Table 7-5(a): Soil Concentration Protective of Indoor Inhalation for Groundwater for Different Distances to On/Off-Site Building for Resident

Depth to Groundwater <20' (DAF=1)

Chemicals of Concern	Distance to POE (ft)																	
	0.00		25.00		50.00		75.00		100.00		150.00		200.00		250.00	
Benzene	1.12E+01		1.13E+01		1.47E+01		2.28E+01	*	3.49E+01	*	7.00E+01	*	1.19E+02	*	1.83E+02	*
Toluene	1.51E+04	*	1.52E+04	*	1.98E+04	*	3.07E+04	*	4.69E+04	*	9.41E+04	*	1.60E+05	*	2.46E+05	*
Ethylbenzene	5.89E+03	*	5.95E+03	*	7.71E+03	*	1.20E+04	*	1.83E+04	*	3.67E+04	*	6.26E+04	*	9.59E+04	*
Xylenes (mixed)	7.48E+02	*	7.55E+02	*	9.79E+02	*	1.52E+03	*	2.32E+03	*	4.66E+03	*	7.94E+03	*	1.22E+04	*
Ethylene Dibromide (EDB)	2.18E+00		2.20E+00		2.85E+00		4.43E+00		6.77E+00		1.36E+01		2.32E+01		3.55E+01	
Ethylene Dichloride (EDC)	3.68E+00		3.71E+00		4.81E+00		7.47E+00		1.14E+01		2.29E+01		3.90E+01		5.98E+01	
Methyl-tert-butyl-ether (MTBE)	5.62E+02		5.67E+02		7.35E+02		1.14E+03		1.75E+03		3.50E+03		5.97E+03		9.15E+03	*
Acenaphthene	1.70E+06	*	1.71E+06	*	2.22E+06	*	3.45E+06	*	5.27E+06	*	1.06E+07	*	1.80E+07	*	2.76E+07	*
Anthracene	1.00E+07	*	1.01E+07	*	1.31E+07	*	2.04E+07	*	3.12E+07	*	6.26E+07	*	1.07E+08	*	1.63E+08	*
Benzo(a)anthracene	6.55E+06	*	6.60E+06	*	8.56E+06	*	1.33E+07	*	2.03E+07	*	4.08E+07	*	6.95E+07	*	1.06E+08	*
Benzo(a)pyrene	5.67E+06	*	5.72E+06	*	7.41E+06	*	1.15E+07	*	1.76E+07	*	3.53E+07	*	6.01E+07	*	9.22E+07	*
Benzo(b)fluoranthene	1.40E+06	*	1.41E+06	*	1.83E+06	*	2.84E+06	*	4.35E+06	*	8.72E+06	*	1.49E+07	*	2.28E+07	*
Benzo(k)fluoranthene	1.72E+08	*	1.73E+08	*	2.24E+08	*	3.49E+08	*	5.33E+08	*	1.07E+09	*	1.82E+09	*	2.79E+09	*
Chrysene	4.84E+06	*	4.88E+06	*	6.33E+06	*	9.83E+06	*	1.50E+07	*	3.01E+07	*	5.14E+07	*	7.87E+07	*
Dibenzo(a,h)anthracene	5.57E+08	*	5.62E+08	*	7.29E+08	*	1.13E+09	*	1.73E+09	*	3.47E+09	*	5.92E+09	*	9.07E+09	*
Fluoranthene	2.27E+08	*	2.29E+08	*	2.97E+08	*	4.61E+08	*	7.05E+08	*	1.41E+09	*	2.41E+09	*	3.69E+09	*
Fluorene	6.19E+06	*	6.25E+06	*	8.10E+06	*	1.26E+07	*	1.92E+07	*	3.86E+07	*	6.57E+07	*	1.01E+08	*
Napthalene	6.72E+02	*	6.78E+02	*	8.79E+02	*	1.36E+03	*	2.09E+03	*	4.18E+03	*	7.13E+03	*	1.09E+04	*
Pyrene	2.70E+08	*	2.73E+08	*	3.53E+08	*	5.49E+08	*	8.39E+08	*	1.68E+09	*	2.87E+09	*	4.40E+09	*
TPH-GRO	NA		NA		NA		NA		NA		NA		NA		NA	
TPH-DRO	NA		NA		NA		NA		NA		NA		NA		NA	
TPH-ORO	NA		NA		NA		NA		NA		NA		NA		NA	
>C6 - C8 (Aliphatics)	NA		NA		NA		NA		NA		NA		NA		NA	
>C8 - C10 (Aliphatics)	NA		NA		NA		NA		NA		NA		NA		NA	
>C10 - C12 (Aliphatics)	NA		NA		NA		NA		NA		NA		NA		NA	
>C12 - C16 (Aliphatics)	NA		NA		NA		NA		NA		NA		NA		NA	
>C16 - C35 (Aliphatics)	NA		NA		NA		NA		NA		NA		NA		NA	
>C8 - C10 (Aromatics)	NA		NA		NA		NA		NA		NA		NA		NA	
>C10 - C12 (Aromatics)	NA		NA		NA		NA		NA		NA		NA		NA	
>C12 - C16 (Aromatics)	NA		NA		NA		NA		NA		NA		NA		NA	
>C16 - C21 (Aromatics)	NA		NA		NA		NA		NA		NA		NA		NA	
>C21 - C35 (Aromatics)	NA		NA		NA		NA		NA		NA		NA		NA	
Tertiary-amyl-methyl-ether (TAME)	1.68E+02		1.70E+02		2.20E+02		3.42E+02		5.23E+02		1.05E+03		1.79E+03	*	2.74E+03	*
Tertiary-butyl- alcohol (TBA)	2.59E+04	*	2.61E+04	*	3.38E+04	*	5.25E+04	*	8.03E+04	*	1.61E+05	*	2.75E+05	*	4.21E+05	*
Ethyl-tert-butyl-ether (ETBE)	7.28E+02		7.34E+02		9.52E+02		1.48E+03		2.26E+03	*	4.53E+03	*	7.72E+03	*	1.18E+04	*
Diisopropyl ether (DIPE)	9.62E+02		9.71E+02		1.26E+03	*	1.95E+03	*	2.99E+03	*	5.99E+03	*	1.02E+04	*	1.57E+04	*
Ethanol	1.81E+05	*	1.82E+05	*	2.36E+05	*	3.67E+05	*	5.61E+05	*	1.12E+06	*	1.92E+06	*	2.94E+06	*
Methanol	7.39E+05	*	7.45E+05	*	9.66E+05	*	1.50E+06	*	2.29E+06	*	4.60E+06	*	7.84E+06	*	1.20E+07	*
Arsenic	NA		NA		NA		NA		NA		NA		NA		NA	
Barium	NA		NA		NA		NA		NA		NA		NA		NA	
Cadmium	NA		NA		NA		NA		NA		NA		NA		NA	
Chromium III	NA		NA		NA		NA		NA		NA		NA		NA	
Chromium VI	NA		NA		NA		NA		NA		NA		NA		NA	
Lead	NA		NA		NA		NA		NA		NA		NA		NA	
Selenium	NA		NA		NA		NA		NA		NA		NA		NA	

