Table 5-8
Risk-Based Screening Levels for a Resident Child

Chemicals of Concern	Air		Surficial Soil	Sub-surface Soil		Soil Vapor		Groundwater			
	Indoor**	Outdoor	Ingestion, Inhalation (Vapor Emissions and Particulates), and Dermal Contact	Indoor Inhalation**	Outdoor Inhalation	Indoor Inhalation**	Outdoor Inhalation	Indoor Inhalation**	Outdoor Inhalation	Incidental Dermal Contact	Domestic Use of Water (Ingestion and Inhalation)
	[mg/m^3-air]		[mg/kg]			[mg/m^3-air]		[mg/L]			
Benzene	2.34E-03	4.68E-03	1.60E+01	2.03E-02	6.26E+01	2.94E+00	9.10E+03	2.70E-01	5.91E+02	5.09E-02	5.00E-03 M
Toluene	7.82E+00	1.56E+01	6.23E+03 *	1.00E+02	3.21E+05 *	1.10E+04	3.51E+07 +	9.00E+02 #	1.97E+06 #	8.57E+00	1.00E+00 M
Ethylbenzene	7.30E-03	1.46E-02	7.86E+01	1.63E-01	5.40E+02	1.14E+01	3.76E+04	8.26E-01	1.81E+03 #	6.71E-02	7.00E-01 M
Xylenes (total)	1.56E-01	3.13E-01	1.05E+04 *	3.86E+00	1.21E+04 *	2.05E+02	6.44E+05 +	2.05E+01	4.49E+04 #	1.17E+01	1.00E+01 M
Ethylene dibromide (EDB)	3.04E-05	6.08E-05	4.25E-01	1.22E-03	4.32E+00	6.45E-02	2.29E+02	3.95E-02	8.81E+01	3.87E-03	3.65E-05
Ethylene dichloride (EDC (1,2-DCA))	7.02E-04	1.40E-03	9.38E+00	9.55E-03	2.97E+01	8.99E-01	2.80E+03	3.05E-01	6.72E+02	9.71E-02	5.00E-03 M
Methyl tertiary butyl ether (MTBE)	7.02E-02	1.40E-01	4.90E+02	9.32E-01	2.99E+03	9.81E+01	3.14E+05	6.42E+01	1.42E+05 #	4.90E+00	5.89E-02
Tertiary butyl alcohol (TBA)	NA	NA	8.80E+03	NA	NA	NA	NA	NA	NA	1.88E+02	1.41E+00
Ethanol	NA	NA	3.23E+06 *	NA	NA	NA	NA	NA	NA	2.48E+05	5.16E+02
Acenaphthene	NA	NA	3.44E+03 *	NA	NA	NA	NA	NA	NA	1.19E+00	9.39E-01
Anthracene	NA	NA	1.72E+04 *	NA	NA	NA	NA	NA	NA	5.26E+01 #	4.69E+00 #
Benzo(a)anthracene	1.66E-04	3.32E-04	9.16E-01	4.13E+02 *	8.94E+05 *	1.14E-01 +	2.48E+02 +	2.30E+00 #	4.93E+03 #	4.78E-05	1.43E-04
Benzo(a)pyrene	1.66E-05	3.32E-05	9.16E-02	1.81E+03 *	3.76E+05 *	5.86E-03 +	1.21E+00 +	5.69E-01 #	6.23E+02 #	2.81E-06	2.00E-04 M
Benzo(b)fluoranthene	1.66E-04	3.32E-04	9.16E-01	1.38E+04 *	6.19E+06 *	6.24E-02 +	2.79E+01 +	6.52E+00 #	1.01E+04 #	2.76E-05	1.43E-04
Benzo(g,h,i)perylene	NA	NA	1.87E+03 *	NA	NA	NA	NA	NA	NA	4.08E-02 #	4.69E-01 #
