

Appendix A
Data for Risk Assessment

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Table A-1. Site ARA-01 soil concentrations for risk assessment.

Contaminant of Potential Concern	ARA-01	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
Arsenic	1.10E+01	0-0.5
Arsenic	2.58E+01	0-0.5
Arsenic	1.53E+01	0-0.5
Arsenic	1.96E+01	0-0.5
Arsenic	1.90E+01	0-0.5
Arsenic	1.71E+01	0-0.5
Arsenic	1.52E+01	0-0.5
Lead	4.39E+01	0-0.5
Lead	2.10E+01	0-0.5
Lead	2.58E+01	0-0.5
Lead	3.85E+01	0-0.5
Lead	2.36E+01	0-0.5
Lead	3.21E+01	0-0.5
Lead	1.78E+01	0-0.5
Lead	2.39E+01	0-0.5
Lead	2.46E+01	0-0.5
Lead	2.20E+01	0-0.5
Lead	2.37E+01	0-0.5
Lead	1.74E+01	0-0.5
Lead	7.00E+00	0-0.5
Lead	1.00E+01	0-0.5
Lead	2.04E+01	0-0.5
Lead	1.93E+01	0-0.5
Lead	1.77E+01	0-0.5
Lead	1.49E+01	0-0.5
Lead	1.59E+01	0-0.5
Lead	2.19E+01	0-0.5
Lead	1.81E+01	0-0.5
Lead	2.25E+01	0-0.5
Lead	1.57E+01	0-0.5
Lead	2.77E+01	0-0.5

Table A-1. (continued).

Contaminant of Potential Concern	ARA-01	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
Lead	1.96E+01	0-0.5
Lead	3.21E+01	0-0.5
Lead	2.79E+01	0-0.5
Lead	2.80E+01	0-0.5
Lead	2.15E+01	0-0.5
Lead	2.19E+01	0-0.5
Lead	1.10E+01	0-0.5
Lead	1.82E+01	1-2
Lead	2.39E+01	1-2
Lead	1.64E+01	1-2
Lead	2.98E+01	1-2
Thallium	5.29E+01	0-0.5
Thallium	4.40E+01	0-0.5
Thallium	1.35E+01	0-0.5
Thallium	3.78E+01	0-0.5
Thallium	1.93E+01	0-0.5
Thallium	2.68E+01	0-0.5
Thallium	4.30E+01	0-0.5
Thallium	1.42E+01	0-0.5
Thallium	1.58E+01	0-0.5
Thallium	1.81E+01	0-0.5
Thallium	2.59E+01	0-0.5
Thallium	3.75E+01	0-0.5
Thallium	2.91E+01	0-0.5
Thallium	5.19E+01	0-0.5
Thallium	3.04E+01	0-0.5
Thallium	5.92E+01	0-0.5
Thallium	2.89E+01	0-0.5
Thallium	2.20E+01	0-0.5
Thallium	2.03E+01	0-0.5
Thallium	2.61E+01	1-2

Table A-1. (continued).

Contaminant of Potential Concern	ARA-01	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
Thallium	3.36E+01	1-2
Am-241	2.69E-02	0.5
Am-241	5.76E-02	0.5
Am-241	5.64E-02	0.5
Am-241	5.12E-02	0.5
Am-241	6.09E-02	0.5
Am-241	9.63E-02	0.5
Am-241	1.13E-01	0.5
Am-241	2.37E-02	0.5
Am-241	4.43E-02	0.5
Am-241	5.06E-02	0.5
Am-241	3.66E-02	0.5
Am-241	4.94E-02	0.5
Am-241	3.48E-02	1
Am-241	3.71E-02	1
Am-241	5.80E-02	1
Am-241	1.80E-02	2
Am-241	3.68E-02	2
Cs-137	1.53E+00	0.5
Cs-137	2.00E-01	0.5
Pu-238	1.47E-02	2
Pu-238	1.35E-02	2
Pu-239/240	2.41E-02	0.5
Pu-239/240	5.33E-01	0.5
Pu-239/240	1.05E-02	0.5
Pu-239/240	2.64E-02	0.5
Pu-239/240	5.23E-02	0.5
Pu-239/240	1.33E-02	0.5
Pu-239/240	1.87E-02	0.5
Pu-239/240	1.88E-02	0.5
Pu-239/240	6.24E-03	0.5

Table A-1. (continued).

Contaminant of Potential Concern	ARA-01	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
Pu-239/240	1.79E-02	0.5
Pu-239/240	6.87E-03	1
Pu-239/240	3.02E-02	1
Pu-239/240	4.38E-03	1
Pu-239/240	2.31E-02	2
Pu-239/240	5.45E-03	2
Pu-239/240	8.69E-03	2
Pu-239/240	1.18E-01	2
Pu-239/240	1.38E-01	2
Ra-226	3.08E+00	0.5
Ra-226	1.43E+00	0.5
Sr-90	6.28E-01	0.5
Sr-90	4.10E-01	0.5
Sr-90	1.74E-01	0.5
Sr-90	2.47E-01	0.5
Sr-90	2.26E-01	0.5
Sr-90	1.91E-01	0.5
Sr-90	3.93E-01	2
Sr-90	2.11E-01	2
U-235	3.06E-02	0.5
U-235	4.43E-01	0.5
U-235	3.25E-02	0.5
U-235	2.76E-02	0.5
U-235	4.56E-02	0.5
U-235	3.87E-02	0.5
U-235	1.16E-01	0.5
U-235	4.60E-02	0.5
U-235	2.61E-02	0.5
U-235	3.21E-02	0.5
U-235	3.01E-02	0.5
U-235	3.98E-02	0.5

Table A-1. (continued).

