Appendix G-1

Summary of Soil and Aquatic Sediment Guidelines and Standards

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Table G-1A
Eastern U.S.A. Background Concentrations for Elements in Soils[a]

Analyte	Units	Eastern U.S.A Background Concentrations for Soil
Aluminum	mg/kg (ppm)	33,000
Antimony	mg/kg (ppm)	--
Arsenic	mg/kg (ppm)	3–12[b]
Barium	mg/kg (ppm)	15–600
Beryllium	mg/kg (ppm)	0–1.75
Cadmium	mg/kg (ppm)	0.1–1
Calcium	mg/kg (ppm)	130–35,000
Chromium	mg/kg (ppm)	1.5–40[b]
Cobalt	mg/kg (ppm)	2.5–60[b]
Copper	mg/kg (ppm)	1–50
Iron	mg/kg (ppm)	2,000–550,000
Lead	mg/kg (ppm)	4–61[c]
Magnesium	mg/kg (ppm)	100–5,000
Manganese	mg/kg (ppm)	50–5,000
Mercury	mg/kg (ppm)	0.001–0.2
Nickel	mg/kg (ppm)	0.5–25
Potassium	mg/kg (ppm)	8,500–43,000[b]
Selenium	mg/kg (ppm)	0.1–3.9
Silver	mg/kg (ppm)	--
Sodium	mg/kg (ppm)	6,000–8,000
Thallium	mg/kg (ppm)	--
Vanadium	mg/kg (ppm)	1–300
Zinc	mg/kg (ppm)	9–50

-- No reference level available for these analytes
[a] Source: New York State Department of Environmental Conservation "Technical and Administrative Guidance Memorandum (TAGM) #4046"
[b] New York State background
[c] 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 Elements in Contaminated Sediments[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)

-- 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
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).

Table G-1C
Elemental 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"

Appendix G-2

Soil and Sediment Data

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Table G-2A
2004 Contaminants in On-Site Soils Downstream of the WVDP at Frank's Creek (SNSP006)

Analyte	Units	N	SNSP006	Guidance Values		
				Lowest Effect Level[a]	Severe Effect Level[a]	No Appreciable Contamination Level[b]
Gross Alpha	µCi/g	1	7.21±1.90E-06	--	--	--
Gross Beta	µCi/g	1	2.40±0.28E-05	--	--	--
K-40	µCi/g	1	1.55±0.13E-05	--	--	--
Co-60	µCi/g	1	0.28±1.42E-08	--	--	--
Sr-90	µCi/g	1	3.52±0.29E-07	--	--	--
Cs-137	µCi/g	1	5.22±0.49E-06	--	--	--
U-232	µCi/g	1	0.92±4.07E-08	--	--	--
U-233/234	µCi/g	1	5.53±1.48E-07	--	--	--
U-235/236	µCi/g	1	1.04±0.64E-07	--	--	--
U-238	µCi/g	1	5.56±1.46E-07	--	--	--
Total U	µg/g	1	2.29±0.03E+00	--	--	--
Pu-238	µCi/g	1	2.94±1.83E-08	--	--	--
Pu-239/240	µCi/g	1	5.64±7.67E-09	--	--	--
Am-241	µCi/g	1	3.20±2.94E-08	--	--	--
Aluminum	mg/kg	1	4,950	--	--	--
Antimony	mg/kg	1	<0.25	2.0	25.0	--
Arsenic	mg/kg	1	5.1	6.0	33.0	14
Barium	mg/kg	1	52.8	--	--	--
Beryllium	mg/kg	1	0.25	--	--	--
Cadmium	mg/kg	1	0.08	0.6	9.0	<1.2
Calcium	mg/kg	1	14,200	--	--	--
Chromium	mg/kg	1	7.0	26.0	110.0	--
Cobalt	mg/kg	1	7.6	--	--	--
Copper	mg/kg	1	12.0	16.0	110.0	<33
Iron	%	1	0.001	2.0	4.0	--
Lead	mg/kg	1	9.4	31.0	110.0	<33
Magnesium	mg/kg	1	5,425	--	--	--
Manganese	mg/kg	1	507	460.0	1,100.0	--
Mercury	mg/kg	1	<0.02	0.15	1.3	0.17
Nickel	mg/kg	1	15.0	16.0	50.0	--
Potassium	mg/kg	1	608	--	--	--
Selenium	mg/kg	1	<0.32	--	--	--
Silver	mg/kg	1	<0.06	1.0	2.2	--
Sodium	mg/kg	1	57.6	--	--	--
Thallium	mg/kg	1	<0.37	--	--	--
Vanadium	mg/kg	1	9	--	--	--
Zinc	mg/kg	1	42.6	120.0	270.0	--

Note: Effects of radiological soils and sediments are addressed with the evaluation of radiological dose to biota in Chapter 2.
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 and Operational Guidance Series 5.1.9, "In-Water and Riparian Management of Sediment and Dredge Material," January 2003.

