Table B-24. Average soil concentrations (pCi/g) from 0 to 4 ft during the period year 0 to year 25.

COPC	ARA-01	ARA-02 Soils	ARA-02 Seepage Pit	ARA-03	ARA-12	ARA-16	ARA-23	ARA-24	PBF-10	PBF-12	PBF-16	PBF-21	PBF-22	PBF-26
Ag-108m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.27E+01	3.49E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Am-241	4.92E-02	0.00E+00	7.79E-03	0.00E+00	4.41E-01	0.00E+00	1.12E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.83E-01	0.00E+00
Co-60	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.86E+00	6.53E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.65E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137	1.16E+00	0.00E+00	8.67E-02	4.22E+00	1.01E+00	2.93E+01	7.76E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.84E-01	5.85E+00
Eu-152	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.91E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu-154	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.29E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Np-237	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pu-238	6.67E-03	0.00E+00	0.00E+00	0.00E+00	1.27E-01	0.00E+00	0.00E+00	9.08E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.40E-01	9.98E-03
Pu-239/240	1.29E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.95E-01	0.00E+00
Ra-226	3.06E+00	1.13E+00	3.26E-01	0.00E+00	0.00E+00	1.78E+00	1.50E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr-90	3.21E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.48E+01	5.58E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tc-99	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th-228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.13E-01	0.00E+00
Th-230	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.00E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.96E+00	0.00E+00
Th-232	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.74E+00	0.00E+00
U-234	0.00E+00	3.50E-01	4.07E-01	0.00E+00	1.16E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.96E+00	3.40E+00
U-235	4.27E-02	2.49E-02	2.92E-02	0.00E+00	0.00E+00	0.00E+00	3.73E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.40E+00
U-238	0.00E+00	0.00E+00	3.44E-01	0.00E+00	1.16E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E+00	3.40E+00

Table B-25. Average soil concentrations (pCi/g) from 0 to 6 in. during the period year 100 to year 125.

COPC	ARA-01	ARA-02 Soils	ARA-02 Seepage Pit	ARA-03	ARA-12	ARA-16	ARA-23	ARA-24	PBF-10	PBF-12	PBF-16	PBF-21	PBF-22	PBF-26
Ag-108m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.64E+01	8.07E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Am-241	6.20E-02	0.00E+00	0.00E+00	0.00E+00	1.67E-01	0.00E+00	1.15E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.60E-01	0.00E+00
Co-60	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.43E-05	3.35E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.50E-17	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137	1.17E-01	0.00E+00	0.00E+00	0.00E+00	1.68E-01	9.66E+00	2.24E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.40E-01	5.89E-01
Eu-152	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.67E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu-154	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.03E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Np-237	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pu-238	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.77E-02	0.00E+00	0.00E+00	4.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.75E-01	4.53E-03
Pu-239/240	2.20E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Ra-226	2.93E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.82E+00	3.45E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr-90	3.83E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.85E+00	1.67E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tc-99	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th-228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.02E-17	0.00E+00
Th-230	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.53E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.25E+00	0.00E+00
Th-232	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.53E+00	0.00E+00
U-234	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.20E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.23E+00	3.40E+00
U-235	6.29E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.24E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.40E+00
U-238	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.13E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E+00	3.40E+00

Table B-26. Average soil concentrations (pCi/g) from 0 to 4 ft during the period year 100 to year 125.

COPC	ARA-01	ARA-02 Soils	ARA-02 Seepage Pit	ARA-03	ARA-12	ARA-16	ARA-23	ARA-24	PBF-10	PBF-12	PBF-16	PBF-21	PBF-22	PBF-26
Ag-108m	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.90E+01	2.02E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Am-241	4.19E-02	0.00E+00	6.64E-03	0.00E+00	3.76E-01	0.00E+00	9.52E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.97E-01	0.00E+00
Co-60	0.00E+00	0.00E+00	0.00E+00	0.00E+00	7.50E-06	1.27E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-134	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.38E-17	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137	1.17E-01	0.00E+00	8.74E-03	4.25E-01	1.02E-01	2.95E+00	7.82E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.89E-02	5.89E-01
Eu-152	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.17E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu-154	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.01E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Np-237	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pu-238	3.03E-03	0.00E+00	0.00E+00	0.00E+00	5.77E-02	0.00E+00	0.00E+00	4.12E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.45E-01	4.53E-03
Pu-239/240	1.29E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.94E-01	0.00E+00
Ra-226	2.93E+00	1.09E+00	3.12E-01	0.00E+00	0.00E+00	1.70E+00	1.44E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr-90	2.84E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.20E+00	4.94E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tc-99	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th-228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-17	0.00E+00
Th-230	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.99E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.96E+00	0.00E+00
Th-232	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.74E+00	0.00E+00
U-234	0.00E+00	3.50E-01	4.07E-01	0.00E+00	1.16E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.96E+00	3.40E+00
U-235	4.27E-02	2.49E-02	2.92E-02	0.00E+00	0.00E+00	0.00E+00	3.73E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.40E+00
U-238	0.00E+00	0.00E+00	3.44E-01	0.00E+00	1.16E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.34E+00	3.40E+00

Table B-27. Average soil concentration (pCi/g) from 0 to 10 ft. during the period year 100 to year 130.

COPC	ARA-01	ARA-02 Soils	ARA-02 Seepage Pit	ARA-03	ARA-12	ARA-16	ARA-23	ARA-24	PBF-10	PBF-12	PBF-16	PBF-21	PBF-22	PBF-26
Ag-108m	0.00E+00	0.00E+00	1.23E-02	0.00E+00	1.11E+01	7.96E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Am-241	4.17E-02	0.00E+00	2.29E-01	0.00E+00	2.85E-01	0.00E+00	3.78E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.42E-01	0.00E+00
Co-60	0.00E+00	0.00E+00	4.62E-06	0.00E+00	3.80E-06	6.03E-08	0.00E+00	0.00E+00	0.00E+00	3.47E-08	0.00E+00	5.98E-07	0.00E+00	0.00E+00
Cs-134	0.00E+00	0.00E+00	9.75E-18	0.00E+00	0.00E+00	1.23E-17	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137	1.11E-01	0.00E+00	1.09E+00	3.77E-01	6.09E-02	2.32E+00	2.98E-01	0.00E+00	3.82E-01	3.39E-01	0.00E+00	2.09E-01	5.20E-02	5.60E-01
Eu-152	0.00E+00	0.00E+00	5.14E-03	0.00E+00	0.00E+00	4.23E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu-154	0.00E+00	0.00E+00	3.08E-05	0.00E+00	0.00E+00	7.04E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Np-237	0.00E+00	0.00E+00	7.12E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pu-238	2.97E-03	0.00E+00	1.32E-02	0.00E+00	5.66E-02	0.00E+00	0.00E+00	4.04E-03	0.00E+00	3.64E-01	0.00E+00	0.00E+00	2.15E-01	4.45E-03
Pu-239/240	1.29E-01	0.00E+00	3.68E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.33E-01	0.00E+00
Ra-226	2.93E+00	1.63E+00	9.13E+00	0.00E+00	0.00E+00	1.58E+00	5.75E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr-90	2.69E-02	4.28E-01	1.36E+00	0.00E+00	0.00E+00	1.39E+00	1.88E-01	0.00E+00	0.00E+00	2.01E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tc-99	0.00E+00	0.00E+00	6.07E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th-228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.37E-15	0.00E+00
Th-230	0.00E+00	0.00E+00	4.10E-01	0.00E+00	0.00E+00	0.00E+00	2.80E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.46E+00	0.00E+00
Th-232	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.94E+00	0.00E+00
U-234	0.00E+00	9.02E-01	1.26E+02	0.00E+00	1.02E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.60E+00	0.00E+00	6.52E-01	2.40E+00	3.40E+00
U-235	4.27E-02	3.78E-02	1.20E+01	0.00E+00	0.00E+00	0.00E+00	1.49E-02	0.00E+00	0.00E+00	2.20E-01	0.00E+00	3.00E-02	0.00E+00	3.40E+00
U-238	0.00E+00	0.00E+00	1.94E+01	0.00E+00	1.06E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.70E-01	0.00E+00	5.84E-01	1.61E+00	3.40E+00

Table B-28. Concentration of contaminants of potential concern in homegrown produce (mg/kg or pCi/g).