Contaminant of Potential Concern	ARA-01	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
U-235	2.88E-02	0.5
U-235	2.21E-02	0.5
U-235	2.69E-02	0.5
U-235	2.42E-02	0.5
U-235	2.09E-02	0.5
U-235	4.73E-02	0.5
U-235	3.32E-02	0.5
U-235	2.07E-02	0.5
U-235	2.92E-02	0.5
U-235	3.06E-02	0.5
U-235	4.62E-02	1
U-235	3.28E-02	1
U-235	2.85E-02	1
U-235	2.99E-02	1
U-235	4.83E-02	2
U-235	2.50E-02	2
U-235	3.10E-02	2
U-235	3.65E-02	2
U-235	3.54E-02	2
U-235	2.63E-02	2
U-235	2.69E-02	2
U-235	1.84E-02	2
U-235	2.28E-02	2

Table A-2. Site ARA-02 soil concentrations for risk assessment.

Compound	ARA-02	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
Arsenic	3.80E+00	2.5-5
Arsenic	4.20E+00	2.5-5
Arsenic	3.60E+00	2.5-5
Arsenic	7.50E+00	4-4.5
Arsenic	3.40E+00	4-4.5
Arsenic	3.90E+00	5.0-7.5
Arsenic	2.80E+00	7.5-10
Arsenic	6.10E+00	8-8.5
Arsenic	5.00E+00	8-8.5
Arsenic	3.10E+00	8-8.5
Ra-226	1.73E+00	2.5-5
Ra-226	2.28E+00	2.5-5
Ra-226	1.68E+00	2.5-5
Ra-226	1.58E+00	5.0-7.5
Ra-226	2.38E+00	7.5-10
Sr-90	1.70E+01	4-4.5
Sr-90	5.70E+00	4-4.5
U-234	7.00E-01	2.5-5
U-234	6.32E-01	2.5-5
U-234	6.81E-01	2.5-5
U-234	2.00E+00	4-4.5
U-234	3.50E+00	4-4.5
U-234	8.05E-01	5.0-7.5
U-234	8.36E-01	7.5-10
U-234	7.00E-01	8-8.5
U-234	7.00E-01	8-8.5
U-235	3.32E-02	2.5-5
U-235	4.55E-02	2.5-5
U-235	4.97E-02	2.5-5
U-235	3.86E-02	5.0-7.5
U-235	5.06E-02	7.5-10

Table A-3. ARA-02 seepage pit concentrations for risk assessment.

Compound	ARA-02	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
Aroclor-1242	2.35E+01	9.5-10
Aroclor-1242	5.51E+00	9.5-10
Aroclor-1242	2.21E+01	9.5-10
Aroclor-1242	1.20E+01	9.5-10
Aroclor-1242	1.20E+01	9.5-10
Aroclor-1242	1.20E+01	9.5-10
Aroclor-1242	8.80E+00	9.5-10
Aroclor-1242	1.30E+01	9.5-10
Aroclor-1242	1.30E+01	9.5-10
Aroclor-1242	6.90E+00	9.5-10
Arsenic	3.30E+00	2.5-5
Arsenic	1.60E+00	7.5-10
Arsenic	2.60E+00	7.5-10
Arsenic	5.50E+00	8-8.5
Arsenic	7.07E+01	9.5-10
Arsenic	4.42E+01	9.5-10
Arsenic	6.81E+01	9.5-10
Arsenic	2.10E+01	9.5-10
Arsenic	2.20E+01	9.5-10
Arsenic	1.90E+01	9.5-10
Arsenic	1.40E+01	9.5-10
Arsenic	3.00E+01	9.5-10
Arsenic	3.50E+01	9.5-10
Arsenic	2.30E+01	9.5-10
Cadmium	1.00E+02	9.5-10
Cadmium	2.22E+02	9.5-10
Cadmium	7.71E+01	9.5-10
Cadmium	2.00E+01	9.5-10
Cadmium	2.20E+01	9.5-10
Cadmium	2.30E+01	9.5-10
Cadmium	1.20E+01	9.5-10

Table A-3. (continued).

Compound	ARA-02	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
Cadmium	2.60E+01	9.5-10
Cadmium	1.80E+01	9.5-10
Cadmium	2.50E+01	9.5-10
Chromium	1.83E+01	2.5-5
Chromium	1.98E+01	7.5-10
Chromium	2.11E+01	7.5-10
Chromium	1.67E+01	8-8.5
Chromium	2.80E+03	9.5-10
Chromium	1.91E+03	9.5-10
Chromium	2.37E+03	9.5-10
Chromium	8.60E+02	9.5-10
Chromium	9.50E+02	9.5-10
Chromium	1.10E+03	9.5-10
Chromium	5.30E+02	9.5-10
Chromium	1.00E+03	9.5-10
Chromium	1.10E+03	9.5-10
Chromium	1.10E+03	9.5-10
Copper	1.60E+01	2.5-5
Copper	2.05E+01	7.5-10
Copper	2.08E+01	7.5-10
Copper	3.41E+03	9.5-10
Copper	4.04E+03	9.5-10
Copper	2.87E+03	9.5-10
Copper	6.00E+02	9.5-10
Copper	6.20E+02	9.5-10
Copper	7.30E+02	9.5-10
Copper	3.70E+02	9.5-10
Copper	7.70E+02	9.5-10
Copper	7.00E+02	9.5-10
Copper	8.00E+02	9.5-10
Diethylether	4.10E-02	9.5-10

Table A-3. (continued).

Compound	ARA-02	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
Diethylether	3.20E-02	9.5-10
Lead	1.23E+01	2.5-5
Lead	1.21E+01	7.5-10
Lead	1.32E+01	7.5-10
Lead	1.15E+01	8-8.5
Lead	1.29E+03	9.5-10
Lead	1.14E+03	9.5-10
Lead	1.16E+03	9.5-10
Lead	2.60E+02	9.5-10
Lead	2.50E+02	9.5-10
Lead	2.40E+02	9.5-10
Lead	1.40E+02	9.5-10
Lead	3.10E+02	9.5-10
Lead	2.50E+02	9.5-10
Lead	3.10E+02	9.5-10
Nickel	1.97E+01	2.5-5
Nickel	2.09E+01	7.5-10
Nickel	2.38E+01	7.5-10
Nickel	2.06E+01	8-8.5
Nickel	5.89E+03	9.5-10
Nickel	4.75E+03	9.5-10
Nickel	4.87E+03	9.5-10
Nickel	1.30E+03	9.5-10
Nickel	1.30E+03	9.5-10
Nickel	1.60E+03	9.5-10
Nickel	7.50E+02	9.5-10
Nickel	1.50E+03	9.5-10
Nickel	1.70E+03	9.5-10
Nickel	1.40E+03	9.5-10
Silver	1.40E+00	7.5-10
Silver	1.00E+00	7.5-10

Table A-3. (continued).