Table G-2B
2004 Contaminants in On-Site Soils From North Swamp (SNSW74A)

Analyte	Units	N	SNSW74A	Reference Value[a]
Gross Alpha	µCi/g	1	1.26±0.17E-05	--
Gross Beta	µCi/g	1	1.82±0.18E-05	--
K-40	µCi/g	1	1.43±0.12E-05	--
Co-60	µCi/g	1	1.18±1.73E-08	--
Sr-90	µCi/g	1	1.16±0.21E-07	--
Cs-137	µCi/g	1	1.05±0.12E-06	--
U-232	µCi/g	1	-0.88±1.39E-08	--
U-233/234	µCi/g	1	5.30±1.35E-07	--
U-235/236	µCi/g	1	8.91±5.68E-08	--
U-238	µCi/g	1	7.86±1.62E-07	--
Total U	µg/g	1	2.59±0.04E+00	--
Pu-238	µCi/g	1	-0.01±1.17E-08	--
Pu-239/240	µCi/g	1	1.94±1.38E-08	--
Am-241	µCi/g	1	2.22±1.27E-08	--
Aluminum	mg/kg	1	7,250	33,000
Antimony	mg/kg	1	<0.31	--
Arsenic	mg/kg	1	10.7	3–12[b]
Barium	mg/kg	1	69.5	15–600
Beryllium	mg/kg	1	0.34	0–1.75
Cadmium	mg/kg	1	0.37	0.1–1
Calcium	mg/kg	1	45,300	130–35,000
Chromium	mg/kg	1	14.7	1.5–40[b]
Cobalt	mg/kg	1	7.2	2.5–60[b]
Copper	mg/kg	1	29.1	1–50
Iron	mg/kg	1	22,000	2,000–550,000
Lead	mg/kg	1	19.6	4–61[c]
Magnesium	mg/kg	1	15,500	100–5,000
Manganese	mg/kg	1	917	50–5,000
Mercury	mg/kg	1	<0.02	0.001–0.2
Nickel	mg/kg	1	21.6	0.5–25
Potassium	mg/kg	1	916	8,500–43,000[b]
Selenium	mg/kg	1	<0.39	0.1–3.9
Silver	mg/kg	1	<0.07	--
Sodium	mg/kg	1	184.0	6,000–8,000
Thallium	mg/kg	1	<0.46	--
Vanadium	mg/kg	1	13.7	1–300
Zinc	mg/kg	1	150.0	9–50

Note: Effects of radiological soils and sediments are addressed with the evaluation of radiological dose to biota in Chapter 2.
N - Number of samples
-- No reference standard available for these analytes
[a] NYSDEC: Technical and Administrative Guidance Memorandum (TAGM) #4046.
[b] New York State background
[c] Background levels vary widely. Average levels in undeveloped rural areas may range from 4–61 ppm (reported here). Average background levels in metropolitain or suburban areas, or near highways are much higher and typically range from 200–500 ppm.

Table G-2C
2004 Contaminants in On-Site Soils From Northeast Swamp (SNSWAMP)