COPC	ARA-01	ARA-02 Soils	ARA-02 Seepage Pit	ARA-03	ARA-12	ARA-16	ARA-23	ARA-24	PBF-10	PBF-12	PBF-16	PBF-21	PBF-22	PBF-26
Aroclor-1242	4.97E-09	4.97E-09	4.03E-02	4.97E-09	0.00E+00	4.97E-09	4.97E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Aroclor-1254	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.23E-08	1.11E-01
Bis(2-ethylhexyl)phthalate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Diethylphthalate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Diethylether	3.72E-07	3.72E-07	1.95E-04	3.72E-07	0.00E+00	3.72E-07	3.72E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Methylmethacrylate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Antimony	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Arsenic	3.32E-02	5.40E-03	1.07E-02	4.00E-05	0.00E+00	4.00E-05	4.00E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.26E-02	1.20E-02
Barium	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cadmium	4.04E-05	4.04E-05	5.14E-01	4.04E-05	0.00E+00	4.04E-05	4.04E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chromium(III)	1.46E-06	1.46E-06	3.57E-03	1.46E-06	3.03E-03	1.46E-06	1.46E-06	1.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chromium(VI)	1.46E-06	1.46E-06	3.57E-03	1.46E-06	3.03E-03	1.46E-06	1.46E-06	1.08E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cobalt	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Copper	1.27E-03	1.27E-03	6.17E+01	1.27E-03	0.00E+00	1.27E-03	1.27E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead	3.68E-01	1.27E-05	1.56E+00	1.27E-05	7.23E-01	1.27E-05	1.27E-05	1.97E-04	0.00E+00	0.00E+00	4.27E-01	0.00E+00	1.87E-01	3.18E-01
Manganese	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.28E+02	0.00E+00	0.00E+00	1.99E-01	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.76E+02	4.02E-01
Mercury	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nickel	5.63E-05	5.63E-05	1.86E+01	5.63E-05	0.00E+00	5.63E-05	5.63E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Selenium	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Silver	1.85E-07	1.85E-07	5.43E-02	1.85E-07	0.00E+00	1.85E-07	1.85E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium	4.62E-04	6.22E-06	6.22E-06	6.22E-06	0.00E+00	6.22E-06	6.22E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Vanadium	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Zinc	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chloride	5.69E-07	5.69E-07	5.69E-07	5.69E-07	0.00E+00	4.08E-04	5.69E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	4.83E-03	0.00E+00	0.00E+00
Orthophosphate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.13E-03	0.00E+00	0.00E+00
Sulfate	2.64E-06	2.64E-06	2.64E-06	2.64E-06	0.00E+00	1.89E-03	2.64E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.63E-03	0.00E+00	0.00E+00
Ag-108m	4.15E-15	4.15E-15	2.63E-07	4.15E-15	2.38E-04	1.70E-07	4.15E-15	2.30E-10	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Am-241	5.15E-06	1.77E-12	2.82E-05	1.77E-12	3.52E-05	1.77E-12	4.66E-07	5.57E-12	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.45E-05	2.07E-11

Table B-28. (continued).

COPC	ARA-01	ARA-02 Soils	ARA-02 Seepage Pit	ARA-03	ARA-12	ARA-16	ARA-23	ARA-24	PBF-10	PBF-12	PBF-16	PBF-21	PBF-22	PBF-26
Co-60	9.89E-11	9.89E-11	1.02E-09	9.89E-11	8.06E-09	1.11E-10	9.89E-11	7.29E-09	5.26E-13	7.47E-12	0.00E+00	3.88E-10	0.00E+00	0.00E+00
Cs-134	1.02E-14	1.02E-14	1.02E-14	1.02E-14	0.00E+00	1.02E-14	1.02E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137	2.04E-04	1.59E-08	2.00E-03	6.89E-04	1.11E-04	4.23E-03	5.44E-04	1.45E-10	6.98E-04	6.20E-04	0.00E+00	3.82E-04	9.50E-05	1.02E-03
Eu-152	2.51E-14	2.51E-14	9.19E-08	2.51E-14	0.00E+00	7.57E-09	2.51E-14	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu-154	2.31E-15	2.31E-15	3.57E-10	2.31E-15	0.00E+00	8.15E-11	2.31E-15	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Np-237	4.28E-11	4.28E-11	7.43E-04	4.28E-11	0.00E+00	4.28E-11	4.28E-11	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pu-238	1.45E-07	1.44E-15	6.43E-07	1.44E-15	2.75E-06	1.44E-15	1.44E-15	1.97E-07	1.08E-14	1.77E-05	0.00E+00	0.00E+00	1.05E-05	2.16E-07
Pu-239/240	1.32E-04	3.62E-13	3.77E-04	3.62E-13	0.00E+00	3.62E-13	3.62E-13	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.39E-04	1.41E-11
Ra-226	9.19E-04	5.11E-04	2.86E-03	7.49E-07	0.00E+00	4.96E-04	1.81E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr-90	3.02E-04	4.77E-03	1.52E-02	1.46E-06	0.00E+00	1.54E-02	2.09E-03	0.00E+00	5.50E-11	2.24E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Tc-99	9.57E-05	9.57E-05	5.02E+01	9.57E-05	0.00E+00	9.57E-05	9.57E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th-228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	9.59E-10	9.59E-10
Th-230	4.24E-08	4.24E-08	1.02E-02	4.24E-08	0.00E+00	4.24E-08	6.99E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	6.14E-02	3.99E-08
Th-232	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	5.05E-02	3.23E-08
U-234	9.91E-09	9.06E-04	1.27E-01	9.91E-09	1.02E-03	9.91E-09	9.91E-09	7.22E-09	2.01E-10	3.62E-03	0.00E+00	6.55E-04	2.41E-03	3.42E-03
U-235	4.30E-05	3.81E-05	1.21E-02	0.00E+00	0.00E+00	0.00E+00	1.50E-05	0.00E+00	1.23E-11	2.22E-04	0.00E+00	3.02E-05	1.15E-09	3.43E-03
U-238	3.33E-09	3.33E-09	1.95E-02	3.33E-09	1.07E-03	3.33E-09	3.33E-09	7.52E-09	1.51E-11	2.72E-04	0.00E+00	5.88E-04	1.62E-03	3.43E-03

Table B-29. Summary of data for dermal exposure from soil.