Compound	ARA-02	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
Silver	3.40E-01	8-8.5
Silver	7.54E+02	9.5-10
Silver	8.07E+02	9.5-10
Silver	7.29E+02	9.5-10
Silver	2.60E+02	9.5-10
Silver	1.40E+02	9.5-10
Silver	2.30E+02	9.5-10
Silver	2.70E+02	9.5-10
Silver	2.50E+02	9.5-10
Silver	3.00E+02	9.5-10
Silver	2.10E+02	9.5-10
Ag-108m	2.30E-01	9.5-10
Am-241	1.59E-02	2.5-5
Am-241	2.60E+00	9.5-10
Am-241	2.70E+00	9.5-10
Am-241	2.20E+00	9.5-10
Co-60	5.12E+01	9.5-10
Co-60	1.65E+02	9.5-10
Co-60	6.05E+01	9.5-10
Co-60	6.67E+01	9.5-10
Co-60	7.20E+01	9.5-10
Co-60	3.37E+01	9.5-10
Co-60	5.17E+01	9.5-10
Co-60	8.74E+01	9.5-10
Co-60	6.34E+01	9.5-10
Co-60	6.70E+01	9.5-10
Cs-134	4.04E-01	9.5-10
Cs-137	2.27E-01	2.5-5
Cs-137	1.02E+00	7.5-10
Cs-137	4.00E+00	7.5-10
Cs-137	4.59E-01	8-8.5

Table A-3. (continued).

Compound	ARA-02	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
Cs-137	7.47E+01	9.5-10
Cs-137	4.62E+01	9.5-10
Cs-137	5.31E+01	9.5-10
Cs-137	8.59E+01	9.5-10
Cs-137	1.23E+02	9.5-10
Cs-137	6.16E+01	9.5-10
Cs-137	1.14E+02	9.5-10
Cs-137	1.35E+02	9.5-10
Cs-137	1.78E+02	9.5-10
Cs-137	1.34E+02	9.5-10
Eu-152	1.95E+00	9.5-10
Eu-152	2.50E+00	9.5-10
Eu-152	1.78E+00	9.5-10
Eu-152	2.59E+00	9.5-10
Eu-152	2.84E+00	9.5-10
Eu-152	3.52E+01	9.5-10
Eu-152	4.04E+00	9.5-10
Eu-152	5.48E+00	9.5-10
Eu-152	1.12E+01	9.5-10
Eu-152	4.95E+00	9.5-10
Eu-154	4.87E-01	9.5-10
Eu-154	5.32E-01	9.5-10
Eu-154	2.27E+00	9.5-10
Eu-154	1.05E+00	9.5-10
Eu-154	7.88E-01	9.5-10
Eu-154	9.89E-01	9.5-10
Np-237	7.38E-02	9.5-10
Np-237	5.98E-01	9.5-10
Np-237	9.58E-02	9.5-10
Np-237	3.98E-01	9.5-10
Np-237	1.95E-01	9.5-10

Table A-3. (continued).

Compound	ARA-02	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
Np-237	1.18E-01	9.5-10
Np-237	7.12E-01	9.5-10
Pu-238	1.60E-01	9.5-10
Pu-238	3.75E-01	9.5-10
Pu-238	2.03E-01	9.5-10
Pu-238	2.07E-01	9.5-10
Pu-238	2.70E-01	9.5-10
Pu-238	2.39E-01	9.5-10
Pu-239	7.40E+00	9.5-10
Pu-239	9.77E-01	9.5-10
Pu-239	1.50E+00	9.5-10
Pu-239	1.03E+00	9.5-10
Pu-239	1.34E+00	9.5-10
Pu-239	1.39E+00	9.5-10
Pu-239	1.35E+00	9.5-10
Pu-239	1.10E+00	9.5-10
Ra-226	1.68E+00	7.5-10
Ra-226	2.22E+00	7.5-10
Ra-226	5.77E+01	9.5-10
Ra-226	3.29E+01	9.5-10
Ra-226	3.74E+01	9.5-10
Ra-226	7.32E+01	9.5-10
Ra-226	7.96E+01	9.5-10
Ra-226	8.96E+01	9.5-10
Ra-226	7.20E+01	9.5-10
Sr-90	1.20E+00	8-8.5
Sr-90	4.40E+01	9.5-10
Sr-90	2.13E+02	9.5-10
Sr-90	2.15E+02	9.5-10
Sr-90	5.95E+01	9.5-10
Sr-90	7.70E+01	9.5-10

Table A-3. (continued).

Compound	ARA-02	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
Sr-90	2.02E+02	9.5-10
Sr-90	1.14E+02	9.5-10
Sr-90	1.38E+02	9.5-10
Sr-90	2.12E+02	9.5-10
Sr-90	1.49E+02	9.5-10
Tc-99	2.01E+01	9.5-10
Tc-99	4.79E+01	9.5-10
Tc-99	2.17E+01	9.5-10
Tc-99	3.04E+01	9.5-10
Tc-99	4.83E+01	9.5-10
Tc-99	4.22E+01	9.5-10
Tc-99	6.39E+01	9.5-10
Th-230	1.41E+00	9.5-10
Th-230	4.50E+00	9.5-10
Th-230	1.28E+00	9.5-10
Th-230	1.03E+00	9.5-10
Th-230	1.42E+00	9.5-10
Th-230	1.26E+00	9.5-10
Th-230	3.59E-01	9.5-10
U-234	8.14E-01	2.5-5
U-234	1.30E+00	7.5-10
U-234	1.20E+00	7.5-10
U-234	2.60E+00	8-8.5
U-234	9.30E+02	9.5-10
U-234	1.05E+03	9.5-10
U-234	1.04E+03	9.5-10
U-234	7.79E+01	9.5-10
U-234	1.14E+03	9.5-10
U-234	1.00E+03	9.5-10
U-234	9.59E+01	9.5-10
U-234	1.25E+03	9.5-10

Table A-3. (continued).

