0
		Total Suspended Solids	mg/L	4	5	N/A
		Zinc	µg/L	3.92	12.30	N/A
3/2017	RM-141.5	Hardness	mg/L	21	18	15.4
		Iron	µg/L	494	444	10.7
		Manganese	µg/L	60.6	64.0	5.5
		Nitrate-Nitrogen	mg/L	0.179	0.147	19.6
		Nitrite-Nitrogen	mg/L	0.0088	0.0088	N/A
		Total Organic Carbon	mg/L	3.5	3.5	0.0
		Phosphorus	mg/L	0.074	0.077	4.0
		Total Suspended Solids	mg/L	7	6	15.4
		Zinc	µg/L	4.05	3.77	N/A

Table 44 Summary of Savannah River Water Quality Duplicate Sample Results Detected
(continued)

Date	Location	Analyte	Units	Result	Duplicate Result	Percent Difference
4/2017	RM-160	Aluminum	µg/L	609.0	438.0	32.7
		Copper	µg/L	3	2	N/A
		Hardness	mg/L	19	19	0.0
		Iron	µg/L	1060	1050	0.9
		Manganese	µg/L	139.0	126.0	9.8
		Nitrate-Nitrogen	mg/L	0.206	0.213	3.3
		Nitrite-Nitrogen	mg/L	0.0103	0.0099	N/A
		Total Organic Carbon	mg/L	8.3	7.5	10.1
		Phosphorus	mg/L	0.140	0.130	7.4
		Total Suspended Solids	mg/L	15	14	6.9
		Zinc	µg/L	14.70	8.55	N/A
5/2017	RM-118.8	Aluminum	µg/L	193.0	211.0	N/A
		Copper	µg/L	3	3	N/A
		Hardness	mg/L	10	12	N/A
		Iron	µg/L	621	639	2.9
		Manganese	µg/L	72.4	74.6	3.0
		Nitrate-Nitrogen	mg/L	0.260	0.258	0.8
		Nitrite-Nitrogen	mg/L	0.0139	0.0135	N/A
		Total Organic Carbon	mg/L	5.0	4.8	4.1
		Phosphorus	mg/L	0.140	0.140	0.0
		Total Suspended Solids	mg/L	11	10	9.5
		Zinc	µg/L	15.90	16.60	4.3
6/2017	RM-129.1	Aluminum	µg/L	365.0	343.0	6.2
		Hardness	mg/L	20	18	10.5
		Iron	µg/L	510	539	5.5
		Manganese	µg/L	72.4	72.3	0.1
		Nitrate-Nitrogen	mg/L	0.218	0.229	4.9
		Nitrite-Nitrogen	mg/L	0.0034	0.0035	N/A
		Total Organic Carbon	mg/L	3.1	3.3	6.2
		Phosphorus	mg/L	0.130	0.130	0.0
		Total Suspended Solids	mg/L	13	11	16.7
		Zinc	µg/L	9.87	7.62	N/A
7/2017	RM-150.4	Aluminum	µg/L	155.0	218.0	N/A
		Hardness	mg/L	16	20	22.2
		Iron	µg/L	383	496	25.7
		Manganese	µg/L	62.0	79.7	25.0
		Nitrate-Nitrogen	mg/L	0.218	0.229	4.9
		Nitrite-Nitrogen	mg/L	0.0063	0.0063	N/A
		Total Organic Carbon	mg/L	3.3	3.8	14.1
		Phosphorus	mg/L	0.110	0.130	16.7
		Total Suspended Solids	mg/L	9	12	28.6
		Zinc	µg/L	3.42	5.37	N/A

Table 44 Summary of Savannah River Water Quality Duplicate Sample Results Detected
(continued)

Date	Location	Analyte	Units	Result	Duplicate Result	Percent Difference
8/2017	RM-150.4	Aluminum	µg/L	302.0	313.0	3.6
		Copper	µg/L	2	3	N/A
		Hardness	mg/L	20	22	9.5
		Iron	µg/L	544	562	3.3
		Manganese	µg/L	58.8	59.8	1.7
		Nitrate-Nitrogen	mg/L	0.235	0.270	13.9
		Nitrite-Nitrogen	mg/L	0.0108	0.0105	N/A
		Total Organic Carbon	mg/L	4.5	4.3	4.5
		Phosphorus	mg/L	0.140	0.170	19.4
		Total Suspended Solids	mg/L	6	7	15.4
		Zinc	µg/L	8.53	11.10	N/A
9/2017	RM-160	Aluminum	µg/L	74.6	113.0	N/A
		Hardness	mg/L	20	20	0.0
		Iron	µg/L	761	529	36.0
		Manganese	µg/L	65.0	66.0	1.5
		Nitrate-Nitrogen	mg/L	0.200	0.186	7.3
		Nitrite-Nitrogen	mg/L	0.0081	0.0085	N/A
		Total Organic Carbon	mg/L	4.2	3.7	12.7
		Phosphorus	mg/L	0.140	0.130	7.4
		Total Suspended Solids	mg/L	6	3	N/A
		Zinc	µg/L	8.28	5.67	N/A
10/2017	RM-118.8	Copper	µg/L	2	3	N/A
		Hardness	mg/L	20	18	10.5
		Iron	µg/L	467	519	10.5
		Manganese	µg/L	80.7	83.6	3.5
		Nitrate-Nitrogen	mg/L	0.786	0.710	10.2
		Nitrite-Nitrogen	mg/L	0.0033	0.0027	N/A
		Total Organic Carbon	mg/L	3.9	5.9	40.8
		Phosphorus	mg/L	0.150	0.170	12.5
		Total Suspended Solids	mg/L	12	20	50.0
		Zinc	µg/L	10.80	13.70	23.7
11/2017	RM-129.1	Aluminum	µg/L	54.2	66.6	N/A
		Hardness	mg/L	40	40	0.0
		Iron	µg/L	451	444	1.6
		Manganese	µg/L	26.4	26.4	0.0
		Nitrate-Nitrogen	mg/L	0.0871	0.0841	3.5
		Nitrite-Nitrogen	mg/L	0.0036	0.0047	N/A
		Total Organic Carbon	mg/L	5.4	5.2	3.8
		Phosphorus	mg/L	0.025	0.024	N/A
		Total Suspended Solids	mg/L	1	2	N/A
		Zinc	µg/L	4.30	2.16	N/A

Table 44 Summary of Savannah River Water Quality Duplicate Sample Results Detected
(continued)

Date	Location	Analyte	Units	Result	Duplicate Result	Percent Difference
12/2017	RM-141.5	Aluminum	µg/L	163.0	143.0	N/A
		Hardness	mg/L	20	18	10.5
		Iron	µg/L	612	619	1.1
		Manganese	µg/L	61.4	61.8	0.6
		Nitrate-Nitrogen	mg/L	0.353	0.360	2.0
		Nitrite-Nitrogen	mg/L	0.0126	0.0128	N/A
		Total Organic Carbon	mg/L	5.0	5.1	2.0
		Phosphorus	mg/L	0.100	0.100	0.0
		Total Suspended Solids	mg/L	4	4	N/A
		Zinc	µg/L	4.69	4.18	N/A