Analyte	Units	N	SNSWAMP	Reference Value[a]
Gross Alpha	µCi/g	1	1.32±0.17E-05	--
Gross Beta	µCi/g	1	5.43±0.25E-05	--
K-40	µCi/g	1	1.69±0.14E-05	--
Co-60	µCi/g	1	1.00±1.68E-08	--
Sr-90	µCi/g	1	2.82±0.12E-06	--
Cs-137	µCi/g	1	1.38±0.12E-05	--
U-232	µCi/g	1	-2.65±1.79E-08	--
U-233/234	µCi/g	1	8.85±1.58E-07	--
U-235/236	µCi/g	1	5.44±4.04E-08	--
U-238	µCi/g	1	8.92±1.57E-07	--
Total U	µg/g	1	4.26±0.10E+00	--
Pu-238	µCi/g	1	3.47±0.55E-07	--
Pu-239/240	µCi/g	1	4.68±0.63E-07	--
Am-241	µCi/g	1	9.90±1.69E-07	--
Aluminum	mg/kg	1	10,700	33,000
Antimony	mg/kg	1	0.26	--
Arsenic	mg/kg	1	10.6	3–12[b]
Barium	mg/kg	1	73.9	15–600
Beryllium	mg/kg	1	0.51	0–1.75
Cadmium	mg/kg	1	0.11	0.1–1
Calcium	mg/kg	1	4,490	130–35,000
Chromium	mg/kg	1	14	1.5–40[b]
Cobalt	mg/kg	1	9.2	2.5–60[b]
Copper	mg/kg	1	23.7	1–50
Iron	mg/kg	1	24,300	2,000–550,000
Lead	mg/kg	1	21.9	4–61[c]
Magnesium	mg/kg	1	4,460	100–5,000
Manganese	mg/kg	1	563	50–5,000
Mercury	mg/kg	1	0.04	0.001–0.2
Nickel	mg/kg	1	22.8	0.5–25
Potassium	mg/kg	1	1,230	8,500–43,000[b]
Selenium	mg/kg	1	0.29	0.1–3.9
Silver	mg/kg	1	<0.05	--
Sodium	mg/kg	1	50.5	6,000–8,000
Thallium	mg/kg	1	<0.33	--
Vanadium	mg/kg	1	16.3	1–300
Zinc	mg/kg	1	92.4	9–50

Note: Effects of radiological soils and sediments are addressed with the evaluation of radiological dose to biota in Chapter 2.
N - Number of samples
-- No reference standard available for these analytes
[a] *NYSDEC: Technical and Administrative Guidance Memorandum (TAGM) #4046.*
[b] *New York State background*
[c] *Background levels vary widely. Average levels in undeveloped rural areas may range from 4–61 ppm (reported here). Average background levels in metropolitain or suburban areas, or near highways are much higher and typically range from 200–500 ppm.*

Table G-2D
2004 Radioactivity in Surface Soils Collected at Air Stations Around the WVDP

Analyte	Units	N	SFBOEHN	SFRSPRD	Background Location SFGRVAL
Gross Alpha	µCi/g	1	9.40±2.58E-06	9.86±2.75E-06	1.09±0.29E-05
Gross Beta	µCi/g	1	1.59±0.20E-05	1.54±0.19E-05	1.61±0.19E-05
K-40	µCi/g	1	1.52±0.10E-05	1.22±0.11E-05	1.17±0.10E-05
Co-60	µCi/g	1	0.02±1.66E-08	-0.28±1.96E-08	-0.53±1.63E-08
Sr-90	µCi/g	1	2.90±2.40E-08	8.47±2.30E-08	1.03±0.23E-07
Cs-137	µCi/g	1	3.86±0.39E-07	8.29±1.13E-07	6.21±0.70E-07
U-232	µCi/g	1	-0.52±2.16E-08	0.08±2.81E-08	0.58±2.24E-08
U-233/234	µCi/g	1	8.96±1.54E-07	8.56±1.58E-07	7.92±1.39E-07
U-235/236	µCi/g	1	6.98±4.57E-08	7.48±4.63E-08	8.35±4.64E-08
U-238	µCi/g	1	8.37±1.47E-07	8.69±1.58E-07	7.21±1.32E-07
Total U	µg/g	1	3.35±0.19E+00	3.71±0.21E+00	3.40±0.19E+00
Pu-238	µCi/g	1	0.37±1.17E-08	0.57±1.12E-08	2.82±2.61E-08
Pu-239/240	µCi/g	1	1.36±1.97E-08	0.43±1.15E-08	4.59±3.29E-08
Am-241	µCi/g	1	0.02±1.10E-08	1.33±2.61E-08	0.74±1.68E-08

Analyte	Units	N	SFFXVRD	SFRT240	Background Location SFGRVAL
Gross Alpha	µCi/g	1	1.29±0.30E-05	9.22±2.47E-06	1.09±0.29E-05
Gross Beta	µCi/g	1	1.61±0.21E-05	1.43±0.19E-05	1.61±0.19E-05
K-40	µCi/g	1	1.04±0.06E-05	1.20±0.09E-05	1.17±0.10E-05
Co-60	µCi/g	1	0.14±1.40E-08	0.22±1.47E-08	-0.53±1.63E-08
Sr-90	µCi/g	1	6.82±2.23E-08	7.37±2.46E-08	1.03±0.23E-07
Cs-137	µCi/g	1	5.22±0.35E-07	4.17±0.56E-07	6.21±0.70E-07
Pu-238	µCi/g	1	-0.42±1.23E-08	-0.42±1.23E-08	2.82±2.61E-08
Pu-239/240	µCi/g	1	0.88±1.66E-08	2.31±2.26E-08	4.59±3.29E-08
Am-241	µCi/g	1	4.43±3.41E-08	2.06±2.51E-08	0.74±1.68E-08