COPC	Inorganic, PCB[a], VOC[b], or SVOC[c]	Sites of Contaminant	Vapor Pressure (mm Hg)	Assumed ABS (%)	Available Toxicity Data? (yes or no)
Arsenic	Inorganic	ARA-01 ARA-02 PBF-22 PBF-26	NA	3.2	Yes
Aroclor-1242	PCB	ARA-02	NA	6	Yes
Aroclor-1254	PCB	PBF-26	NA	6	Yes

a. PCB = polychlorinated biphenyl

b. VOC = volatile organic contaminant

c. SVOC = semi-volatile organic contaminant.

Table B-30. Calculated residential exposure scenario risks and hazard quotients – dermal absorption from soil.

Site	Contaminant	0 to 10 ft Average Soil Concentration (mg/kg)	Absorbed Dose (mg/kg-day)	Oral Slope Factor $(mg/kg\text{-}day)^{-1}$	Oral Reference Dose (mg/kg-day)	Risk	Hazard Quotient
ARA-01	Arsenic	22.1	6.23E-06	1.5E+00	3E-04	2E-04	1E+00
ARA-02 Soils	Arsenic	3.49	1.01E-06	1.5E+00	3E-04	3E-05	2E-01
ARA-02 Seepage Pit	Arsenic	8.87	2.00E-06	1.5E+00	3E-04	6E-05	3E-01
PBF-22	Arsenic	8.11	2.29E-06	1.5E+00	3E-04	7E-05	4E-01
PBF-26	Arsenic	7.70	2.17E-06	1.5E+00	3E-04	7E-05	3E-01
ARA-02 Seepage Pit	Aroclor-1242	1.80	9.51E-07	4.0E-01	2E-05	8E-06	2E+00
PBF-26	Aroclor-1254	13.0	6.87E-06	4.0E-01	2E-05	5E-05	2E+01
ARA-02 Seepage Pit	Diethylether	0.0041	3.61E-09	NA	2E-01	NA	8E-07

Table B-31. Calculated occupational exposure scenario risks and hazard quotients – dermal absorption from soil.

Site	Contaminant	0 to 6 in. Average Soil Concentration (mg/kg)	Absorbed Dose (mg/kg-day)	Oral Slope Factor $(mg/kg\text{-}day)^{-1}$	Oral Reference Dose (mg/kg-day)	Risk	Hazard Quotient
ARA-01	Arsenic	22.1	6.23E-06	1.5E+00	3E-04	7E-05	5E-01
ARA-02 Soils	Arsenic	0.00	1.01E-06	1.5E+00	3E-04	0E+00	0E+00
ARA-02 Seepage Pit	Arsenic	0.00	2.00E-06	1.5E+00	3E-04	0E+00	0E+00
PBF-22	Arsenic	8.11	2.29E-06	1.5E+00	3E-04	2E-05	1E-01
PBF-26	Arsenic	0.00	2.17E-06	1.5E+00	3E-04	0E+00	0E+00
ARA-02 Seepage Pit	Aroclor-1242	0.00	9.51E-07	4.0E-01	2E-05	0E+00	0E+00
PBF-26	Aroclor-1254	13.0	6.87E-06	4.0E-01	2E-05	2E-05	8E+00
ARA-02 Seepage Pit	Diethylether	0.00	3.61E-09	NA	2E-01	NA	0E+00

Table B-32. Air pathway contaminant concentrations.

	Group 1		Group 2		Group 3		Group 4		Group 5		Group 6	
COPC	Particulate (mg/m^3 or pCi/m^3)	Volatile (mg/m^3)	Particulate (mg/m^3 or pCi/m^3)	Volatile (mg/m^3)	Particulate (mg/m^3 or pCi/m^3)	Volatile (mg/m^3)	Particulate (mg/m^3 or pCi/m^3)	Volatile (mg/m^3)	Particulate (mg/m^3 or pCi/m^3)	Volatile (mg/m^3)	Particulate (mg/m^3 or pCi/m^3)	Volatile (mg/m^3)
Aroclor-1242	8.75E-04	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----
Aroclor-1254	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	1.04E+01	----
Bis(2-ethylhexyl)phthalate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Diethylphthalate	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----
Diethylether	1.99E-06	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----
Methylmethacrylate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Antimony	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----
Arsenic	3.92E-01	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	7.78E+00	----
Barium	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----
Cadmium	6.32E-03	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----
Chromium(III)	1.03E-01	----	2.26E+01	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----
Chromium(VI)	1.03E-01	----	2.26E+01	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----
Cobalt	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----
Copper	1.64E-01	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----
Lead	5.36E-01	----	7.09E+00	----	0.00E+00	----	3.20E+01	----	0.00E+00	----	2.18E+01	----
Manganese	0.00E+00	----	4.76E+01	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	6.09E+01	----
Mercury	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----
Nickel	2.26E-01	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----
Selenium	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----
Silver	3.17E-02	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----
Thallium	6.22E-01	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----
Vanadium	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----
Zinc	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----
Chloride	4.56E-05	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	1.46E+00	----	0.00E+00	----
Orthophosphate	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	1.55E+00	----	0.00E+00	----
Sulfate	2.12E-04	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	2.91E+00	----	0.00E+00	----

COPC	Group 1 Particulate (mg/m³ or pCi/m³)	Group 1 Volatile (mg/m³)	Group 2 Particulate (mg/m³ or pCi/m³)	Group 2 Volatile (mg/m³)	Group 3 Particulate (mg/m³ or pCi/m³)	Group 3 Volatile (mg/m³)	Group 4 Particulate (mg/m³ or pCi/m³)	Group 4 Volatile (mg/m³)	Group 5 Particulate (mg/m³ or pCi/m³)	Group 5 Volatile (mg/m³)	Group 6 Particulate (mg/m³ or pCi/m³)	Group 6 Volatile (mg/m³)
Ag-108m	1.65E-05	----	2.72E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----
Am-241	5.46E-03	----	4.49E-02	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	1.06E-01	----
Co-60	4.70E-03	----	1.03E+00	----	2.40E-03	----	0.00E+00	----	1.24E+00	----	0.00E+00	----
Cs-134	3.79E-05	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----
Cs-137	4.06E+00	----	1.10E-01	----	5.23E+00	----	0.00E+00	----	2.87E+00	----	6.30E+00	----
Eu-152	8.45E-04	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----
Eu-154	1.20E-04	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----
Np-237	3.46E-05	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----
Pu-238	1.44E-04	----	2.70E-02	----	3.00E-02	----	0.00E+00	----	0.00E+00	----	1.15E-01	----
Pu-239/240	2.42E-03	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	4.66E-02	----
Ra-226	6.53E-01	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----
Sr-90	2.96E+00	----	0.00E+00	----	1.07E-02	----	0.00E+00	----	0.00E+00	----	0.00E+00	----
Tc-99	2.95E-03	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----
Th-228	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	2.73E-16	----
Th-230	2.75E-01	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	4.89E-01	----
Th-232	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	3.86E-01	----
U-234	6.24E-02	----	1.33E-01	----	1.20E-01	----	0.00E+00	----	6.52E-01	----	3.20E+00	----
U-235	2.12E-02	----	0.00E+00	----	7.33E-03	----	0.00E+00	----	3.00E-02	----	2.72E+00	----
U-238	9.43E-03	----	1.39E-01	----	8.99E-03	----	0.00E+00	----	5.84E-01	----	3.04E+00	----

Note: "----" = not applicable.

Table B-33. Concentration of contaminants of potential concern in groundwater from surface soil in 100 years (mg/L or pCi/L).

