

Appendix G-1
Summary of Soil and Aquatic Sediment
Guidelines and Standards

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Table G-1A
Soils Cleanup Objectives and Cleanup Levels^a

Analyte	Units	TAGM #4046 Eastern U.S. Background Concentrations for Soil ^a	6 NYCRR Subpart 375-6.8(a) ^b Remedial Soil Cleanup Objectives
Aluminum	mg/kg (ppm)	33,000	--
Antimony	mg/kg (ppm)	--	--
Arsenic	mg/kg (ppm)	3–12 ^c	13
Barium	mg/kg (ppm)	15–600	350
Beryllium	mg/kg (ppm)	0–1.75	7.2
Cadmium	mg/kg (ppm)	0.1–1	2.5
Calcium	mg/kg (ppm)	130–35,000	--
Chromium	mg/kg (ppm)	1.5–40 ^c	30
Cobalt	mg/kg (ppm)	2.5–60 ^c	--
Copper	mg/kg (ppm)	1–50	50
Iron	mg/kg (ppm)	2,000–550,000	--
Lead	mg/kg (ppm)	4–61 ^d	63
Magnesium	mg/kg (ppm)	100–5,000	--
Manganese	mg/kg (ppm)	50–5,000	1,600
Mercury	mg/kg (ppm)	0.001–0.2	0.18
Nickel	mg/kg (ppm)	0.5–25	30
Potassium	mg/kg (ppm)	8,500–43,000 ^c	--
Selenium	mg/kg (ppm)	0.1–3.9	3.9
Silver	mg/kg (ppm)	--	2
Sodium	mg/kg (ppm)	6,000–8,000	--
Thallium	mg/kg (ppm)	--	--
Vanadium	mg/kg (ppm)	1–300	--
Zinc	mg/kg (ppm)	9–50	109

-- No reference level available for these analytes

^a Source: New York State Department of Environmental Conservation “Technical and Administrative Guidance Memorandum (TAGM) #4046”

^b Source: 6 NYCRR Subpart 375-6.8(a) Remedial Soil Cleanup Objectives: Unrestricted Use Soil Cleanup Objectives

^c New York State background

^d Background levels for lead vary widely. Average levels in undeveloped, rural areas may range from 4–61 ppm. Average background levels in metropolitan or suburban areas or near highways are much higher and typically range from 200–500 ppm.

Table G-1B
Screening Concentrations for Contaminated Sediment^a

Analyte	Units	Lowest Effect Level ^b	Severe Effect Level ^c
Aluminum	mg/kg (ppm)	--	--
Antimony	mg/kg (ppm)	2.0 (L)	25.0 (L)
Arsenic	mg/kg (ppm)	6.0 (P)	33.0 (P)
Barium	mg/kg (ppm)	--	--
Beryllium	mg/kg (ppm)	--	--
Cadmium	mg/kg (ppm)	0.6 (P)	9.0 (L)
Calcium	mg/kg (ppm)	--	--
Chromium	mg/kg (ppm)	26.0 (P)	110.0 (P)
Cobalt	mg/kg (ppm)	--	--
Copper	mg/kg (ppm)	16.0 (P)	110.0 (P)
Iron	%	2.0 (P)	4.0 (P)
Lead	mg/kg (ppm)	31.0 (P)	110.0 (L)
Magnesium	mg/kg (ppm)	--	--
Manganese	mg/kg (ppm)	460.0 (P)	1,100.0 (L)
Mercury	mg/kg (ppm)	0.15 (L)	1.3 (L)
Nickel	mg/kg (ppm)	16.0 (P)	50.0 (L)
Potassium	mg/kg (ppm)	--	--
Selenium	mg/kg (ppm)	--	--
Silver	mg/kg (ppm)	1.0 (L)	2.2 (L)
Sodium	mg/kg (ppm)	--	--
Thallium	mg/kg (ppm)	--	--
Vanadium	mg/kg (ppm)	--	--
Zinc	mg/kg (ppm)	120.0 (P/L)	270.0 (L)

L - An "L" following a criterion indicates that it was taken from Long and Morgan (1990).

P - A "P" following a criterion indicates that it was taken from Persaud et al. (1992).