Compound	ARA-02	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
U-234	1.15E+03	9.5-10
U-234	1.04E+03	9.5-10
U-235	5.84E-02	2.5-5
U-235	7.68E-02	7.5-10
U-235	9.97E-02	7.5-10
U-235	2.35E+01	9.5-10
U-235	8.00E+01	9.5-10
U-235	2.47E+01	9.5-10
U-235	7.70E+01	9.5-10
U-235	2.29E+01	9.5-10
U-235	5.60E+01	9.5-10
U-235	4.78E+00	9.5-10
U-235	1.20E+02	9.5-10
U-235	7.32E+01	9.5-10
U-235	5.73E+00	9.5-10
U-235	6.93E+01	9.5-10
U-235	8.88E+01	9.5-10
U-235	5.57E+01	9.5-10
U-238	6.87E-01	2.5-5
U-238	8.43E-01	7.5-10
U-238	8.87E-01	7.5-10
U-238	1.00E+00	8-8.5
U-238	1.90E+02	9.5-10
U-238	1.80E+02	9.5-10
U-238	1.40E+02	9.5-10
U-238	6.01E+00	9.5-10
U-238	1.12E+02	9.5-10
U-238	8.67E+01	9.5-10
U-238	7.85E+00	9.5-10
U-238	9.26E+01	9.5-10

Table A-3. (continued).

ARA-02		
Compound	Concentration (mg/kg or pCi/g)	Depth Range (ft)
U-238	9.87E+01	9.5-10
U-238	8.64E+01	9.5-10

Table A-4. Site ARA-03 soil concentrations for risk assessment.

Compound	ARA-03	
	Concentration (mg/kg or pCi/g)	Depth Range ^a (ft)
Cs-137	0.49	0-3
Cs-137	1.26	0-3
Cs-137	0.92	0-3
Cs-137	3.8	0-3
Cs-137	7.4	0-3
Cs-137	3.3	0-3

a. Samples were collected before the site was backfilled with clean soils. See Section 3.1.3.

Table A-5. Site ARA-12 soil concentrations for risk assessment.

Compound	ARA-12	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
Chromium	1.45E+02	0-0.5
Chromium	1.17E+02	0-0.5
Chromium	1.70E+01	0-0.5
Chromium	1.62E+02	0-0.5
Chromium	1.79E+02	0-0.5
Chromium	4.69E+02	0-0.5
Chromium	3.20E+02	0-0.5
Chromium	7.57E+01	0-0.5
Chromium	1.49E+01	0-0.5
Chromium	1.57E+01	0-0.5
Chromium	2.64E+02	0-0.5
Chromium	1.93E+01	2.5-3
Chromium	1.61E+02	2.5-3
Chromium	2.01E+01	2.5-3
Chromium	1.52E+01	2.5-3
Chromium	1.28E+01	3-3.5
Chromium	4.65E+01	3-3.5
Chromium	3.83E+01	3-3.5
Chromium	1.32E+01	3-3.5
Chromium	1.98E+01	3-3.5
Chromium	2.06E+01	4.5-5
Chromium	2.40E+01	4.5-5
Chromium	1.73E+01	5-5.5
Chromium	2.15E+01	6-6.5
Lead	9.38E+01	0-0.5
Lead	4.43E+01	0-0.5
Lead	1.64E+01	0-0.5
Lead	1.53E+01	0-0.5
Lead	3.00E+00	0-0.5
Lead	4.70E+00	0-0.5
Lead	8.86E+01	0-0.5

Table A-5. (continued).

Compound	ARA-12	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
Lead	3.20E+00	0-0.5
Lead	2.70E+00	0-0.5
Lead	2.80E+00	0-0.5
Lead	1.58E+02	0-0.5
Lead	3.70E+00	2.5-3
Lead	2.80E+00	2.5-3
Lead	2.40E+00	2.5-3
Lead	1.48E+01	2.5-3
Lead	1.50E+00	3-3.5
Lead	2.50E+00	3-3.5
Lead	2.11E+01	3-3.5
Lead	2.30E+00	3-3.5
Lead	1.43E+01	3-3.5
Lead	1.61E+01	4.5-5
Lead	2.40E+00	4.5-5
Lead	1.40E+00	5-5.5
Lead	2.30E+00	6-6.5
Manganese	3.58E+02	0-0.5
Manganese	3.29E+02	0-0.5
Manganese	1.82E+02	0-0.5
Manganese	1.77E+02	0-0.5
Manganese	1.57E+02	0-0.5
Manganese	2.56E+02	0-0.5
Manganese	1.20E+02	0-0.5
Manganese	2.33E+02	0-0.5
Manganese	4.39E+02	0-0.5
Manganese	5.70E+02	0-0.5
Manganese	1.46E+02	0-0.5
Manganese	1.93E+02	2.5-3
Manganese	3.33E+02	2.5-3
Manganese	2.85E+02	2.5-3

Table A-5. (continued).