COPC	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
Aroclor-1242	8.33E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Aroclor-1254	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.60E-07
Bis(2-ethylhexyl)phthalate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Diethylphthalate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Diethylether	1.03E-07	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Methylmethacrylate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Antimony	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Arsenic	3.62E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.80E-03
Barium	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cadmium	1.44E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chromium(III)	1.15E-03	8.46E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chromium(VI)	1.15E-03	8.46E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cobalt	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Copper	1.16E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Lead	2.18E-05	3.38E-04	0.00E+00	3.03E-04	0.00E+00	2.16E-04
Manganese	0.00E+00	4.53E-03	0.00E+00	0.00E+00	0.00E+00	9.15E-03
Mercury	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Nickel	3.21E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Selenium	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Silver	5.00E-06	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Thallium	6.42E-03	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Vanadium	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Zinc	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Chloride	2.35E-06	0.00E+00	0.00E+00	0.00E+00	7.80E-04	0.00E+00
Orthophosphate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	8.33E-04	0.00E+00
Sulfate	1.09E-05	0.00E+00	0.00E+00	0.00E+00	1.56E-03	0.00E+00
Ag-108m	2.60E-09	1.44E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Am-241	2.00E-07	6.31E-07	0.00E+00	0.00E+00	0.00E+00	2.35E-06
Co-60	6.52E-06	4.81E-04	3.47E-08	0.00E+00	1.77E-05	0.00E+00
Cs-134	1.08E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Cs-137	1.15E-04	1.05E-06	1.55E-06	0.00E+00	1.17E-06	2.61E-06
Eu-152	1.85E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Eu-154	2.63E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Np-237	5.97E-08	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Pu-238	3.95E-10	9.81E-08	2.97E-09	0.00E+00	0.00E+00	5.32E-07
Pu-239/240	5.99E-09	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.34E-07
Ra-226	3.14E-02	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Sr-90	1.73E-03	0.00E+00	6.53E-08	0.00E+00	0.00E+00	0.00E+00
Tc-99	1.52E-04	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Th-228	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	1.29E-03
Th-230	3.92E-05	0.00E+00	0.00E+00	0.00E+00	0.00E+00	3.69E-05
Th-232	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	2.91E-05
U-234	1.40E-04	1.02E-04	2.84E-06	0.00E+00	1.53E-05	5.92E-04
U-235	0.00E+00	0.00E+00	1.74E-07	0.00E+00	7.01E-07	1.62E-05
U-238	4.70E-05	1.06E-04	2.13E-07	0.00E+00	1.36E-05	4.01E-04

Table B-34. Concentrations of volatiles in air from indoor water use (mg/m^3).

COPC	Group 1	Group 2	Group 3	Group 4	Group 5	Group 6
Bis(2-ethylhexyl) phthalate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00
Methylmethacrylate	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00	0.00E+00

Table B-35. Soil ingestion intake factor equation for the occupational exposure scenario.

$$\text{Intake factor} = \frac{C_{air} * IR * FI * EF * ED * CF}{BW * AT}$$

		Parameter	Value[a]
C_{soil}	=	contaminant concentration in soil (mg/kg or pCi/g)	Contaminant dependent
IR	=	ingestion rate (mg/day)	50
FI	=	fraction ingested from contaminated source	1
EF	=	exposure frequency (day/year)	250
ED	=	exposure duration (year)	25
CF	=	conversion factor (kg/mg)	
		nonradionuclide	1E-06
		radionuclide	1E-03
BW[b]	=	body weight (kg)	70
AT[b]	=	averaging time (day)	
		noncarcinogenic	9.13E+03
		carcinogenic	2.55E+04

a. The source of the values is DOE-ID (1994).

b. The equation for radionuclides does not include the denominator (BW*AT).

Table B-36. External exposure intake factor equation for the occupational exposure scenario.

$$\text{Exposure Factor} = C_{soil} * ET * EF * ED * CF$$

		Parameter	Value[a]
C_{soil}	=	Contaminant concentration in soil (pCi/g)	Contaminant dependent
ET	=	Exposure time (hour/day)	8
EF	=	Exposure frequency (day/year)	250
ED	=	Exposure duration (year)	25
CF	=	Conversion factor (year/hour)	1.14E-04

a. The source of the values is DOE-ID (1994).

Table B-37. Inhalation of fugitive dust intake factor equation for the occupational exposure scenario.

$$\text{Intake factor} = \frac{C_{air} * IR * EF * ET * ED}{BW * AT}$$

		Parameter	Value[a]
C_{air}	=	contaminant concentration in air (mg/m^3 or pCi/m^3)	Contaminant dependent
IR	=	inhalation rate (m^3/hour)	8.3E-01
ED	=	exposure duration (year)	25
ET	=	exposure time (hour/day)	8
EF	=	exposure frequency (day/year)	250
BW[b]	=	body weight (kg)	70
AT[b]	=	averaging time (day)	
		noncarcinogenic	9.13E+03
		carcinogenic	2.55E+04

a. The source of the values is DOE-ID (1994).

b. The equation for radionuclides does not include the denominator (BW*AT).

Table B-38. Inhalation of volatiles intake factor equation for the occupational exposure scenario.

$$\text{Intake factor} = \frac{C_{air} * IR * EF * ET * ED}{BW * AT}$$

		Parameter	Value[a]
C_{air}	=	contaminant concentration in air (mg/m^3)	Contaminant dependent
IR	=	inhalation rate (m^3/hour)	8.3E-01
EF	=	exposure frequency (day/year)	250
ED	=	exposure duration (year)	25
ET	=	exposure time (hour/day)	8
BW[b]	=	body weight (kg)	70
AT[b]	=	averaging time (day)	
		noncarcinogenic	9.13E+03
		carcinogenic	2.55E+04

a. The source of the values is DOE-ID (1994).
b. The equation for radionuclides does not include the denominator (BW*AT).

Table B-39. Soil ingestion intake factor equation for the future residential exposure scenario.

$$\text{Intake factor} = \left(\frac{C_{soil} * FI * EF * CF}{AT}\right) * \left(\frac{IR_{adult} * ED_{adult}}{BW_{adult}} + \frac{IR_{child} * ED_{child}}{BW_{child}}\right)$$

		Parameter	Value[a]	
			Adult	Child
C_{soil}	=	contaminant concentration in air (mg/kg or pCi/g)	Contaminant dependent	Contaminant dependent
IR	=	ingestion rate (mg/day)	100	200
FI	=	fraction ingested from contaminated source	1	1
EF	=	exposure frequency (day/year)	350	350
ED	=	exposure duration (year)	24	6
CF	=	conversion factor (kg/mg)		
		nonradionuclide	10^{-6}	1E-06
		radionuclide	10^{-3}	1E-03
BW[b]	=	body weight (kg)	70	15
AT[b]	=	averaging time (day)		
		noncarcinogenic	1.10E+04	1.10E+04
		carcinogenic	2.55E+04	2.55E+04

a. The source of the values is DOE-ID (1994).
b. The equation for radionuclides does not include the denominator (BW*AT).