-- No reference value available for these analytes

^a Source: New York State Department of Environmental Conservation "Technical Guidance for Screening Contaminated Sediments," January 1999

^b The Lowest Effect Level for each metal is the lowest of the either the Persaud et al. (1992) Lowest Effect Level or the Long and Morgan (1990) Effect Range-Low

^c The Severe Effect Level for each metal is the lowest of either the Persaud et al. (1992) Severe Effect Level or the Long and Morgan (1990) Effect Range-Moderate

Table G-1C
Screening Thresholds for In-Water and Riparian Management of Sediment and Dredge Material^a

Analyte	Units	No Appreciable Contamination Level
Arsenic	mg/kg (ppm)	<14
Cadmium	mg/kg (ppm)	<1.2
Copper	mg/kg (ppm)	<33
Lead	mg/kg (ppm)	<33
Mercury	mg/kg (ppm)	<0.17

^a Source: Draft New York State Department of Environmental Conservation Technical and Operational Guidance Series (TOGS) #5.1.9, "In-Water and Riparian Management of Sediment and Dredge Material"

Table G-1D
Radionuclide Comparison Values for Soils

Radionuclide	Units	Consultation Triggers for Soil Contamination ^a		NUREG-1757 Screening Values of Common Radionuclides for Soil Surface Contamination Levels ^b
		Residential Soil Concentration	Industrial/Commercial Concentration	
Co-60	μCi/g	4E-06	6E-06	3.8E-06
Sr-90	μCi/g	--	--	1.7E-06
Sr-90+D ^c	μCi/g	2.3E-05	1.07E-03	--
Cs-137	μCi/g	--	--	1.1E-05
Cs-137+D ^c	μCi/g	6E-06	1.1E-05	--
U-234	μCi/g	4.01E-04	3.31E-03	1.3E-05
U-235	μCi/g	--	--	8E-06
U-235+D ^c	μCi/g	2.0E-05	3.9E-05	2.9E-07
U-238	μCi/g	--	--	1.4E-05
U-238+D ^c	μCi/g	7.4E-05	1.79E-04	5E-07
Total U	μg/g	4.7E+01	1.23E+03	--
Pu-238	μCi/g	2.97E-04	1.64E-03	2.5E-06
Pu-239	μCi/g	2.59E-04	1.43E-03	2.3E-06
Am-241	μCi/g	1.87E-04	5.68E-04	2.1E-06

-- No reference trigger available

^a Memorandum of Understanding between the Environmental Protection Agency and the Nuclear Regulatory Commission "Consultation and Finality on Decommissioning and Decontamination of Contaminated Sites," September 2002.

^b U.S. Nuclear Regulatory Commission. Consolidated Decommissioning Guidance: Characterization, Survey, and Determination of Radiological Criteria. NUREG-1757, Vol. 2, Rev. 1. September 2006.

^c Concentrations apply to the parent radionuclide but assume that the daughter products are present in equilibrium.

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Appendix G-2
Soil and Sediment Data

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Table G-2A
2006 Contaminants in On-Site Soils Downstream of the WVDP at
Frank's Creek (SNSP006)

RADIOACTIVE CONSTITUENTS

Isotope	Units	N	SNSP006	Consultation Triggers ^a For Soil Contamination		NUREG-1757 Soil Screening Contamination Levels ^b
				Residential	Industrial Commercial	
Gross Alpha	μCi/g	1	9.42±2.24E-06	--	--	--
Gross Beta	μCi/g	1	4.97±0.36E-05	--	--	--
K-40	μCi/g	1	1.86±0.15E-05	--	--	--
Co-60	μCi/g	1	0.38±2.57E-08	4E-06	6E-06	3.8E-06
Sr-90	μCi/g	1	1.01±0.09E-06	2.3E-05 ^c	1.07E-03 ^c	1.7E-06
Cs-137	μCi/g	1	2.33±0.14E-05	6E-06 ^c	1.1E-05 ^c	1.1E-05
U-232	μCi/g	1	5.72±5.24E-08	--	--	--
U-233/234	μCi/g	1	7.66±1.52E-07	4.01E-04	3.31E-03	1.3E-05
U-235/236	μCi/g	1	3.80±3.69E-08	2.0E-05 ^c	3.9E-05 ^c	8.0E-06 ^d
U-238	μCi/g	1	8.03±1.55E-07	7.4E-05 ^c	1.79E-04 ^c	1.4E-05 ^d
Total U	μg/g	1	1.89±0.17E+00	4.7E+01	1.23E+03	--
Pu-238	μCi/g	1	2.68±2.57E-08	2.97E-04	1.64E-03	2.5E-06
Pu-239/240	μCi/g	1	3.82±3.14E-08	2.59E-04	1.43E-03	2.3E-06
Am-241	μCi/g	1	4.82±3.24E-08	1.87E-04	5.68E-04	2.1E-06

N - Number of samples

-- No reference trigger available

^a Memorandum of Understanding between the EPA and the NRC "Consultation and Finality on Decommissioning and Decontamination of Contaminated Sites."