Notes:

NA : Not Available

Target levels are based on distance to groundwater < 20 ft for which default vadose zone DAF is 1.

All concentrations in mg/kg.

* Value exceeds effective/saturated soil concentration

Table 7-5(b): Soil Concentration Protective of Indoor Inhalation for Groundwater for Different Distances to On/Off-Site Building for Resident Depth to Groundwater 20' – 50' (DAF=2)																
Chemicals of Concern	Distance to POE (ft)															
	0.00		25.00		50.00		75.00		100.00		150.00		200.00		250.00	
Benzene	2.25E+01	*	2.27E+01	*	2.94E+01	*	4.57E+01	*	6.98E+01	*	1.40E+02	*	2.39E+02	*	3.66E+02	*
Toluene	3.02E+04	*	3.05E+04	*	3.95E+04	*	6.14E+04	*	9.39E+04	*	1.88E+05	*	3.21E+05	*	4.92E+05	*
Ethylbenzene	1.18E+04	*	1.19E+04	*	1.54E+04	*	2.39E+04	*	3.66E+04	*	7.34E+04	*	1.25E+05	*	1.92E+05	*
Xylenes (mixed)	1.50E+03	*	1.51E+03	*	1.96E+03	*	3.04E+03	*	4.65E+03	*	9.32E+03	*	1.59E+04	*	2.43E+04	*
Ethylene Dibromide (EDB)	4.36E+00		4.40E+00		5.70E+00		8.86E+00		1.35E+01		2.72E+01		4.63E+01		7.10E+01	
Ethylene Dichloride (EDC)	7.36E+00		7.42E+00		9.62E+00		1.49E+01		2.28E+01		4.58E+01		7.81E+01		1.20E+02	
Methyl-tert-butyl-ether (MTBE)	1.12E+03		1.13E+03		1.47E+03		2.28E+03		3.49E+03		7.00E+03	*	1.19E+04	*	1.83E+04	*
Acenaphthene	3.39E+06	*	3.42E+06	*	4.44E+06	*	6.89E+06	*	1.05E+07	*	2.11E+07	*	3.60E+07	*	5.52E+07	*
Anthracene	2.01E+07	*	2.03E+07	*	2.63E+07	*	4.08E+07	*	6.24E+07	*	1.25E+08	*	2.13E+08	*	3.27E+08	*
Benzo(a)anthracene	1.31E+07	*	1.32E+07	*	1.71E+07	*	2.66E+07	*	4.07E+07	*	8.15E+07	*	1.39E+08	*	2.13E+08	*
Benzo(a)pyrene	1.13E+07	*	1.14E+07	*	1.48E+07	*	2.30E+07	*	3.52E+07	*	7.06E+07	*	1.20E+08	*	1.84E+08	*
Benzo(b)fluoranthene	2.80E+06	*	2.83E+06	*	3.66E+06	*	5.69E+06	*	8.70E+06	*	1.74E+07	*	2.97E+07	*	4.56E+07	*
Benzo(k)fluoranthene	3.43E+08	*	3.46E+08	*	4.49E+08	*	6.97E+08	*	1.07E+09	*	2.14E+09	*	3.64E+09	*	5.58E+09	*
Chrysene	9.68E+06	*	9.76E+06	*	1.27E+07	*	1.97E+07	*	3.01E+07	*	6.03E+07	*	1.03E+08	*	1.57E+08	*