Table B-40. Homegrown produce ingestion intake factor equation for the future residential exposure scenario.

$$\text{Intake factor} = \frac{C_{produce} * IR * EF * ED * CF}{AT}$$

		Parameter	Value[a]
$C_{produce}$	=	Contaminant concentration in homegrown fruits and vegetables (mg/kg or pCi/g)	Contaminant dependent
IR[b]	=	Ingestion rate (g/kg-day or g/day)[c]	2.76E-01 g/kg-day (nonradionuclide) 1.67E+01 g/day (radionuclide)
EF	=	Exposure frequency (day/year)	350
ED	=	Exposure duration (year)	30
CF	=	Conversion factor	10^{-3} kg/g (non-radionuclide) 1 (radionuclide)
AT[c]	=	Averaging time (day)	
		Noncarcinogenic	1.10E+04
		Carcinogenic	2.55E+04

a. Values from DOE-ID (1994).
b. See LMITCO (1996) for derivation of these ingestion rates.
c. Equation for radionuclide does not include denominator (AT).

Table B-41. External exposure intake factor equation for the future residential exposure scenario.

$$\text{Intake Factor} = C_{soil} * ET * EF * ED * CF$$

		Parameter	Value [a]
C_{soil}	=	contaminant concentration (pCi/g)	Contaminant dependent
ET	=	exposure time (hour/day)	24
EF	=	exposure frequency (day/year)	350
ED	=	exposure duration (year)	30
CF	=	conversion factor (year/hour)	1.14E-04

a. The source of the values is DOE-ID (1994).

Table B-42. Inhalation of fugitive dust intake factor equation for the future residential exposure scenario.

$$\text{Intake factor} = \frac{C_{air} * IR * EF * ET * ED}{BW * AT}$$

		Parameter	Value[a]
C_{air}	=	contaminant concentration in air (mg/m^3 or pCi/m^3)	Contaminant dependent
IR	=	inhalation rate (m^3/hour)	8.3E-01
EF	=	exposure frequency (days/year)	350
ED	=	exposure duration (year)	30
ET	=	exposure time (hour/day)	24
BW[b]	=	body weight (kg)	70
AT[b]	=	averaging time (day)	
		noncarcinogenic	1.10E+04
		carcinogenic	2.55E+04

a. The source of the value is DOE-ID (1994).

b. The equation for radionuclides does not include the denominator (BW*AT).

Table B-43. Inhalation of volatiles intake factor equation for the future residential exposure scenario.[a]

$$\text{Intake factor} = \frac{C_{air} * IR * EF * ED * ET}{BW * AT}$$

		Parameter	Value[a]
C_{air}	=	Contaminant concentration in air (mg/m^3)	Contaminant dependent
IR	=	inhalation rate (m^3/hour)	8.3E-01
EF	=	exposure frequency (day/year)	350
ED	=	exposure duration (year)	30
ET	=	exposure time (hour/day)	24
BW[b]	=	body weight (kg)	70
AT[b]	=	averaging time (day)	
		noncarcinogenic	1.10E+04
		carcinogenic	2.55E+04

a. The same equation is used to estimate the inhalation of water vapors from indoor water use.

b. The source of the values is DOE-ID (1994).

c. The equation for radionuclides does not include the denominator (BW*AT).

Table B-44. Inhalation of groundwater intake factor equation for the future residential exposure scenario.

$$\text{Intake factor} = \frac{C_{air} * IR * EF * ET * ED}{BW * AT}$$

		Parameter	Value[a]
C_{air}	=	Contaminant concentration in air (mg/L or pCi/L)	Contaminant dependent
IR	=	inhalation rate (m^3/hr)	8.3E-01
EF	=	exposure frequency (day/year)	350
ED	=	exposure duration (year)	30
ET	=	exposure time (hr/day)	24
BW[b]	=	body weight (kg)	70
AT[b]	=	averaging time (day)	
		noncarcinogenic	1.10E+04
		carcinogenic	2.55E+04

a. The source of the values is DOE-ID (1994).

b. The equation for radionuclides does not include denominator (BW*AT).

Table B-45. Ingestion of groundwater intake factor equation for the future residential exposure scenario.

$$\text{Intake factor} = \frac{C_w * IR * EF * ED * FI}{BW * AT}$$

Parameter			Value[a]
C_w	=	Contaminant concentration in groundwater (mg/L of pCi/L)	Contaminant dependent
IR	=	Intake rate (L/day)	2
EF	=	Exposure frequency (day/year)	350
ED	=	Exposure duration (year)	30
FI	=	Fraction ingested from contaminated source	1
BW[b]	=	Body weight (kg)	70
AT[b]	=	Averaging time (day)	
		Noncarcinogenic	1.10E+04
		Carcinogenic	2.55E+04

a. The source of the value is DOE-ID (1994).

b. The equation for radionuclides does not include the denominator (BW * AT).

Table B-46. Dermal exposure to groundwater intake factor equation for the future residential exposure scenario.

$$\text{Intake factor} = \frac{C_w * SA * PC * ET * EF * ED * CF}{BW * AT}$$

		Parameter	Value[a]
C_w	=	Contaminant concentration in water (mg/L)	Contaminant dependent
SA	=	Skin surface area available for contact (cm^2)	17,000[b]
PC	=	Chemical specific dermal permeability constant (cm/hour)	Contaminant dependent
ET	=	Exposure time (hours/event)	2.5E-01[b]
EF	=	Exposure frequency (events/year)	350
ED	=	Exposure duration (year)	30
CF	=	Volumetric conversion factor for water (1L/1000 cm^3)	1E-03
BW[c]	=	Body weight (kg)	70
AT[c]	=	Averaging time (day)	
		Noncarcinogenic	1.10E+04
		Carcinogenic	2.55E+04

a. The source of the value is DOE-ID (1994) except as indicated.

b. The source of the value is EPA (1992).

c. The equation for radionuclides does not include the denominator (BW*AT).

Table B-47. Intakes (carcinogenic)—current worker at year 0, ingestion of soil (mg/kg-day or pCi).

COPC	ARA-01	ARA-02 Soils	ARA-02 Seepage Pit	ARA-03	ARA-12	ARA-16	ARA-23	ARA-24	PBF-10	PBF-12	PBF-16	PBF-21	PBF-22	PBF-26
Aroclor-1242	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Aroclor-1254	----	----	----	----	----	----	----	----	----	----	----	----	----	2.27E-06
Bis(2-ethylhexyl)phthalate	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Diethylphthalate	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Diethylether	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Methylmethacrylate	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Antimony	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Arsenic	3.86E-06	----	----	----	----	----	----	----	----	----	----	----	1.17E-06	----
Barium	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Cadmium	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Chromium(III)	----	----	----	----	8.19E-05	----	----	----	----	----	----	----	----	----
Chromium(VI)	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Cobalt	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Copper	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Lead	4.42E-06	----	----	----	2.76E-05	----	----	----	----	----	5.59E-06	----	3.18E-06	7.51E-06
Manganese	----	----	----	----	6.67E-05	----	----	----	----	----	----	----	6.83E-05	----
Mercury	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Nickel	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Selenium	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Silver	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Thallium	6.52E-06	----	----	----	----	----	----	----	----	----	----	----	----	----
Vanadium	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Zinc	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Chloride	----	----	----	----	----	2.24E-07	----	----	----	----	----	----	----	----
Orthophosphate	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Sulfate	----	----	----	----	----	1.04E-06	----	----	----	----	----	----	----	----
Ag-108m	----	----	----	----	1.96E+04	4.35E+01	----	----	----	----	----	----	----	----

Table B-47. (continued).