N - Number of samples

Table G-2D (concluded)
2004 Radioactivity in Surface Soils Collected at Air Stations Around the WVDP

Analyte	Units	N	SFSPRVL	SFTCORD	Background Location SFGRVAL
Gross Alpha	µCi/g	1	1.57±0.31E-05	1.11±0.33E-05	1.09±0.29E-05
Gross Beta	µCi/g	1	1.75±0.20E-05	2.60±0.24E-05	1.61±0.19E-05
K-40	µCi/g	1	1.26±0.05E-05	2.11±0.16E-05	1.17±0.10E-05
Co-60	µCi/g	1	0.44±1.22E-08	-0.50±1.54E-08	-0.53±1.63E-08
Sr-90	µCi/g	1	8.91±2.48E-08	1.31±0.25E-07	1.03±0.23E-07
Cs-137	µCi/g	1	3.90±0.26E-07	2.96±0.35E-07	6.21±0.70E-07
Pu-238	µCi/g	1	-0.13±1.10E-08	-0.30±1.29E-08	2.82±2.61E-08
Pu-239/240	µCi/g	1	0.96±1.54E-08	2.05±2.50E-08	4.59±3.29E-08
Am-241	µCi/g	1	2.02±2.51E-08	3.02±2.08E-08	0.74±1.68E-08
Analyte	**Units**	**N**	**SFBLKST**	**SFWEVAL**	**Background Location SFGRVAL**
Gross Alpha	µCi/g	1	1.50±0.34E-05	1.19±0.29E-05	1.09±0.29E-05
Gross Beta	µCi/g	1	1.86±0.22E-05	1.37±0.19E-05	1.61±0.19E-05
K-40	µCi/g	1	1.92±0.08E-05	1.32±0.11E-05	1.17±0.10E-05
Co-60	µCi/g	1	0.19±1.84E-08	-0.12±1.52E-08	-0.53±1.63E-08
Sr-90	µCi/g	1	1.88±2.27E-08	1.88±0.68E-07	1.03±0.23E-07
Cs-137	µCi/g	1	1.44±0.33E-07	2.66±0.38E-07	6.21±0.70E-07
Pu-238	µCi/g	1	0.44±1.18E-08	-0.57±1.29E-08	2.82±2.61E-08
Pu-239/240	µCi/g	1	0.44±1.18E-08	1.64±2.03E-08	4.59±3.29E-08
Am-241	µCi/g	1	0.73±1.07E-08	-0.36±1.57E-08	0.74±1.68E-08

N - Number of samples

Table G-2E
2004 Radioactivity in Stream Sediments Around the WVDP

Analyte	Units	N	SFCCSED	SFSDSED	Background Location SFBISED
Gross Alpha	µCi/g	1	6.87±2.94E-06	1.36±0.34E-05	9.37±2.66E-06
Gross Beta	µCi/g	1	1.37±0.21E-05	1.98±0.24E-05	1.31±0.20E-05
K-40	µCi/g	1	1.18±0.09E-05	1.67±0.13E-05	1.23±0.09E-05
Co-60	µCi/g	1	0.28±1.56E-08	0.29±1.60E-08	0.35±6.22E-09
Sr-90	µCi/g	1	1.88±3.08E-08	4.07±4.19E-08	3.10±4.21E-08
Cs-137	µCi/g	1	1.14±0.27E-07	5.09±2.24E-08	2.47±1.05E-08
U-232	µCi/g	1	-0.20±3.00E-08	-0.57±2.71E-08	1.24±3.55E-08
U-233/234	µCi/g	1	5.48±1.30E-07	7.64±1.57E-07	6.06±1.32E-07
U-235/236	µCi/g	1	7.65±4.81E-08	6.48±4.65E-08	6.07±4.65E-08
U-238	µCi/g	1	5.40±1.29E-07	7.74±1.57E-07	6.34±1.34E-07
Total U	µg/g	1	1.62±0.02E+00	2.63±0.04E+00	1.27±0.01E+00
Pu-238	µCi/g	1	-0.16±1.12E-08	0.19±1.41E-08	-3.08±4.27E-09
Pu-239/240	µCi/g	1	0.22±1.12E-08	-0.16±1.34E-08	0.64±1.26E-08
Am-241	µCi/g	1	0.08±1.74E-08	-0.20±1.35E-08	-1.09±1.68E-08