Compound	ARA-12	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
Manganese	4.04E+02	2.5-3
Manganese	1.84E+02	3-3.5
Manganese	4.36E+02	3-3.5
Manganese	2.99E+02	3-3.5
Manganese	3.24E+02	3-3.5
Manganese	3.25E+02	3-3.5
Manganese	2.06E+02	4.5-5
Manganese	4.71E+02	4.5-5
Manganese	2.04E+02	5-5.5
Manganese	2.67E+02	6-6.5
Ag-108m	1.27E+01	0-0.5
Ag-108m	2.87E+01	0-0.5
Ag-108m	2.77E+00	0-0.5
Ag-108m	5.17E+00	0-0.5
Ag-108m	4.55E+00	0-0.5
Ag-108m	6.72E+01	0-0.5
Ag-108m	5.02E-01	0-0.5
Ag-108m	5.54E+01	0-0.5
Ag-108m	9.74E-01	2.5-3
Ag-108m	1.74E+00	2.5-3
Ag-108m	2.33E-01	3-3.5
Ag-108m	7.64E-01	3-3.5
Ag-108m	3.91E+00	3-3.5
Ag-108m	6.03E-01	3-3.5
Ag-108m	1.04E+00	4.5-5
Ag-108m	2.36E-01	4.5-5
Ag-108m	2.32E+00	5-5.5
Am-241	2.00E-01	0-0.5
Am-241	1.00E-01	0-0.5
Am-241	2.00E-01	4.5-5
Co-60	5.37E+00	0-0.5

Table A-5. (continued).

Compound	ARA-12	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
Co-60	2.03E+01	0-0.5
Co-60	5.83E-01	0-0.5
Co-60	7.41E-01	0-0.5
Co-60	5.15E+00	0-0.5
Co-60	2.52E+01	0-0.5
Co-60	4.68E-01	0-0.5
Co-60	2.48E+01	0-0.5
Co-60	6.78E-01	2.5-3
Co-60	1.32E+00	2.5-3
Co-60	2.12E-01	3-3.5
Co-60	1.17E+00	3-3.5
Co-60	5.72E-01	3-3.5
Co-60	3.99E-01	4.5-5
Co-60	9.87E-01	5-5.5
Cs-137	4.93E-01	0-0.5
Cs-137	3.18E+00	0-0.5
Cs-137	5.13E-01	0-0.5
Cs-137	4.89E-01	0-0.5
Cs-137	2.48E+00	0-0.5
Cs-137	2.48E+00	0-0.5
Cs-137	2.42E+00	0-0.5
Cs-137	2.09E+00	0-0.5
Cs-137	1.36E-01	0-0.5
Cs-137	2.77E-01	0-0.5
Cs-137	4.28E-01	0-0.5
Cs-137	2.86E-01	0-0.5
Cs-137	1.99E-01	0-0.5
Cs-137	3.57E-01	0-0.5
Cs-137	1.42E-01	0-0.5
Cs-137	2.56E-01	0-0.5
Cs-137	3.32E-01	0-0.5

Table A-5. (continued).

Compound	ARA-12	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
Cs-137	3.34E-01	0-0.5
Cs-137	2.37E-01	0-0.5
Cs-137	4.42E+00	0-0.5
Cs-137	8.09E-01	2.5-3
Cs-137	4.82E-01	2.5-3
Cs-137	4.82E-01	2.5-3
Cs-137	1.19E-01	3-3.5
Cs-137	1.01E-01	3-3.5
Cs-137	9.86E-02	4.5-5
Cs-137	2.29E-01	5-5.5
Pu-238	3.00E-02	0-0.5
Pu-238	1.40E-01	0-0.5
U-234	1.30E+00	0-0.5
U-234	3.00E-01	0-0.5
U-234	6.00E-01	0-0.5
U-234	1.40E+00	0-0.5
U-234	5.00E-01	0-0.5
U-234	1.40E+00	0-0.5
U-234	2.70E+00	0-0.5
U-234	9.00E-01	0-0.5
U-234	5.00E-01	0-0.5
U-234	8.00E-01	0-0.5
U-234	1.10E+00	0-0.5
U-234	2.00E-01	0-0.5
U-234	6.00E-01	0-0.5
U-234	1.20E+00	0-0.5
U-234	7.00E-01	0-0.5
U-234	8.00E-01	0-0.5
U-234	7.00E-01	0-0.5
U-234	8.00E-01	0-0.5
U-234	9.00E-01	0-0.5

Table A-5. (continued).

Compound	ARA-12	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
U-234	6.00E-01	0-0.5
U-234	7.00E-01	2.5-3
U-234	1.20E+00	2.5-3
U-234	9.00E-01	2.5-3
U-234	1.10E+00	2.5-3
U-234	6.00E-01	3-3.5
U-234	1.10E+00	3-3.5
U-234	7.00E-01	3-3.5
U-234	8.00E-01	3-3.5
U-234	8.00E-01	3-3.5
U-234	8.00E-01	4.5-5
U-234	4.00E-01	4.5-5
U-234	1.10E+00	5-5.5
U-234	6.00E-01	6-6.5
U-238	1.20E+00	0-0.5
U-238	1.50E+00	0-0.5
U-238	9.00E-01	0-0.5
U-238	1.20E+00	0-0.5
U-238	5.00E-01	0-0.5
U-238	1.60E+00	0-0.5
U-238	1.80E+00	0-0.5
U-238	1.00E+00	0-0.5
U-238	1.10E+00	0-0.5
U-238	8.00E-01	0-0.5
U-238	1.00E+00	0-0.5
U-238	7.00E-01	0-0.5
U-238	8.00E-01	0-0.5
U-238	5.00E-01	0-0.5
U-238	5.00E-01	0-0.5
U-238	7.00E-01	0-0.5
U-238	7.00E-01	0-0.5

Table A-5. (continued).

Compound	ARA-12	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
U-238	6.00E-01	0-0.5
U-238	8.00E-01	0-0.5
U-238	6.00E-01	2.5-3
U-238	1.20E+00	2.5-3
U-238	5.00E-01	2.5-3
U-238	9.00E-01	2.5-3
U-238	1.20E+00	3-3.5
U-238	9.00E-01	3-3.5
U-238	7.00E-01	3-3.5
U-238	8.00E-01	3-3.5
U-238	8.00E-01	4.5-5
U-238	5.00E-01	4.5-5
U-238	9.00E-01	5-5.5
U-238	1.10E+00	6-6.5

Table A-6. Site ARA-16 soil concentrations for risk assessment.