COPC	ARA-01	ARA-02 Soils	ARA-02 Seepage Pit	ARA-03	ARA-12	ARA-16	ARA-23	ARA-24	PBF-10	PBF-12	PBF-16	PBF-21	PBF-22	PBF-26
Am-241	2.28E+01	----	----	----	6.13E+01	----	4.23E+00	----	----	----	----	----	2.79E+02	----
Co-60	----	----	----	----	2.31E+03	5.40E+01	----	----	----	----	----	----	----	----
Cs-134	----	----	----	----	----	7.06E+00	----	----	----	----	----	----	----	----
Cs-137	3.64E+02	----	----	----	5.21E+02	3.00E+04	6.94E+03	----	----	----	----	----	4.35E+02	1.83E+03
Eu-152	----	----	----	----	----	2.39E+02	----	----	----	----	----	----	----	----
Eu-154	----	----	----	----	----	6.61E+01	----	----	----	----	----	----	----	----
Np-237	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Pu-238	----	----	----	----	3.97E+01	----	----	2.84E+00	----	----	----	----	2.58E+02	3.12E+00
Pu-239/240	6.90E+01	----	----	----	----	----	----	----	----	----	----	----	----	----
Ra-226	9.57E+02	----	----	----	----	1.25E+03	1.13E+03	----	----	----	----	----	----	----
Sr-90	1.35E+02	----	----	----	----	2.06E+04	5.88E+03	----	----	----	----	----	----	----
Tc-99	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Th-228	----	----	----	----	----	----	----	----	----	----	----	----	5.44E+01	----
Th-230	----	----	----	----	----	----	4.78E+02	----	----	----	----	----	1.02E+03	----
Th-232	----	----	----	----	----	----	----	----	----	----	----	----	4.78E+02	----
U-234	----	----	----	----	3.75E+02	----	----	----	----	----	----	----	1.01E+03	1.06E+03
U-235	1.97E+01	----	----	----	----	----	3.87E+01	----	----	----	----	----	----	1.06E+03
U-238	----	----	----	----	3.53E+02	----	----	----	----	----	----	----	3.94E+02	1.06E+03

Note: "----" = not applicable.

Table B-48. Intakes (carcinogenic)—current worker at year 0, external radiation exposure (pCi-year/g).

COPC	ARA-01	ARA-02 Soils	ARA-02 Seepage Pit	ARA-03	ARA-12	ARA-16	ARA-23	ARA-24	PBF-10	PBF-12	PBF-16	PBF-21	PBF-22	PBF-26
Ag-108m	----	----	----	----	1.86E+02	1.99E-01	----	----	----	----	----	----	----	----
Am-241	2.80E-01	----	4.44E-02	----	2.51E+00	----	6.37E-02	----	----	----	----	----	3.32E+00	----
Co-60	----	----	----	----	2.20E+01	3.72E-01	----	----	----	----	----	----	----	----
Cs-134	----	----	----	----	----	3.22E-02	----	----	----	----	----	----	----	----
Cs-137	6.64E+00	----	4.94E-01	2.41E+01	5.77E+00	1.67E+02	4.42E+01	----	----	----	----	----	3.90E+00	3.34E+01
Eu-152	----	----	----	----	----	1.09E+00	----	----	----	----	----	----	----	----
Eu-154	----	----	----	----	----	3.01E-01	----	----	----	----	----	----	----	----
Np-237	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Pu-238	3.80E-02	----	----	----	7.24E-01	----	----	5.17E-02	----	----	----	----	3.08E+00	5.69E-02
Pu-239/240	7.35E-01	----	----	----	----	----	----	----	----	----	----	----	1.11E+00	----
Ra-226	1.75E+01	6.46E+00	1.86E+00	----	----	1.01E+01	8.56E+00	----	----	----	----	----	----	----
Sr-90	1.83E+00	----	----	----	----	1.42E+02	3.18E+01	----	----	----	----	----	----	----
Tc-99	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Th-228	----	----	----	----	----	----	----	----	----	----	----	----	1.21E+00	----
Th-230	----	----	----	----	----	----	3.99E+00	----	----	----	----	----	1.69E+01	----
Th-232	----	----	----	----	----	----	----	----	----	----	----	----	9.92E+00	----
U-234	----	1.99E+00	2.32E+00	----	6.61E+00	----	----	----	----	----	----	----	1.69E+01	1.94E+01
U-235	2.43E-01	1.42E-01	1.66E-01	----	----	----	2.13E-01	----	----	----	----	----	----	1.94E+01
U-238	----	----	1.96E+00	----	6.61E+00	----	----	----	----	----	----	----	7.64E+00	1.94E+01

Note: "----" = not applicable.

Table B-49. Intakes (carcinogenic)—current worker at year 0, inhalation (mg/kg-day or pCi).

	Group 1		Group 2		Group 3		Group 4		Group 5		Group 6	
COPC	Fugitive Dust	Volatiles	Fugitive Dust	Volatiles	Fugitive Dust	Volatiles	Fugitive Dust	Volatiles	Fugitive Dust	Volatiles	Fugitive Dust	Volatiles
Aroclor-1242	----	----	----	----	----	----	----	----	----	----	----	----
Aroclor-1254	----	----	----	----	----	----	----	----	----	----	2.90E-09	----
Bis(2-ethylhexyl)phthalate	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00
Diethylphthalate	----	----	----	----	----	----	----	----	----	----	----	----
Diethylether	----	----	----	----	----	----	----	----	----	----	----	----
Methylmethacrylate	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00
Antimony	----	----	----	----	----	----	----	----	----	----	----	----
Arsenic	1.07E-10	----	----	----	----	----	----	----	----	----	3.72E-10	----
Barium	----	----	----	----				----	----	----	----	----
Cadmium	----	----	----	----	----	----	----	----	----	----	----	----
Chromium(III)	----	----	1.71E-08	----	----	----	----	----	----	----	----	----
Chromium(VI)	----	----	----	----	----	----	----	----	----	----	----	----
Cobalt	----	----	----	----	----	----	----	----	----	----	----	----
Copper	----	----	----	----	----	----	----	----	----	----	----	----
Lead	1.22E-10	----	5.76E-09	----	----	----	8.91E-09	----	----	----	1.06E-08	----
Manganese	----	----	1.39E-08	----	----	----	----	----	----	----	2.17E-08	----
Mercury	----	----	----	----	----	----	----	----	----	----	----	----
Nickel	----	----	----	----	----	----	----	----	----	----	----	----
Selenium	----	----	----	----	----	----	----	----	----	----	----	----
Silver	----	----	----	----	----	----	----	----	----	----	----	----
Thallium	1.80E-10	----	----	----	----	----	----	----	----	----	----	----
Vanadium	----	----	----	----	----	----	----	----	----	----	----	----
Zinc	----	----	----	----	----	----	----	----	----	----	----	----
Chloride	1.27E-13	----	----	----	----	----	----	----	----	----	----	----
Orthophosphate	----	----	----	----	----	----	----	----	----	----	----	----
Sulfate	5.91E-13	----	----	----	----	----	----	----	----	----	----	----
Ag-108m	2.65E-08	----	4.38E-03	----	----	----	----	----	----	----	----	----

Table B-49. (continued).