Analyte	Units	N	SFTCSED	--	Background Location SFBCSED
Gross Alpha	µCi/g	1	7.98±3.24E-06	--	7.99±2.88E-06
Gross Beta	µCi/g	1	2.04±0.24E-05	--	1.51±0.20E-05
K-40	µCi/g	1	1.17±0.06E-05	--	1.25±0.11E-05
Co-60	µCi/g	1	-0.42±1.48E-08	--	1.84±9.37E-09
Sr-90	µCi/g	1	8.26±4.48E-08	--	4.76±2.45E-08
Cs-137	µCi/g	1	6.48±0.37E-07	--	3.13±1.49E-08
U-232	µCi/g	1	-1.70±2.07E-08	--	-3.18±4.87E-09
U-233/234	µCi/g	1	6.49±1.35E-07	--	7.59±1.45E-07
U-235/236	µCi/g	1	4.48±4.03E-08	--	9.29±5.05E-08
U-238	µCi/g	1	7.69±1.47E-07	--	8.53±1.53E-07
Total U	µg/g	1	2.07±0.03E+00	--	2.11±0.02E+00
Pu-238	µCi/g	1	-0.15±1.27E-08	--	1.39±2.23E-08
Pu-239/240	µCi/g	1	-0.30±1.30E-08	--	-0.19±1.59E-08
Am-241	µCi/g	1	2.08±2.16E-08	--	0.47±1.19E-08

N - Number of samples
-- Not applicable; no additional sampling location

Table G-2F
2004 Contaminants in Rail Bed Soil Material

Analyte	Units	N	Maximum	Allowable Soil Concentration Reference Value[a]	Soil Cleanup Objectives to Protect Groundwater Quality Reference Value[a]
Am-241	µCi/g	9	<6.85E-08	--	--
Cs-137	µCi/g	9	8.52±2.59E-08	--	--
2,3,7,8-TCDD Dioxin	mg/kg	9	<0.000026	0.0006	0.06
2,4,5-T	mg/kg	9	<0.0043	0.019	1.9
2,4-D	mg/kg	9	<0.0046	0.005	0.5
alpha BHC	mg/kg	9	<0.000460	0.002	0.2
Anthracene	mg/kg	9	<0.160	7.0	700.0
Benzene	mg/kg	9	<0.001	0.0006	0.06
beta BHC	mg/kg	9	<0.00023	0.002	0.2
delta BHC	mg/kg	9	<0.00046	0.003	0.3
Ethyl benzene	mg/kg	9	<0.0008	0.055	5.5
gamma BHC (Lindane)	mg/kg	9	<0.000460	0.0006	0.06
Heptachlor	mg/kg	9	<0.000250	0.0010	0.1
Heptachlor epoxide	mg/kg	9	<0.000200	0.0002	0.02
Lead, total	mg/kg	9	18.8	4-61[b]	4-61[b]
Naphthalene	mg/kg	9	<0.130	0.130	13.0
o-Cresol (2-methylphenol)	mg/kg	9	<0.100	0.001	0.1
PCB-1016	mg/kg	9	<2.0	0.1	10
PCB-1221	mg/kg	9	<2.0	0.1	10
PCB-1232	mg/kg	9	<2.0	0.1	10
PCB-1242	mg/kg	9	<2.0	0.1	10
PCB-1248	mg/kg	9	<2.0	0.1	10
PCB-1254	mg/kg	9	<2.0	0.1	10
PCB-1260	mg/kg	9	<2.0	0.1	10
Total TCDD	mg/kg	9	<0.000026	0.0006	0.06
p-Cresol (4-methylphenol)	mg/kg	9	<0.130	0.009	0.9
Pentachlorophenol (8151)	mg/kg	9	<0.0045	0.01	1.0
Pentachlorophenol (8270)	mg/kg	9	<0.800	0.01	1.0
Silvex (2,4,5-TP)	mg/kg	9	<0.0540	0.007	0.7
Toluene	mg/kg	9	0.02	0.015	1.5
Xylene (Total)	mg/kg	9	<0.004	0.012	1.2

N - Number of samples
-- No reference standard available
[a] NYSDEC: Technical Administrative Guidance Memorandum (TAGM) 4046
[b] Background levels 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.

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