Compound	ARA-16	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
Chloride	1.28	0-0.5
Sulfate	5.95	0-0.5
Ag-108m	1.49E-01	0-0.5
Co-60	3.51E-01	0.5-2.5
Co-60	1.82E-01	0.5-2.5
Co-60	6.46E-01	0-0.5
Co-60	7.94E-01	0-0.5
Co-60	6.89E-02	0-0.5
Co-60	3.18E-01	0-0.5
Co-60	3.07E-01	0-0.5
Co-60	3.41E-01	0-0.5
Co-60	1.80E-01	0-0.5
Co-60	1.60E-01	0-0.5
Co-60	2.63E-01	0-0.5
Co-60	4.29E-01	0-0.5
Co-60	3.01E-01	0-0.5
Co-60	1.34E-01	0-0.5
Co-60	5.22E-01	5
Co-60	1.15E+00	5
Co-60	2.27E-01	5
Co-60	1.25E-01	9
Co-60	3.65E-01	9.5-10
Co-60	3.82E-01	9.5-10
Cs-134	1.90E-01	0-0.5
Cs-134	3.21E-01	9.5-10
Cs-137	1.27E+02	0-0.5
Cs-137	1.03E+02	0-0.5
Cs-137	1.07E+02	0-0.5
Cs-137	1.85E+02	0-0.5
Cs-137	2.01E+02	0-0.5
Cs-137	3.85E+01	0-0.5

Table A-6. (continued).

Compound	ARA-16	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
Cs-137	4.82E+01	0-0.5
Cs-137	7.01E+01	0-0.5
Cs-137	7.12E+01	0-0.5
Cs-137	2.88E+01	0-0.5
Cs-137	8.03E+01	0-0.5
Cs-137	4.21E+01	0-0.5
Cs-137	4.81E+01	0-0.5
Cs-137	2.16E+01	0-0.5
Cs-137	3.12E+01	0-0.5
Cs-137	1.03E+01	0-0.5
Cs-137	8.06E+01	0-0.5
Cs-137	2.76E+01	0.5-2.5
Cs-137	8.79E-01	0.5-2.5
Cs-137	1.87E+01	5-6
Cs-137	3.23E+00	5-6
Cs-137	3.75E+00	8-9
Cs-137	1.12E+01	8-9
Cs-137	2.73E-01	9.5-10
Cs-137	1.34E+02	9.5-10
Eu-152	1.35E+00	0-0.5
Eu-152	4.38E-01	0-0.5
Eu-152	9.06E-01	0-0.5
Eu-154	2.86E-01	0-0.5
Eu-154	4.84E-01	0-0.5
Eu-154	2.73E-01	0-0.5
Eu-154	2.28E-01	0-0.5
Ra-226	5.27E+00	0-0.5
Ra-226	3.31E+00	0-0.5
Ra-226	4.22E+00	0-0.5
Ra-226	3.92E+00	0-0.5
Ra-226	2.79E+00	0-0.5

Table A-6. (continued).

Compound	ARA-16	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
Ra-226	3.21E+00	0-0.5
Ra-226	3.22E+00	0-0.5
Ra-226	2.32E+00	0-0.5
Ra-226	3.17E+00	0-0.5
Ra-226	2.16E+00	0-0.5
Ra-226	2.73E+00	0.5-2.5
Ra-226	3.17E+00	0.5-2.5
Ra-226	2.11E+00	5-6
Ra-226	1.59E+00	8-9
Ra-226	2.30E+00	8-9
Ra-226	1.36E+00	9.5-10
Ra-226	4.98E+00	9.5-10
Sr-90	9.88E+01	0-0.5
Sr-90	3.77E+01	0-0.5
Sr-90	7.20E+01	0-0.5
Sr-90	1.18E+02	0-0.5
Sr-90	1.48E+02	0-0.5
Sr-90	3.19E+01	0-0.5
Sr-90	3.64E+01	0-0.5
Sr-90	6.41E+01	0-0.5
Sr-90	6.50E+01	0-0.5
Sr-90	4.77E+01	0-0.5
Sr-90	1.01E+02	0-0.5
Sr-90	4.24E+01	0-0.5
Sr-90	3.71E+01	0-0.5
Sr-90	1.49E+01	0-0.5
Sr-90	3.24E+01	0-0.5
Sr-90	4.99E+01	0-0.5
Sr-90	4.43E+01	0.5-2.5
Sr-90	2.60E+01	5-6
Sr-90	6.18E+01	9.5-10

Table A-7. Site ARA-23 soil concentrations for risk assessment.

Compound	ARA-23	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
Am-241	3.00E-03	0-0.5
Am-241	1.00E-02	0-0.5
Am-241	1.00E-02	0-0.5
Am-241	1.65E-02	0-0.5
Am-241	6.00E-03	0-0.5
Am-241	5.00E-03	0-0.5
Am-241	5.40E-03	0-0.5
Am-241	4.00E-03	0-0.5
Am-241	5.00E-03	0-0.5
Am-241	3.00E-03	0-0.5
Am-241	8.00E-03	0-0.5
Am-241	2.00E-03	0-0.5
Am-241	3.00E-03	0-0.5
Am-241	3.00E-03	0-0.5
Am-241	2.73E-02	0-0.5
Am-241	2.48E-02	0-0.5
Am-241	3.17E-02	1-2
Am-241	2.53E-02	1-2
Cs-137	8.99E-01	0-0.5
Cs-137	6.17E+00	0-0.5
Cs-137	6.44E+00	0-0.5
Cs-137	7.34E+00	0-0.5
Cs-137	1.14E+00	0-0.5
Cs-137	6.82E+00	0-0.5
Cs-137	1.87E+01	0-0.5
Cs-137	2.78E+00	0-0.5
Cs-137	5.17E+00	0-0.5
Cs-137	2.14E+03	0-0.5
Cs-137	3.50E+00	0-0.5
Cs-137	2.55E+00	0-0.5
Cs-137	1.66E+01	0-0.5

Table A-7. (continued).