Benzo(k)fluoranthene	1.66E-04	3.32E-04	9.16E+00 *	1.51E+04 *	6.07E+06 *	6.17E-02 +	2.48E+01 +	6.79E+00 #	1.01E+04 #	3.96E-04	2.93E-04
Chrysene	1.66E-03	3.32E-03	9.15E+01 *	8.49E+03 *	1.56E+07 *	9.87E-01 +	1.81E+03 +	3.99E+01 #	8.41E+04 #	4.78E-03 #	2.93E-03 #
Fluoranthene	NA	NA	2.29E+03 *	NA	NA	NA	NA	NA	NA	3.00E-01 #	6.26E-01 #
Fluorene	NA	NA	2.29E+03 *	NA	NA	NA	NA	NA	NA	1.05E+00	6.26E-01
Naphthalene	5.37E-04	1.07E-03	4.69E+02	7.54E-01	2.52E+03 *	8.73E-01	2.92E+03 +	7.64E-01	1.69E+03 #	1.16E+00	1.07E-03
Phenanthrene	NA	NA	1.87E+03 *	NA	NA	NA	NA	NA	NA	4.09E-01	4.69E-01
Pyrene	NA	NA	1.72E+03 *	NA	NA	NA	NA	NA	NA	2.55E-01 #	4.69E-01 #
TPH-GRO	3.07E+01	6.13E+01	4.65E+05 *	5.44E+01	1.63E+05 *	3.59E+04	1.08E+08 +	3.88E+01	8.54E+04 #	NA	3.45E+01
Aliphatics - > C6-C8	2.88E+01	5.76E+01	4.52E+05 *	2.88E+01	8.65E+04 *	3.37E+04	1.01E+08 +	1.74E+01 #	3.79E+04 #	NA	3.32E+01 #
Aliphatics - > C8-C10	1.56E+00	3.13E+00	9.49E+03 *	1.06E+01	3.20E+04 *	1.83E+03	5.50E+06 +	8.60E-01 #	1.87E+03 #	NA	1.04E+00 #
Aromatics - >C8-C10	3.13E-01	6.26E-01	3.69E+03 *	1.50E+01	4.50E+04 *	3.66E+02	1.10E+06 +	2.05E+01	4.57E+04 #	NA	3.13E-01
TPH-DRO	3.75E+00	7.51E+00	2.30E+05 *	2.12E+03 *	6.35E+06 *	4.38E+03	1.32E+07 +	2.45E+02 #	5.43E+05 #	NA	3.45E+01 #
Aliphatics - >C10-C12	1.56E+00	3.13E+00	9.73E+03 *	7.68E+01	2.31E+05 *	1.83E+03	5.50E+06 +	7.69E-01 #	1.72E+03 #	NA	1.04E+00 #
Aliphatics - >C12-C16	1.56E+00	3.13E+00	9.93E+03 *	1.33E+03 *	4.00E+06 *	1.83E+03 +	5.50E+06 +	6.69E-01 #	1.49E+03 #	NA	1.04E+00 #
Aliphatics - >C16-C21	NA	NA	2.01E+05 *	NA	NA	NA	NA	NA	NA	NA	3.13E+01 #
Aromatics - >C10-C12	3.13E-01	6.26E-01	3.86E+03 *	7.07E+01	2.12E+05 *	3.64E+02	1.09E+06 +	5.26E+01 #	1.17E+05 #	NA	3.13E-01
Aromatics - >C12-C16	3.13E-01	6.26E-01	3.96E+03 *	6.41E+02 *	1.91E+06 *	3.57E+02 +	1.06E+06 +	1.91E+02 #	4.23E+05 #	NA	3.13E-01
Aromatics - >C16-C21	NA	NA	1.87E+03 *	NA	NA	NA	NA	NA	NA	NA	4.69E-01
TPH-ORO	NA	NA	2.02E+05 *	NA	NA	NA	NA	NA	NA	NA	3.18E+01 #
Aliphatics - >C21-C35	NA	NA	2.01E+05 *	NA	NA	NA	NA	NA	NA	NA	3.13E+01 #
Aromatics - >C21-C35	NA	NA	1.87E+03 *	NA	NA	NA	NA	NA	NA	NA	4.69E-01 #