^b U.S. Nuclear Regulatory Commission. "Consolidated Decommissioning Guidance: Characterization, Survey, and Determination of Radiological Criteria." NUREG-1757, Vol. 2, Rev. 1. September 2006.

^c Concentrations apply to the parent radionuclide but assume that the daughter products are present in equilibrium.

^d WVDP-related uranium isotopes are not assumed to be in equilibrium with daughter products because of their relatively recent origin as processed nuclear materials. Therefore, the single-nuclide screening levels for U-235 and U-238 were selected for comparison with radionuclide concentrations in on-site soils.

Table G-2A (concluded)
2006 Contaminants in On-Site Soils Downstream of the WVDP at
Frank's Creek (SNSP006)

METALS

Analyte	Units	N	SNSP006	Guidance Values		
				Lowest Effect Level ^a	Severe Effect Level ^a	No Appreciable Contamination Level ^b
Aluminum	mg/kg (ppm)	1	7,370	--	--	--
Antimony	mg/kg (ppm)	1	<0.66	2.0	25.0	--
Arsenic	mg/kg (ppm)	1	7.6	6.0	33.0	14
Barium	mg/kg (ppm)	1	90.6	--	--	--
Beryllium	mg/kg (ppm)	1	0.41	--	--	--
Cadmium	mg/kg (ppm)	1	0.26	0.6	9.0	<1.2
Calcium	mg/kg (ppm)	1	21,950	--	--	--
Chromium	mg/kg (ppm)	1	11	26.0	110.0	--
Cobalt	mg/kg (ppm)	1	9.4	--	--	--
Copper	mg/kg (ppm)	1	20.4	16.0	110.0	<33
Iron	%	1	1.9	2.0	4.0	--
Lead	mg/kg (ppm)	1	12.6	31.0	110.0	<33
Magnesium	mg/kg (ppm)	1	6,685	--	--	--
Manganese	mg/kg (ppm)	1	1,114	460.0	1,100.0	--
Mercury	mg/kg (ppm)	1	0.08	0.15	1.3	0.17
Nickel	mg/kg (ppm)	1	21	16.0	50.0	--
Potassium	mg/kg (ppm)	1	962	--	--	--
Selenium	mg/kg (ppm)	1	<0.71	--	--	--
Silver	mg/kg (ppm)	1	<0.11	1.0	2.2	--
Sodium	mg/kg (ppm)	1	201	--	--	--
Thallium	mg/kg (ppm)	1	<1.08	--	--	--
Vanadium	mg/kg (ppm)	1	13.2	--	--	--
Zinc	mg/kg (ppm)	1	71.9	120.0	270.0	--

N - Number of samples

-- No reference standard available

^a Screening guidelines for chemical constituents obtained from NYSDEC "Technical Guidance for Screening Contaminated Sediments"

^b NYSDEC: Draft Technical & Operational Guidance Series 5.1.9, "In-Water and Riparian Management of Sediment and Dredge Material," January 2003.

Table G-2B
2006 Contaminants in On-Site Soils From North Swamp (SNSW74A)

RADIOACTIVE CONSTITUENTS

Isotope	Units	N	SNSW74A	Consultation Triggers ^a For Soil Contamination		NUREG-1757 Soil Screening Contamination Levels ^b
				Residential	Industrial/ Commercial	
Gross Alpha	μCi/g	1	1.04±0.21E-05	--	--	--
Gross Beta	μCi/g	1	2.01±0.26E-05	--	--	--
K-40	μCi/g	1	1.86±0.07E-05	--	--	--
Co-60	μCi/g	1	-1.19±1.54E-08	4E-06	6E-06	3.8E-06
Sr-90	μCi/g	1	9.99±3.73E-08	2.3E-05 ^c	1.07E-03 ^c	1.7E-06
Cs-137	μCi/g	1	1.71±0.05E-06	6E-06 ^c	1.1E-05 ^c	1.1E-05
U-232	μCi/g	1	3.26±2.91E-08	--	--	--
U-233/234	μCi/g	1	7.36±1.30E-07	4.01E-04	3.31E-03	1.3E-05
U-235/236	μCi/g	1	3.15±2.91E-08	2.0E-05 ^c	3.9E-05 ^c	8E-06 ^d
U-238	μCi/g	1	6.82±1.25E-07	7.4E-05 ^c	1.79E-04 ^c	1.4E-05 ^d
Total U	μg/g	1	3.01±0.08E+00	4.7E+01	1.23E+03	--
Pu-238	μCi/g	1	0.31±1.23E-08	2.97E-04	1.64E-03	2.5E-06
Pu-239/240	μCi/g	1	2.83±2.62E-08	2.59E-04	1.43E-03	2.3E-06
Am-241	μCi/g	1	2.64±1.83E-08	1.87E-04	5.68E-04	2.1E-06