Dibenzo(a,h)anthracene	1.11E+09	*	1.12E+09	*	1.46E+09	*	2.26E+09	*	3.46E+09	*	6.94E+09	*	1.18E+10	*	1.81E+10	*
Fluoranthene	4.54E+08	*	4.58E+08	*	5.93E+08	*	9.22E+08	*	1.41E+09	*	2.83E+09	*	4.82E+09	*	7.38E+09	*
Fluorene	1.24E+07	*	1.25E+07	*	1.62E+07	*	2.52E+07	*	3.85E+07	*	7.71E+07	*	1.31E+08	*	2.01E+08	*
Napthalene	1.34E+03	*	1.36E+03	*	1.76E+03	*	2.73E+03	*	4.17E+03	*	8.37E+03	*	1.43E+04	*	2.19E+04	*
Pyrene	5.41E+08	*	5.45E+08	*	7.07E+08	*	1.10E+09	*	1.68E+09	*	3.37E+09	*	5.74E+09	*	8.79E+09	*
TPH-GRO	NA		NA		NA		NA		NA		NA		NA		NA	
TPH-DRO	NA		NA		NA		NA		NA		NA		NA		NA	
TPH-ORO	NA		NA		NA		NA		NA		NA		NA		NA	
>C6 - C8 (Aliphatics)	NA		NA		NA		NA		NA		NA		NA		NA	
>C8 - C10 (Aliphatics)	NA		NA		NA		NA		NA		NA		NA		NA	
>C10 - C12 (Aliphatics)	NA		NA		NA		NA		NA		NA		NA		NA	
>C12 - C16 (Aliphatics)	NA		NA		NA		NA		NA		NA		NA		NA	
>C16 - C35 (Aliphatics)	NA		NA		NA		NA		NA		NA		NA		NA	
>C8 - C10 (Aromatics)	NA		NA		NA		NA		NA		NA		NA		NA	
>C10 - C12 (Aromatics)	NA		NA		NA		NA		NA		NA		NA		NA	
>C12 - C16 (Aromatics)	NA		NA		NA		NA		NA		NA		NA		NA	
>C16 - C21 (Aromatics)	NA		NA		NA		NA		NA		NA		NA		NA	
>C21 - C35 (Aromatics)	NA		NA		NA		NA		NA		NA		NA		NA	
Tertiary-amyl-methyl-ether (TAME)	3.37E+02		3.40E+02		4.40E+02		6.84E+02		1.05E+03		2.10E+03	*	3.58E+03	*	5.48E+03	*
Tertiary-butyl- alcohol (TBA)	5.17E+04	*	5.22E+04	*	6.77E+04	*	1.05E+05	*	1.61E+05	*	3.22E+05	*	5.49E+05	*	8.41E+05	*
Ethyl-tert-butyl-ether (ETBE)	1.46E+03		1.47E+03		1.90E+03	*	2.96E+03	*	4.52E+03	*	9.06E+03	*	1.54E+04	*	2.37E+04	*
Diisopropyl ether (DIPE)	1.92E+03	*	1.94E+03	*	2.52E+03	*	3.91E+03	*	5.98E+03	*	1.20E+04	*	2.04E+04	*	3.13E+04	*
Ethanol	3.61E+05	*	3.64E+05	*	4.72E+05	*	7.33E+05	*	1.12E+06	*	2.25E+06	*	3.83E+06	*	5.87E+06	*
Methanol	1.48E+06	*	1.49E+06	*	1.93E+06	*	3.00E+06	*	4.59E+06	*	9.20E+06	*	1.57E+07	*	2.40E+07	*
Arsenic	NA		NA		NA		NA		NA		NA		NA		NA	
Barium	NA		NA		NA		NA		NA		NA		NA		NA	
Cadmium	NA		NA		NA		NA		NA		NA		NA		NA	
Chromium III	NA		NA		NA		NA		NA		NA		NA		NA	
Chromium VI	NA		NA		NA		NA		NA		NA		NA		NA	
Selenium	NA		NA		NA		NA		NA		NA		NA		NA	