Compound	ARA-23	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
Cs-137	1.05E+00	0-0.5
Cs-137	5.31E+00	0-0.5
Cs-137	4.87E+00	0-0.5
Cs-137	1.38E+01	0-0.5
Cs-137	5.67E+00	0-0.5
Cs-137	2.19E+01	0-0.5
Cs-137	7.72E+00	0-0.5
Cs-137	5.36E+00	0-0.5
Cs-137	3.60E-01	0-0.5
Cs-137	3.00E-01	0-0.5
Cs-137	1.81E+00	0-0.5
Cs-137	1.00E+00	0-0.5
Cs-137	2.99E+00	0-0.5
Cs-137	1.03E+00	0-0.5
Cs-137	3.49E+00	0-0.5
Cs-137	6.40E-01	0-0.5
Cs-137	5.60E+00	0-0.5
Cs-137	2.94E+00	0-0.5
Cs-137	1.32E+00	0-0.5
Cs-137	7.16E-01	0-0.5
Cs-137	5.20E-01	0-0.5
Cs-137	3.70E-01	0-0.5
Cs-137	3.70E-01	0-0.5
Cs-137	3.70E-01	0-0.5
Cs-137	1.70E+02	0-0.5
Cs-137	5.00E+00	0-0.5
Cs-137	3.00E+01	0-0.5
Cs-137	5.29E-01	0-0.5
Cs-137	6.10E-01	0-0.5
Cs-137	6.60E-01	0-0.5
Cs-137	3.90E-01	0-0.5

Table A-7. (continued).

Compound	ARA-23	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
Cs-137	1.38E+01	0-0.5
Cs-137	5.80E+00	0-0.5
Cs-137	3.08E+00	0-0.5
Cs-137	6.30E-01	0-0.5
Cs-137	1.89E+01	0-0.5
Cs-137	4.20E-01	0-0.5
Cs-137	9.10E-01	0-0.5
Cs-137	1.79E+01	0-0.5
Cs-137	3.24E+00	0-0.5
Cs-137	1.35E+00	0-0.5
Cs-137	2.63E+00	0-0.5
Cs-137	8.80E-01	0-0.5
Cs-137	6.00E-02	0-0.5
Cs-137	4.70E-01	0-0.5
Cs-137	4.20E-01	0-0.5
Cs-137	1.79E+01	0-0.5
Cs-137	1.93E+01	0-0.5
Cs-137	1.99E+00	0-0.5
Cs-137	5.31E+00	0-0.5
Cs-137	1.30E+00	0-0.5
Cs-137	1.15E+00	0-0.5
Cs-137	2.06E+01	0-0.5
Cs-137	3.85E+01	0-0.5
Cs-137	2.01E+01	0-0.5
Cs-137	5.97E+00	0-0.5
Cs-137	8.10E-01	0-0.5
Cs-137	1.92E+00	0-0.5
Cs-137	7.74E+00	0-0.5
Cs-137	6.90E-01	0-0.5
Cs-137	9.70E-01	0-0.5
Cs-137	1.78E+01	0-0.5

Table A-7. (continued).

Compound	ARA-23	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
Cs-137	9.16E+00	0-0.5
Cs-137	9.30E-01	0-0.5
Cs-137	1.21E+00	0-0.5
Cs-137	8.40E-01	0-0.5
Cs-137	4.45E-01	0-0.5
Cs-137	1.11E+00	0-0.5
Cs-137	1.90E+00	0-0.5
Cs-137	3.00E+00	0-0.5
Cs-137	9.90E-01	0-0.5
Cs-137	2.00E+00	0-0.5
Cs-137	7.40E+01	0-0.5
Cs-137	3.92E+01	0-0.5
Cs-137	5.98E+00	0-0.5
Cs-137	6.18E+00	0-0.5
Cs-137	1.20E+01	0-0.5
Cs-137	7.80E+00	0-0.5
Cs-137	4.30E+00	0-0.5
Cs-137	6.70E+00	0-0.5
Cs-137	3.30E-01	0-0.5
Cs-137	3.50E+00	0-0.5
Cs-137	8.90E-01	0-0.5
Cs-137	1.45E+00	0-0.5
Cs-137	7.61E-01	0-0.5
Cs-137	1.37E+01	0-0.5
Cs-137	7.71E+00	0-0.5
Cs-137	1.64E+02	0-0.5
Cs-137	8.87E+01	0-0.5
Cs-137	4.54E+01	0-0.5
Cs-137	1.18E+01	0-0.5
Cs-137	2.17E+00	0-0.5
Cs-137	1.09E+02	0-0.5

Table A-7. (continued).

Compound	ARA-23	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
Cs-137	7.82E+01	0-0.5
Cs-137	1.21E+01	0-0.5
Cs-137	7.62E+00	0-0.5
Cs-137	6.30E+00	0-0.5
Cs-137	1.99E+02	0-0.5
Cs-137	1.03E+02	0-0.5
Cs-137	1.20E+01	0-0.5
Cs-137	6.35E+00	0-0.5
Cs-137	1.20E+00	0-0.5
Cs-137	1.25E+00	0-0.5
Cs-137	8.00E-01	0-0.5
Cs-137	5.80E-01	0-0.5
Cs-137	7.70E-01	0-0.5
Cs-137	2.90E-01	0-0.5
Cs-137	6.00E+00	0-0.5
Cs-137	3.49E+00	0-0.5
Cs-137	9.90E-01	0-0.5
Cs-137	2.54E+02	0-0.5
Cs-137	4.21E+01	0-0.5
Cs-137	1.48E+02	0-0.5
Cs-137	8.00E-02	0-0.5
Cs-137	1.02E+00	0-0.5
Cs-137	9.07E+00	0-0.5
Cs-137	3.70E+00	0-0.5
Cs-137	4.80E+01	0-0.5
Cs-137	2.62E+02	0-0.5
Cs-137	6.30E-01	0-0.5
Cs-137	9.00E-02	0-0.5
Cs-137	4.90E-01	0-0.5
Cs-137	1.35E+01	0-0.5
Cs-137	1.34E+00	0-0.5

Table A-7. (continued).