N - Number of samples

-- No reference trigger available

^a Memorandum of Understanding between the EPA and the NRC "Consultation and Finality on Decommissioning and Decontamination of Contaminated Sites."

^b U.S. Nuclear Regulatory Commission. "Consolidated Decommissioning Guidance: Characterization, Survey, and Determination of Radiological Criteria." NUREG-1757, Vol. 2, Rev. 1. September 2006.

^c Concentrations apply to the parent radionuclide but assume that the daughter products are in equilibrium.

^d WVDP-related uranium isotopes are not assumed to be in equilibrium with daughter products because of their relatively recent origin as processed nuclear materials. Therefore, the single-nuclide screening levels for U-235 and U-238 were selected for comparison with radionuclide concentrations in on-site soils.

Table G-2B (concluded)
2006 Contaminants in On-Site Soils From North Swamp (SNSW74A)

METALS

Analyte	Units	N	SNSW74A	TAGM #4046 Recommended Soil Cleanup Objective ^a	6 NYCRR Subpart 375-6.8 (a) Remedial Program Soil Cleanup Objective ^b
Aluminum	mg/kg (ppm)	1	8,590	33,000	--
Antimony	mg/kg (ppm)	1	<0.68	--	--
Arsenic	mg/kg (ppm)	1	10.7	3–12 ^c	13
Barium	mg/kg (ppm)	1	92.2	15–600	350
Beryllium	mg/kg (ppm)	1	0.47	0–1.75	7.2
Cadmium	mg/kg (ppm)	1	0.62	0.1–1	2.5
Calcium	mg/kg (ppm)	1	34,900	130–35,000	--
Chromium	mg/kg (ppm)	1	15.4	1.5–40 ^c	30
Cobalt	mg/kg (ppm)	1	8.8	2.5–60 ^c	--
Copper	mg/kg (ppm)	1	30.1	1–50	50
Iron	mg/kg (ppm)	1	23,400	2,000–550,000	--
Lead	mg/kg (ppm)	1	20.5	4–61 ^d	63
Magnesium	mg/kg (ppm)	1	10,200	100–5,000	--
Manganese	mg/kg (ppm)	1	1,640	50–5,000	1,600
Mercury	mg/kg (ppm)	1	0.04	0.001–0.2	0.18
Nickel	mg/kg (ppm)	1	22.7	0.5–25	30
Potassium	mg/kg (ppm)	1	954	8,500–43,000 ^c	--
Selenium	mg/kg (ppm)	1	<0.73	0.1–3.9	3.9
Silver	mg/kg (ppm)	1	<0.11	--	2
Sodium	mg/kg (ppm)	1	295	6,000–8,000	--
Thallium	mg/kg (ppm)	1	<1.10	--	--
Vanadium	mg/kg (ppm)	1	15.7	1–300	--
Zinc	mg/kg (ppm)	1	254	9–50	109

N - Number of samples

-- No reference standard available

^a NYSDEC: Technical and Administrative Guidance Memorandum (TAGM) #4046.

^b 6 NYCRR Subpart 375-6.8(a) Remedial Program Soil Cleanup Objectives

^c New York State background

^d Background levels for lead vary widely. Average levels in undeveloped rural areas may range from 4–61 ppm (reported here). Average background levels in metropolitan or suburban areas, or near highways are much higher and typically range from 200–500 ppm.