Notes:

*: Calculated RBSL exceeded saturated soil concentration and calculated value is shown.

#: Calculated RBSL exceeded pure component water solubility and calculated value is shown.

+: Calculated RBSL exceeded saturated soil vapor concentration and calculated value is shown.

Soil concentrations are presented on a dry weight basis.

**: These values may change when the Division develops the vapor intrusion pathway.

NA: Not available due to lack of an input parameter.

M: MCL

Table 5-9
Risk-Based Screening Levels for a Resident Adult

Chemicals of Concern	Air		Surficial Soil	Sub-surface Soil		Soil Vapor		Groundwater			
	Indoor**	Outdoor	Ingestion, Inhalation (Vapor Emissions and Particulates), and Dermal Contact	Indoor Inhalation**	Outdoor Inhalation	Indoor Inhalation**	Outdoor Inhalation	Indoor Inhalation**	Outdoor Inhalation	Incidental Dermal Contact	Domestic Use of Water (Ingestion and Inhalation)
	[mg/m^3-air]		[mg/kg]			[mg/m^3-air]		[mg/L]			
Benzene	5.85E-04	1.17E-03	3.64E+01	5.06E-03	1.57E+01	7.36E-01	2.28E+03	6.76E-02	1.48E+02	2.92E-02	5.00E-03 M
Toluene	7.82E+00	1.56E+01	5.80E+04 *	1.00E+02	3.21E+05 *	1.10E+04	3.51E+07 +	9.00E+02 #	1.97E+06 #	1.96E+01	1.00E+00 M
Ethylbenzene	1.83E-03	3.65E-03	1.76E+02	4.08E-02	1.35E+02	2.84E+00	9.41E+03	2.06E-01	4.53E+02 #	3.85E-02	7.00E-01 M
Xylenes (total)	1.56E-01	3.13E-01	7.68E+04 *	3.86E+00	1.21E+04 *	2.05E+02	6.44E+05 +	2.05E+01	4.49E+04 #	2.69E+01	1.00E+01 M
Ethylene dibromide (EDB)	7.60E-06	1.52E-05	9.38E-01	3.04E-04	1.08E+00	1.61E-02	5.73E+01	9.89E-03	2.20E+01	2.22E-03	1.18E-05
Ethylene dichloride (EDC (1,2-DCA))	1.75E-04	3.51E-04	2.07E+01	2.39E-03	7.43E+00	2.25E-01	6.99E+02	7.63E-02	1.68E+02	5.57E-02	5.00E-03 M
Methyl tertiary butyl ether (MTBE)	1.75E-02	3.51E-02	1.11E+03	2.33E-01	7.46E+02	2.45E+01	7.86E+04	1.61E+01	3.55E+04	2.81E+00	2.20E-02
Tertiary butyl alcohol (TBA)	NA	NA	8.21E+04 *	NA	NA	NA	NA	NA	NA	4.31E+02	3.29E+00
Ethanol	NA	NA	3.01E+07 *	NA	NA	NA	NA	NA	NA	5.70E+05 #	1.20E+03
Acenaphthene	NA	NA	2.88E+04 *	NA	NA	NA	NA	NA	NA	2.72E+00	2.19E+00
Anthracene	NA	NA	1.44E+05 *	NA	NA	NA	NA	NA	NA	1.21E+02 #	1.10E+01 #
Benzo(a)anthracene	4.15E-05	8.30E-05	1.92E+00	1.03E+02 *	2.24E+05 *	2.86E-02 +	6.19E+01 +	5.75E-01 #	1.23E+03 #	2.74E-05	5.29E-05
Benzo(a)pyrene	4.15E-06	8.30E-06	1.92E-01	4.53E+02 *	9.39E+04 *	1.47E-03 +	3.04E-01 +	1.42E-01 #	1.56E+02 #	1.61E-06	2.00E-04 M