COPC	Group 1		Group 2		Group 3		Group 4		Group 5		Group 6	
	Fugitive Dust	Volatiles	Fugitive Dust	Volatiles	Fugitive Dust	Volatiles	Fugitive Dust	Volatiles	Fugitive Dust	Volatiles	Fugitive Dust	Volatiles
Am-241	7.38E-06	----	1.30E-05	----	----	----	----	----	----	----	8.84E-05	----
Co-60	1.05E-07	----	1.64E-03	----	----	----	----	----	----	----	----	----
Cs-134	3.37E-08	----	----	----	----	----	----	----	----	----	----	----
Cs-137	1.43E-02	----	1.43E-04	----	----	----	----	----	----	----	2.47E-03	----
Eu-152	2.40E-07	----	----	----	----	----	----	----	----	----	----	----
Eu-154	8.59E-08	----	----	----	----	----	----	----	----	----	----	----
Np-237	----	----	----	----	----	----	----	----	----	----	----	----
Pu-238	----	----	1.34E-05	----	----	----	----	----	----	----	8.58E-05	----
Pu-239/240	1.91E-06	----	----	----	----	----	----	----	----	----	----	----
Ra-226	1.79E-03	----	----	----	----	----	----	----	----	----	----	----
Sr-90	1.23E-02	----	----	----	----	----	----	----	----	----	----	----
Tc-99	----	----	----	----	----	----	----	----	----	----	----	----
Th-228	----	----	----	----	----	----	----	----	----	----	1.73E-05	----
Th-230	7.47E-04	----	----	----	----	----	----	----	----	----	3.22E-04	----
Th-232	----	----	----	----	----	----	----	----	----	----	1.52E-04	----
U-234	----	----	7.82E-05	----	----	----	----	----	----	----	1.68E-03	----
U-235	6.11E-05	----	----	----	----	----	----	----	----	----	1.36E-03	----
U-238	----	----	7.36E-05	----	----	----	----	----	----	----	1.48E-03	----

Note: "----" = not applicable.

Table B-50. Intakes (noncarcinogenic)–current worker at year 0, ingestion of soil (mg/kg-day).

COPC	ARA-01	ARA-02 Soils	ARA-02 Seepage Pit	ARA-03	ARA-12	ARA-16	ARA-23	ARA-24	PBF-10	PBF-12	PBF-16	PBF-21	PBF-22	PBF-26
Aroclor-1242	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Aroclor-1254	----	----	----	----	----	----	----	----	----	----	----	----	----	6.36E-06
Bis(2-ethylhexyl)phthalate	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Diethylphthalate	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Diethylether	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Methylmethacrylate	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Antimony	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Arsenic	1.08E-05	----	----	----	----	----	----	----	----	----	----	----	3.29E-06	----
Barium	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Cadmium	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Chromium(III)	----	----	----	----	2.29E-04	----	----	----	----	----	----	----	----	----
Chromium(VI)	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Cobalt	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Copper	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Lead	1.24E-05	----	----	----	7.73E-05	----	----	----	----	----	1.57E-05	----	8.90E-06	2.10E-05
Manganese	----	----	----	----	1.87E-04	----	----	----	----	----	----	----	1.91E-04	----
Mercury	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Nickel	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Selenium	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Silver	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Thallium	1.82E-05	----	----	----	----	----	----	----	----	----	----	----	----	----
Vanadium	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Zinc	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Chloride	----	----	----	----	----	6.26E-07	----	----	----	----	----	----	----	----
Orthophosphate	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Sulfate	----	----	----	----	----	2.91E-06	----	----	----	----	----	----	----	----

Note: "----" = not applicable.

Table B-51. Intakes (noncarcinogenic)—current worker at year 0, inhalation (mg/kg-day).

COPC	Group 1		Group 2		Group 3		Group 4		Group 5		Group 6	
	Fugitive Dust	Volatiles	Fugitive Dust	Volatiles	Fugitive Dust	Volatiles	Fugitive Dust	Volatiles	Fugitive Dust	Volatiles	Fugitive Dust	Volatiles
Aroclor-1242	----	----	----	----	----	----	----	----	----	----	----	----
Aroclor-1254	----	----	----	----	----	----	----	----	----	----	8.12E-09	----
Bis(2-ethylhexyl)phthalate	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00
Diethylphthalate	----	----	----	----	----	----	----	----	----	----	----	----
Diethylether	----	----	----	----	----	----	----	----	----	----	----	----
Methylmethacrylate	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00
Antimony	----	----	----	----	----	----	----	----	----	----	----	----
Arsenic	2.99E-10	----	----	----	----	----	----	----	----	----	1.04E-09	----
Barium	----	----	----	----	----	----	----	----	----	----	----	----
Cadmium	----	----	----	----	----	----	----	----	----	----	----	----
Chromium(III)	----	----	4.78E-08	----	----	----	----	----	----	----	----	----
Chromium(VI)	----	----	----	----	----	----	----	----	----	----	----	----
Cobalt	----	----	----	----	----	----	----	----	----	----	----	----
Copper	----	----	----	----	----	----	----	----	----	----	----	----
Lead	3.43E-10	----	1.61E-08	----	----	----	2.49E-08	----	----	----	2.97E-08	----
Manganese	----	----	3.90E-08	----	----	----	----	----	----	----	6.07E-08	----
Mercury	----	----	----	----	----	----	----	----	----	----	----	----
Nickel	----	----	----	----	----	----	----	----	----	----	----	----
Selenium	----	----	----	----	----	----	----	----	----	----	----	----
Silver	----	----	----	----	----	----	----	----	----	----	----	----
Thallium	5.05E-10	----	----	----	----	----	----	----	----	----	----	----
Vanadium	----	----	----	----	----	----	----	----	----	----	----	----
Zinc	----	----	----	----	----	----	----	----	----	----	----	----
Chloride	3.56E-13	----	----	----	----	----	----	----	----	----	----	----
Orthophosphate	----	----	----	----	----	----	----	----	----	----	----	----
Sulfate	1.65E-12	----	----	----	----	----	----	----	----	----	----	----

Note: "----" = not applicable.

Table B-52. Intakes (carcinogenic)—future worker at year 100, ingestion of soil (mg/kg or pCi).

COPC	ARA-01	ARA-02 Soils	ARA-02 Seepage Pit	ARA-03	ARA-12	ARA-16	ARA-23	ARA-24	PBF-10	PBF-12	PBF-16	PBF-21	PBF-22	PBF-26
Aroclor-1242	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Aroclor-1254	----	----	----	----	----	----	----	----	----	----	----	----	----	2.27E-06
Bis(2-ethylhexyl)phthalate	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Diethylphthalate	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Diethylether	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Methylmethacrylate	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Antimony	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Arsenic	3.86E-06	----	----	----	----	----	----	----	----	----	----	----	1.17E-06	----
Barium	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Cadmium	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Chromium(III)	----	----	----	----	8.19E-05	----	----	----	----	----	----	----	----	----
Chromium(VI)	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Cobalt	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Copper	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Lead	4.42E-06	----	----	----	2.76E-05	----	----	----	----	----	5.59E-06	----	3.18E-06	7.51E-06
Manganese	----	----	----	----	6.67E-05	----	----	----	----	----	----	----	6.83E-05	----
Mercury	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Nickel	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Selenium	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Silver	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Thallium	6.52E-06	----	----	----	----	----	----	----	----	----	----	----	----	----
Vanadium	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Zinc	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Chloride	----	----	----	----	----	2.24E-07	----	----	----	----	----	----	----	----
Orthophosphate	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Sulfate	----	----	----	----	----	1.04E-06	----	----	----	----	----	----	----	----
Ag-108m	----	----	----	----	1.14E+04	2.52E+01	----	----	----	----	----	----	----	----
Am-241	1.94E+01	----	----	----	5.22E+01	----	3.60E+00	----	----	----	----	----	2.37E+02	----

Table 52. (continued).