Table G-2C
2006 Contaminants in On-Site Soils From Northeast Swamp (SNSWAMP)

RADIOACTIVE CONSTITUENTS

Isotope	Units	N	SNSWAMP	Consultation Triggers ^a For Soil Contamination		NUREG-1757 Soil Screening Contamination Levels ^b
				Residential	Industrial/ Commercial	
Gross Alpha	μCi/g	1	1.14±0.44E-05	--	--	--
Gross Beta	μCi/g	1	4.20±0.66E-05	--	--	--
K-40	μCi/g	1	2.34±0.16E-05	--	--	--
Co-60	μCi/g	1	3.11±1.79E-08	4E-06	6E-06	3.8E-06
Sr-90	μCi/g	1	1.08±0.08E-06	2.3E-05 ^c	1.07E-03 ^c	1.7E-06
Cs-137	μCi/g	1	2.62±0.22E-05	6E-06 ^c	1.1E-05 ^c	1.1E-05
U-232	μCi/g	1	1.07±2.68E-08	--	--	--
U-233/234	μCi/g	1	5.92±1.51E-07	4.01E-04	3.31E-03	1.3E-05
U-235/236	μCi/g	1	6.75±5.20E-08	2.0E-05 ^c	3.9E-05 ^c	8E-06 ^d
U-238	μCi/g	1	6.28±1.58E-07	7.4E-05 ^c	1.79E-04 ^c	1.4E-05 ^d
Total U	μg/g	1	2.31±0.24E+00	4.7E+01	1.23E+03	--
Pu-238	μCi/g	1	1.50±0.57E-07	2.97E-04	1.64E-03	2.5E-06
Pu-239/240	μCi/g	1	2.33±0.71E-07	2.59E-04	1.43E-03	2.3E-06
Am-241	μCi/g	1	6.14±0.80E-07	1.87E-04	5.68E-04	2.1E-06

N - Number of samples

-- No reference trigger available

^a Memorandum of Understanding between the EPA and the NRC "Consultation and Finality on Decommissioning and Decontamination of Contaminated Sites."

^b U.S. Nuclear Regulatory Commission. "Consolidated Decommissioning Guidance: Characterization, Survey, and Determination of Radiological Criteria." NUREG-1757, Vol. 2, Rev. 1. September 2006.

^c Concentrations apply to the parent radionuclide but assume that the daughter products are in equilibrium.

^d WVDP-related uranium isotopes are not assumed to be in equilibrium with daughter products because of their relatively recent origin as processed nuclear materials. Therefore, the single-nuclide screening levels for U-235 and U-238 were selected for comparison with radionuclide concentrations in on-site soils.

Table G-2C (concluded)
2006 Contaminants in On-Site Soils From Northeast Swamp (SNSWAMP)

METALS

Analyte	Units	N	SNSWAMP	TAGM #4046 Recommended Soil Cleanup Objective ^a	6 NYCRR Subpart 375-6.8 (a) Remedial Program Soil Cleanup Objectives ^b
Aluminum	mg/kg (ppm)	1	11,700	33,000	--
Antimony	mg/kg (ppm)	1	<0.50	--	--
Arsenic	mg/kg (ppm)	1	11.1	3–12 ^c	13
Barium	mg/kg (ppm)	1	84.8	15–600	350
Beryllium	mg/kg (ppm)	1	0.60	0–1.75	7.2
Cadmium	mg/kg (ppm)	1	0.35	0.1–1	2.5
Calcium	mg/kg (ppm)	1	5,210	130–35,000	--
Chromium	mg/kg (ppm)	1	15.7	1.5–40 ^c	30
Cobalt	mg/kg (ppm)	1	10.1	2.5–60 ^c	--
Copper	mg/kg (ppm)	1	26.3	1–50	50
Iron	mg/kg (ppm)	1	26,500	2,000–550,000	--
Lead	mg/kg (ppm)	1	24.7	4–61 ^d	63
Magnesium	mg/kg (ppm)	1	5,100	100–5,000	--
Manganese	mg/kg (ppm)	1	599	50–5,000	1,600
Mercury	mg/kg (ppm)	1	0.06	0.001–0.2	0.18
Nickel	mg/kg (ppm)	1	24.4	0.5–25	30
Potassium	mg/kg (ppm)	1	1,140	8,500–43,000 ^c	--
Selenium	mg/kg (ppm)	1	<0.53	0.1–3.9	3.9
Silver	mg/kg (ppm)	1	<0.08	--	2
Sodium	mg/kg (ppm)	1	49.5	6,000–8,000	--
Thallium	mg/kg (ppm)	1	<0.79	--	--
Vanadium	mg/kg (ppm)	1	18.2	1–300	--
Zinc	mg/kg (ppm)	1	98.7	9–50	109

N - Number of samples

-- No reference standard available

^a NYSDEC: Technical and Administrative Guidance Memorandum (TAGM) #4046.