Benzo(b)fluoranthene	4.15E-05	8.30E-05	1.92E+00	3.46E+03 *	1.55E+06 *	1.56E-02 +	6.97E+00 +	1.63E+00 #	2.52E+03 #	1.58E-05	5.29E-05
Benzo(g,h,i)perylene	NA	NA	1.55E+04 *	NA	NA	NA	NA	NA	NA	9.36E-02 #	1.10E+00 #
Benzo(k)fluoranthene	4.15E-05	8.30E-05	1.92E+01 *	3.77E+03 *	1.52E+06 *	1.54E-02 +	6.20E+00 +	1.70E+00 #	2.52E+03 #	2.27E-04	7.85E-05
Chrysene	4.15E-04	8.30E-04	1.91E+02 *	2.12E+03 *	3.89E+06 *	2.47E-01 +	4.53E+02 +	9.98E+00 #	2.10E+04 #	2.74E-03 #	7.85E-04
Fluoranthene	NA	NA	1.92E+04 *	NA	NA	NA	NA	NA	NA	6.87E-01 #	1.46E+00 #
Fluorene	NA	NA	1.92E+04 *	NA	NA	NA	NA	NA	NA	2.41E+00 #	1.46E+00
Naphthalene	1.34E-04	2.68E-04	2.62E+02	1.88E-01	6.31E+02 *	2.18E-01	7.30E+02 +	1.91E-01	4.24E+02 #	2.66E+00	2.68E-04
Phenanthrene	NA	NA	1.55E+04 *	NA	NA	NA	NA	NA	NA	9.38E-01	1.10E+00 #
Pyrene	NA	NA	1.44E+04 *	NA	NA	NA	NA	NA	NA	5.85E-01 #	1.10E+00 #
TPH-GRO	3.07E+01	6.13E+01	4.08E+06 *	5.44E+01	1.63E+05 *	3.59E+04	1.08E+08 +	3.88E+01	8.54E+04 #	NA	4.59E+01
Aliphatics - > C6-C8	2.88E+01	5.76E+01	3.96E+06 *	2.88E+01	8.65E+04 *	3.37E+04	1.01E+08 +	1.74E+01 #	3.79E+04 #	NA	4.38E+01 #
Aliphatics - > C8-C10	1.56E+00	3.13E+00	8.64E+04 *	1.06E+01	3.20E+04 *	1.83E+03	5.50E+06 +	8.60E-01 #	1.87E+03 #	NA	1.68E+00 #
Aromatics - >C8-C10	3.13E-01	6.26E-01	3.28E+04 *	1.50E+01	4.50E+04 *	3.66E+02	1.10E+06 +	2.05E+01	4.57E+04 #	NA	4.38E-01
TPH-DRO	3.75E+00	7.51E+00	1.86E+06 *	2.12E+03 *	6.35E+06 *	4.38E+03	1.32E+07 +	2.45E+02 #	5.43E+05 #	NA	7.83E+01 #
Aliphatics - >C10-C12	1.56E+00	3.13E+00	7.73E+04 *	7.68E+01	2.31E+05 *	1.83E+03	5.50E+06 +	7.69E-01 #	1.72E+03 #	NA	1.68E+00 #
Aliphatics - >C12-C16	1.56E+00	3.13E+00	7.84E+04 *	1.33E+03 *	4.00E+06 *	1.83E+03 +	5.50E+06 +	6.69E-01 #	1.49E+03 #	NA	1.68E+00 #
Aliphatics - >C16-C21	NA	NA	1.62E+06 *	NA	NA	NA	NA	NA	NA	NA	7.30E+01 #
Aromatics - >C10-C12	3.13E-01	6.26E-01	2.95E+04 *	7.07E+01	2.12E+05 *	3.64E+02	1.09E+06 +	5.26E+01 #	1.17E+05 #	NA	4.38E-01
Aromatics - >C12-C16	3.13E-01	6.26E-01	3.10E+04 *	6.41E+02 *	1.91E+06 *	3.57E+02 +	1.06E+06 +	1.91E+02 #	4.23E+05 #	NA	4.38E-01
Aromatics - >C16-C21	NA	NA	1.55E+04 *	NA	NA	NA	NA	NA	NA	NA	1.10E+00 #
TPH-ORO	NA	NA	1.64E+06 *	NA	NA	NA	NA	NA	NA	NA	7.41E+01 #
Aliphatics - >C21-C35	NA	NA	1.62E+06 *	NA	NA	NA	NA	NA	NA	NA	7.30E+01 #
Aromatics - >C21-C35	NA	NA	1.55E+04 *	NA	NA	NA	NA	NA	NA	NA	1.10E+00 #