COPC	ARA-01	ARA-02 Soils	ARA-02 Seepage Pit	ARA-03	ARA-12	ARA-16	ARA-23	ARA-24	PBF-10	PBF-12	PBF-16	PBF-21	PBF-22	PBF-26
Co-60	----	----	----	----	4.47E-03	1.05E-04	----	----	----	----	----	----	----	----
Cs-134	----	----	----	----	----	1.72E-14	----	----	----	----	----	----	----	----
Cs-137	3.67E+01	----	----	----	5.25E+01	3.02E+03	7.00E+02	----	----	----	----	----	4.38E+01	1.84E+02
Eu-152	----	----	----	----	----	1.46E+00	----	----	----	----	----	----	----	----
Eu-154	----	----	----	----	----	2.51E-02	----	----	----	----	----	----	----	----
Np-237	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Pu-238	----	----	----	----	1.80E+01	----	----	1.29E+00	----	----	----	----	1.17E+02	1.42E+00
Pu-239/240	6.88E+01	----	----	----	----	----	----	----	----	----	----	----	----	----
Ra-226	9.17E+02	----	----	----	----	1.19E+03	1.08E+03	----	----	----	----	----	----	----
Sr-90	1.20E+01	----	----	----	----	1.83E+03	5.21E+02	----	----	----	----	----	----	----
Tc-99	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Th-228	----	----	----	----	----	----	----	----	----	----	----	----	9.44E-15	----
Th-230	----	----	----	----	----	----	4.78E+02	----	----	----	----	----	1.01E+03	----
Th-232	----	----	----	----	----	----	----	----	----	----	----	----	4.78E+02	----
U-234	----	----	----	----	3.75E+02	----	----	----	----	----	----	----	1.01E+03	1.06E+03
U-235	1.97E+01	----	----	----	----	----	3.87E+01	----	----	----	----	----	----	1.06E+03
U-238	----	----	----	----	3.53E+02	----	----	----	----	----	----	----	3.94E+02	1.06E+03

Note: "----" = not applicable.

Table B-53. Intakes (carcinogenic)—future worker at year 100, external radiation exposure (pCi-year/g).

COPC	ARA-01	ARA-02 Soils	ARA-02 Seepage Pit	ARA-03	ARA-12	ARA-16	ARA-23	ARA-24	PBF-10	PBF-12	PBF-16	PBF-21	PBF-22	PBF-26
Ag-108m	----	----	----	----	1.08E+02	1.15E-01	----	----	----	----	----	----	----	----
Am-241	2.39E-01	----	3.78E-02	----	2.14E+00	----	5.43E-02	----	----	----	----	----	2.83E+00	----
Co-60	----	----	----	----	4.27E-05	7.22E-07	----	----	----	----	----	----	----	----
Cs-134	----	----	----	----	----	7.84E-17	----	----	----	----	----	----	----	----
Cs-137	6.69E-01	----	4.98E-02	2.43E+00	5.81E-01	1.68E+01	4.46E+00	----	----	----	----	----	3.93E-01	3.36E+00
Eu-152	----	----	----	----	----	6.66E-03	----	----	----	----	----	----	----	----
Eu-154	----	----	----	----	----	1.14E-04	----	----	----	----	----	----	----	----
Np-237	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Pu-238	1.73E-02	----	----	----	3.29E-01	----	----	2.35E-02	----	----	----	----	1.40E+00	2.58E-02
Pu-239/240	7.33E-01	----	----	----	----	----	----	----	----	----	----	----	1.11E+00	----
Ra-226	1.67E+01	6.19E+00	1.78E+00	----	----	9.72E+00	8.20E+00	----	----	----	----	----	----	----
Sr-90	1.62E-01	----	----	----	----	1.25E+01	2.82E+00	----	----	----	----	----	----	----
Tc-99	----	----	----	----	----	----	----	----	----	----	----	----	----	----
Th-228	----	----	----	----	----	----	----	----	----	----	----	----	2.10E-16	----
Th-230	----	----	----	----	----	----	3.99E+00	----	----	----	----	----	1.69E+01	----
Th-232	----	----	----	----	----	----	----	----	----	----	----	----	9.92E+00	----
U-234	----	1.99E+00	2.32E+00	----	6.61E+00	----	----	----	----	----	----	----	1.69E+01	1.94E+01
U-235	2.43E-01	1.42E-01	1.66E-01	----	----	----	2.13E-01	----	----	----	----	----	----	1.94E+01
U-238	----	----	1.96E+00	----	6.61E+00	----	----	----	----	----	----	----	7.64E+00	1.94E+01

Note: "----" = not applicable.

Table B-54. Intakes (carcinogenic)—future worker at year 100, inhalation (mg/kg-day or pCi).

COPC	Group 1		Group 2		Group 3		Group 4		Group 5		Group 6	
	Fugitive Dust	Volatiles	Fugitive Dust	Volatiles	Fugitive Dust	Volatiles	Fugitive Dust	Volatiles	Fugitive Dust	Volatiles	Fugitive Dust	Volatiles
Aroclor-1242	----	----	----	----	----	----	----	----	----	----	----	----
Aroclor-1254	----	----	----	----	----	----	----	----	----	----	2.90E-09	----
Bis(2-ethylhexyl)phthalate	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00
Diethylphthalate	----	----	----	----	----	----	----	----	----	----	----	----
Diethylether	----	----	----	----	----	----	----	----	----	----	----	----
Methylmethacrylate	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00	----	0.00E+00
Antimony	----	----	----	----	----	----	----	----	----	----	----	----
Arsenic	1.07E-10	----	----	----	----	----	----	----	----	----	3.72E-10	----
Barium	----	----	----	----	----	----	----	----	----	----	----	----
Cadmium	----	----	----	----	----	----	----	----	----	----	----	----
Chromium(III)	----	----	1.71E-08	----	----	----	----	----	----	----	----	----
Chromium(VI)	----	----	----	----	----	----	----	----	----	----	----	----
Cobalt	----	----	----	----	----	----	----	----	----	----	----	----
Copper	----	----	----	----	----	----	----	----	----	----	----	----
Lead	1.22E-10	----	5.76E-09	----	----	----	8.91E-09	----	----	----	1.06E-08	----
Manganese	----	----	1.39E-08	----	----	----	----	----	----	----	2.17E-08	----
Mercury	----	----	----	----	----	----	----	----	----	----	----	----
Nickel	----	----	----	----	----	----	----	----	----	----	----	----
Selenium	----	----	----	----	----	----	----	----	----	----	----	----
Silver	----	----	----	----	----	----	----	----	----	----	----	----
Thallium	1.80E-10	----	----	----	----	----	----	----	----	----	----	----
Vanadium	----	----	----	----	----	----	----	----	----	----	----	----
Zinc	----	----	----	----	----	----	----	----	----	----	----	----
Chloride	1.27E-13	----	----	----	----	----	----	----	----	----	----	----
Orthophosphate	----	----	----	----	----	----	----	----	----	----	----	----
Sulfate	5.91E-13	----	----	----	----	----	----	----	----	----	----	----
Ag-108m	2.65E-08	----	4.38E-03	----	----	----	----	----	----	----	----	----