Compound	ARA-23	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
Cs-137	7.30E-01	0-0.5
Cs-137	2.70E-01	0-0.5
Cs-137	5.90E-01	0-0.5
Cs-137	3.11E+01	0-0.5
Cs-137	1.06E+00	0-0.5
Cs-137	4.90E-01	0-0.5
Cs-137	1.61E+00	0-0.5
Cs-137	5.50E-01	0-0.5
Cs-137	2.20E+00	0-0.5
Cs-137	6.50E+01	0-0.5
Cs-137	5.20E+01	0-0.5
Cs-137	2.68E+01	0-0.5
Cs-137	6.60E-01	0-0.5
Cs-137	4.28E+00	0-0.5
Cs-137	1.13E+00	0-0.5
Cs-137	1.47E+00	0-0.5
Cs-137	1.86E+00	0-0.5
Cs-137	9.70E-01	0-0.5
Cs-137	1.76E-01	1-2
Cs-137	1.14E+00	1-2
Cs-137	2.46E+00	1-2
Cs-137	7.09E-01	1-2
Cs-137	7.65E-01	1-2
Cs-137	8.58E-01	1-2
Cs-137	2.83E+00	1-2
Cs-137	1.08E+00	1-2
Cs-137	9.93E+01	1-2
Cs-137	2.02E+00	1-2
Cs-137	6.77E-01	1-2
Cs-137	4.35E+00	1-2
Cs-137	1.96E-01	1-2

Table A-7. (continued).

Compound	ARA-23	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
Cs-137	3.12E-01	1-2
Cs-137	4.96E+00	1-2
Cs-137	6.68E-01	1-2
Cs-137	2.54E+00	1-2
Cs-137	2.71E-01	1-2
Cs-137	2.63E+00	1-2
Ra-226	1.82E+00	0-0.5
Ra-226	1.65E+00	0-0.5
Ra-226	2.04E+00	0-0.5
Ra-226	1.53E+00	0-0.5
Ra-226	1.46E+00	0-0.5
Ra-226	1.94E+00	0-0.5
Ra-226	2.47E+00	0-0.5
Ra-226	2.57E+00	0-0.5
Ra-226	1.19E+01	0-0.5
Ra-226	2.18E+00	0-0.5
Ra-226	3.06E+00	0-0.5
Ra-226	3.60E+00	0-0.5
Ra-226	2.88E+00	0-0.5
Ra-226	1.88E+00	0-0.5
Ra-226	3.03E+00	0-0.5
Ra-226	2.38E+00	0-0.5
Ra-226	2.93E+00	0-0.5
Ra-226	3.45E+00	0-0.5
Ra-226	2.73E+00	0-0.5
Ra-226	1.37E+00	1-2
Ra-226	1.94E+00	1-2
Ra-226	1.98E+00	1-2
Ra-226	2.46E+00	1-2
Ra-226	2.04E+00	1-2
Ra-226	2.59E+00	1-2

Table A-7. (continued).

Compound	ARA-23	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
Ra-226	1.92E+00	1-2
Ra-226	1.20E+00	1-2
Ra-226	2.66E+00	1-2
Ra-226	1.89E+00	1-2
Ra-226	1.78E+00	1-2
Ra-226	1.89E+00	1-2
Ra-226	3.05E+00	1-2
Ra-226	1.27E+00	1-2
Ra-226	3.03E+00	1-2
Ra-226	1.10E+00	1-2
Sr-90	1.33E+00	0-0.5
Sr-90	5.09E+00	0-0.5
Sr-90	2.10E+01	0-0.5
Sr-90	1.90E-01	0-0.5
Sr-90	2.30E-01	0-0.5
Sr-90	8.00E-01	0-0.5
Sr-90	2.70E-01	0-0.5
Sr-90	3.40E-01	0-0.5
Sr-90	4.99E+00	0-0.5
Sr-90	4.90E-01	0-0.5
Sr-90	3.70E-01	0-0.5
Sr-90	7.91E+00	0-0.5
Sr-90	1.40E+01	0-0.5
Sr-90	1.61E+01	0-0.5
Sr-90	1.80E+01	0-0.5
Sr-90	9.20E-01	0-0.5
Sr-90	1.40E+00	0-0.5
Sr-90	1.57E+00	0-0.5
Sr-90	1.80E+00	0-0.5
Sr-90	1.14E+00	0-0.5
Sr-90	3.80E+01	0-0.5

Table A-7. (continued).

Compound	ARA-23	
	Concentration (mg/kg or pCi/g)	Depth Range (ft)
Sr-90	2.00E-01	0-0.5
Sr-90	3.80E-01	0-0.5
Sr-90	6.00E-01	0-0.5
Sr-90	3.20E-01	0-0.5
Sr-90	1.28E+00	1-2
Sr-90	1.36E+00	1-2
Sr-90	4.66E+00	1-2
Th-230	1.53E+00	0-0.5
Th-230	1.41E+00	0-0.5
Th-230	1.20E+00	0-0.5
Th-230	1.25E+00	1-2
Th-230	1.19E+00	1-2
Th-230	1.27E+00	1-2
Th-230	1.25E+00	1-2
U-235	3.89E-02	0-0.5
U-235	4.69E-02	0-0.5
U-235	5.00E-02	0-0.5
U-235	1.50E-01	0-0.5
U-235	5.30E-02	0-0.5
U-235	1.22E-01	0-0.5
U-235	4.30E-02	0-0.5
U-235	5.30E-02	0-0.5
U-235	2.53E-02	1-2
U-235	2.51E-02	1-2

Table A-8. Site ARA-24 soil concentrations for risk assessment.

Compound	ARA-24 Concentration (mg/kg or pCi/g)	Depth Range (ft)
Pu-238	1.00E-02	0-0.5