Notes:

NA : Not Available

Target levels are based on distance to groundwater between 20 and 50 ft for which default vadose zone DAF is 2.

All concentrations in mg/kg.

* Value exceeds effective/saturated soil concentration

Table 7-5(c): Soil Concentration Protective of Indoor Inhalation for Groundwater for Different Distances to On/Off-Site Building for Resident

Depth to Groundwater > 50' (DAF=4)

Chemicals of Concern	Distance to POE (ft)																	
	0		25		50		75		100		150		200		250	
Benzene	4.50E+01	*	4.54E+01	*	5.88E+01	*	9.13E+01	*	1.40E+02	*	2.80E+02	*	4.77E+02	*	7.31E+02	*
Toluene	6.05E+04	*	6.10E+04	*	7.91E+04	*	1.23E+05	*	1.88E+05	*	3.76E+05	*	6.42E+05	*	9.83E+05	*
Ethylbenzene	2.36E+04	*	2.38E+04	*	3.08E+04	*	4.79E+04	*	7.32E+04	*	1.47E+05	*	2.50E+05	*	3.83E+05	*
Xylenes (mixed)	2.99E+03	*	3.02E+03	*	3.91E+03	*	6.08E+03	*	9.30E+03	*	1.86E+04	*	3.18E+04	*	4.87E+04	*
Ethylene Dibromide (EDB)	8.72E+00		8.80E+00		1.14E+01		1.77E+01		2.71E+01		5.43E+01		9.26E+01		1.42E+02	
Ethylene Dichloride (EDC)	1.47E+01		1.48E+01		1.92E+01		2.99E+01		4.57E+01		9.16E+01		1.56E+02		2.39E+02	
Methyl-tert-butyl-ether (MTBE)	2.25E+03		2.27E+03		2.94E+03		4.57E+03		6.98E+03	*	1.40E+04	*	2.39E+04	*	3.66E+04	*
Acenaphthene	6.78E+06	*	6.85E+06	*	8.87E+06	*	1.38E+07	*	2.11E+07	*	4.23E+07	*	7.20E+07	*	1.10E+08	*
Anthracene	4.02E+07	*	4.05E+07	*	5.25E+07	*	8.16E+07	*	1.25E+08	*	2.50E+08	*	4.27E+08	*	6.54E+08	*
Benzo(a)anthracene	2.62E+07	*	2.64E+07	*	3.42E+07	*	5.32E+07	*	8.13E+07	*	1.63E+08	*	2.78E+08	*	4.26E+08	*
Benzo(a)pyrene	2.27E+07	*	2.29E+07	*	2.96E+07	*	4.60E+07	*	7.04E+07	*	1.41E+08	*	2.41E+08	*	3.69E+08	*
Benzo(b)fluoranthene	5.60E+06	*	5.65E+06	*	7.33E+06	*	1.14E+07	*	1.74E+07	*	3.49E+07	*	5.95E+07	*	9.11E+07	*
Benzo(k)fluoranthene	6.86E+08	*	6.92E+08	*	8.98E+08	*	1.39E+09	*	2.13E+09	*	4.27E+09	*	7.29E+09	*	1.12E+10	*
Chrysene	1.94E+07	*	1.95E+07	*	2.53E+07	*	3.93E+07	*	6.01E+07	*	1.21E+08	*	2.05E+08	*	3.15E+08	*
Dibenzo(a,h)anthracene	2.23E+09	*	2.25E+09	*	2.92E+09	*	4.53E+09	*	6.92E+09	*	1.39E+10	*	2.37E+10	*	3.63E+10	*
Fluoranthene	9.07E+08	*	9.15E+08	*	1.19E+09	*	1.84E+09	*	2.82E+09	*	5.65E+09	*	9.63E+09	*	1.48E+10	*