^b 6 NYCRR Subpart 375-6.8(a) Remedial Program Soil Cleanup Objectives

^c New York State background

^d Background levels for lead vary widely. Average levels in undeveloped rural areas may range from 4–61 ppm (reported here). Average background levels in metropolitan or suburban areas, or near highways are much higher and typically range from 200–500 ppm.

Table G-2D
2006 Radioactivity in Surface Soils Collected at Air Stations Around the WVDP

In 2005, collection frequency was reduced to once every three years at these locations.
The samples will next be collected in CY 2007.

Table G-2E
2006 Radioactivity in Stream Sediments Around the WVDP

Analyte	Units	N	SFCCSED	SFSDSED	N	Background Location
						SFBISED ^a
Gross Alpha	μCi/g	1	8.99±2.23E-06	6.86±2.27E-06	10	1.16±0.35E-05
Gross Beta	μCi/g	1	1.96±0.24E-05	1.93±0.24E-05	10	1.69±0.29E-05
K-40	μCi/g	1	1.43±0.06E-05	1.55±0.11E-05	10	1.37±0.15E-05
Co-60	μCi/g	1	0.83±1.38E-08	2.24±1.96E-08	10	0.02±1.62E-08
Sr-90	μCi/g	1	3.56±1.95E-08	0.91±1.51E-08	10	0.04±4.97E-08
Cs-137	μCi/g	1	1.80±0.31E-07	1.40±0.27E-07	10	3.73±2.27E-08
U-232	μCi/g	1	-0.80±2.22E-08	0.58±3.21E-08	10	0.00±5.52E-08
U-233/234	μCi/g	1	7.24±1.38E-07	6.66±1.34E-07	10	5.42±1.19E-07
U-235/236	μCi/g	1	4.52±3.95E-08	3.76±3.59E-08	10	5.73±3.88E-08
U-238	μCi/g	1	7.89±1.43E-07	7.20±1.37E-07	10	5.30±1.14E-07
Total U	μg/g	1	2.12±0.07E+00	2.27±0.08E+00	10	1.91±0.04E+00
Pu-238	μCi/g	1	-1.13±9.78E-09	0.00±1.17E-08	10	1.11±1.86E-08
Pu-239/240	μCi/g	1	0.85±1.86E-08	0.00±1.17E-08	10	1.44±1.44E-08
Am-241	μCi/g	1	0.49±1.24E-08	-0.56±1.61E-08	10	1.70±2.24E-08

Analyte	Units	N	SFTCSED	--	N	Background Location
						SFBCSED ^b
Gross Alpha	μCi/g	1	8.16±3.72E-06	--	10	7.71±2.96E-06
Gross Beta	μCi/g	1	1.31±0.48E-05	--	10	1.69±0.31E-05
K-40	μCi/g	1	1.28±0.09E-05	--	10	1.39±0.14E-05
Co-60	μCi/g	1	-0.13±1.36E-08	--	10	0.00±2.03E-08
Sr-90	μCi/g	1	7.67±2.34E-08	--	10	3.49±5.31E-08
Cs-137	μCi/g	1	7.44±0.59E-07	--	10	3.59±2.75E-08
U-232	μCi/g	1	-1.98±2.26E-08	--	10	2.03±5.69E-08
U-233/234	μCi/g	1	6.43±1.33E-07	--	10	6.26±1.21E-07
U-235/236	μCi/g	1	3.56±3.46E-08	--	10	4.84±3.60E-08
U-238	μCi/g	1	7.45±1.43E-07	--	10	6.45±1.24E-07
Total U	μg/g	1	2.56±0.07E+00	--	10	2.14±0.05E+00
Pu-238	μCi/g	1	-0.29±1.25E-08	--	10	2.12±1.78E-08
Pu-239/240	μCi/g	1	0.17±1.28E-08	--	10	0.66±1.36E-08
Am-241	μCi/g	1	1.31±1.82E-08	--	10	0.52±1.38E-08

N - Number of samples

-- Not applicable; no additional sampling location

^a Sediment sampling at Bigelow Bridge (SFBISED), the upstream Cattaraugus Creek background, was discontinued in 2005. The ten-year historical average is used as the comparative reference for the Cattaraugus Creek locations.

^b Sampling data at the location upstream in Buttermilk Creek (SFBCSED) is presented as a ten-year rolling average and is used as a comparative reference for Thomas Corners in Buttermilk Creek (SFTCSED), immediately downstream of facility effluents.

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