Fluorene	2.48E+07	*	2.50E+07	*	3.24E+07	*	5.03E+07	*	7.69E+07	*	1.54E+08	*	2.63E+08	*	4.03E+08	*
Napthalene	2.69E+03	*	2.71E+03	*	3.51E+03	*	5.46E+03	*	8.35E+03	*	1.67E+04	*	2.85E+04	*	4.37E+04	*
Pyrene	1.08E+09	*	1.09E+09	*	1.41E+09	*	2.20E+09	*	3.36E+09	*	6.73E+09	*	1.15E+10	*	1.76E+10	*
TPH-GRO	NA		NA		NA		NA		NA		NA		NA		NA	
TPH-DRO	NA		NA		NA		NA		NA		NA		NA		NA	
TPH-ORO	NA		NA		NA		NA		NA		NA		NA		NA	
>C6 - C8 (Aliphatics)	NA		NA		NA		NA		NA		NA		NA		NA	
>C8 - C10 (Aliphatics)	NA		NA		NA		NA		NA		NA		NA		NA	
>C10 - C12 (Aliphatics)	NA		NA		NA		NA		NA		NA		NA		NA	
>C12 - C16 (Aliphatics)	NA		NA		NA		NA		NA		NA		NA		NA	
>C16 - C35 (Aliphatics)	NA		NA		NA		NA		NA		NA		NA		NA	
>C8 - C10 (Aromatics)	NA		NA		NA		NA		NA		NA		NA		NA	
>C10 - C12 (Aromatics)	NA		NA		NA		NA		NA		NA		NA		NA	
>C12 - C16 (Aromatics)	NA		NA		NA		NA		NA		NA		NA		NA	
>C16 - C21 (Aromatics)	NA		NA		NA		NA		NA		NA		NA		NA	
>C21 - C35 (Aromatics)	NA		NA		NA		NA		NA		NA		NA		NA	
Tertiary-amyl-methyl-ether (TAME)	6.73E+02		6.79E+02		8.81E+02		1.37E+03		2.09E+03	*	4.19E+03	*	7.15E+03	*	1.10E+04	*
Tertiary-butyl- alcohol (TBA)	1.03E+05	*	1.04E+05	*	1.35E+05	*	2.10E+05	*	3.21E+05	*	6.44E+05	*	1.10E+06	*	1.68E+06	*
Ethyl-tert-butyl-ether (ETBE)	2.91E+03	*	2.94E+03	*	3.81E+03	*	5.91E+03	*	9.04E+03	*	1.81E+04	*	3.09E+04	*	4.73E+04	*
Diisopropyl ether (DIPE)	3.85E+03	*	3.88E+03	*	5.03E+03	*	7.82E+03	*	1.20E+04	*	2.40E+04	*	4.09E+04	*	6.26E+04	*
Ethanol	7.22E+05	*	7.29E+05	*	9.44E+05	*	1.47E+06	*	2.24E+06	*	4.50E+06	*	7.67E+06	*	1.17E+07	*
Methanol	2.95E+06	*	2.98E+06	*	3.86E+06	*	6.00E+06	*	9.18E+06	*	1.84E+07	*	3.14E+07	*	4.81E+07	*
Arsenic	NA		NA		NA		NA		NA		NA		NA		NA	
Barium	NA		NA		NA		NA		NA		NA		NA		NA	
Cadmium	NA		NA		NA		NA		NA		NA		NA		NA	
Chromium III	NA		NA		NA		NA		NA		NA		NA		NA	
Chromium VI	NA		NA		NA		NA		NA		NA		NA		NA	
Selenium	NA		NA		NA		NA		NA		NA		NA		NA	

Notes:

NA : Not Available

Target levels are based on distance to groundwater >50 ft for which default vadose zone DAF is 4.

All concentrations in mg/kg.

* Value exceeds effective/saturated soil concentration