Notes:

***:** Calculated RBSL exceeded saturated soil concentration and calculated value is shown.

#: Calculated RBSL exceeded pure component water solubility and calculated value is shown.

+: Calculated RBSL exceeded saturated soil vapor concentration and calculated value is shown.

Soil concentrations are presented on a dry weight basis.

****:** These values may change when the Division develops the vapor intrusion pathway.

NA: Not available due to lack of an input parameter.

M: MCL

Table 5-10
Risk-Based Screening Levels for a Commercial Worker

Chemicals of Concern	Air		Surficial Soil	Sub-surface Soil		Soil Vapor		Groundwater		
	Indoor**	Outdoor	Ingestion, Inhalation (Vapor Emissions and Particulates), and Dermal Contact	Indoor Inhalation**	Outdoor Inhalation	Indoor Inhalation**	Outdoor Inhalation	Indoor Inhalation**	Outdoor Inhalation	Incidental Dermal Contact
	[mg/m^3-air]		[mg/kg]			[mg/m^3-air]		[mg/L]		
Benzene	1.57E-03	1.57E-03	4.83E+01	3.36E-02	2.10E+01	4.88E+00	3.06E+03	4.48E-01	1.99E+02	6.78E-02
Toluene	2.19E+01	2.19E+01	8.11E+04 *	6.91E+02	4.49E+05 *	7.57E+04	4.92E+07 +	6.22E+03 #	2.76E+06 #	4.75E+01
Ethylbenzene	4.91E-03	4.91E-03	2.32E+02	2.70E-01	1.81E+02	1.89E+01	1.26E+04	1.37E+00	6.08E+02 #	8.93E-02
Xylenes (total)	4.38E-01	4.38E-01	9.82E+04 *	2.67E+01	1.70E+04 *	1.42E+03	9.02E+05 +	1.42E+02 #	6.28E+04 #	6.50E+01
Ethylene dibromide (EDB)	2.04E-05	2.04E-05	1.23E+00	2.02E-03	1.45E+00	1.07E-01	7.70E+01	6.56E-02	2.96E+01	5.15E-03
Ethylene dichloride (EDC (1,2-DCA))	4.72E-04	4.72E-04	2.72E+01	1.58E-02	9.98E+00	1.49E+00	9.40E+02	5.06E-01	2.26E+02	1.29E-01
Methyl tertiary butyl ether (MTBE)	4.72E-02	4.72E-02	1.47E+03	1.55E+00	1.00E+03	1.63E+02	1.06E+05	1.06E+02	4.77E+04	6.51E+00
Tertiary butyl alcohol (TBA)	NA	NA	1.15E+05 *	NA	NA	NA	NA	NA	NA	1.04E+03
Ethanol	NA	NA	4.22E+07 *	NA	NA	NA	NA	NA	NA	1.38E+06 #
Acenaphthene	NA	NA	3.30E+04 *	NA	NA	NA	NA	NA	NA	6.57E+00 #
Anthracene	NA	NA	1.65E+05 *	NA	NA	NA	NA	NA	NA	2.92E+02 #
Benzo(a)anthracene	1.11E-04	1.11E-04	2.11E+00	6.85E+02 *	3.00E+05 *	1.90E-01 +	8.32E+01 +	3.81E+00 #	1.66E+03 #	6.36E-05
Benzo(a)pyrene	1.11E-05	1.11E-05	2.11E-01	3.01E+03 *	1.26E+05 *	9.72E-03 +	4.08E-01 +	9.44E-01 #	2.09E+02 #	3.74E-06
Benzo(b)fluoranthene	1.11E-04	1.11E-04	2.11E+00	2.30E+04 *	2.08E+06 *	1.03E-01 +	9.37E+00 +	1.08E+01 #	3.38E+03 #	3.68E-05
Benzo(g,h,i)perylene	NA	NA	1.75E+04 *	NA	NA	NA	NA	NA	NA	2.26E-01 #
Benzo(k)fluoranthene	1.11E-04	1.11E-04	2.10E+01 *	2.50E+04 *	2.04E+06 *	1.02E-01 +	8.34E+00 +	1.13E+01 #	3.38E+03 #	5.26E-04
Chrysene	1.11E-03	1.11E-03	2.10E+02 *	1.41E+04 *	5.23E+06 *	1.64E+00 +	6.09E+02 +	6.62E+01 #	2.83E+04 #	6.36E-03 #
Fluoranthene	NA	NA	2.20E+04 *	NA	NA	NA	NA	NA	NA	1.66E+00 #
Fluorene	NA	NA	2.20E+04 *	NA	NA	NA	NA	NA	NA	5.83E+00 #
Naphthalene	3.61E-04	3.61E-04	3.22E+02	1.25E+00	8.48E+02 *	1.45E+00	9.81E+02 +	1.27E+00	5.69E+02 #	6.43E+00
Phenanthrene	NA	NA	1.75E+04 *	NA	NA	NA	NA	NA	NA	2.27E+00 #
Pyrene	NA	NA	1.65E+04 *	NA	NA	NA	NA	NA	NA	1.42E+00 #
TPH-GRO	8.58E+01	8.58E+01	5.56E+06 *	3.76E+02	2.29E+05 *	2.48E+05	1.51E+08 +	2.71E+02 #	1.20E+05 #	NA
Aliphatics - > C6-C8	8.06E+01	8.06E+01	5.40E+06 *	1.99E+02	1.21E+05 *	2.33E+05	1.42E+08 +	1.20E+02 #	5.30E+04 #	NA
Aliphatics - > C8-C10	4.38E+00	4.38E+00	1.20E+05 *	7.34E+01	4.48E+04 *	1.26E+04	7.71E+06 +	5.94E+00 #	2.62E+03 #	NA
Aromatics - >C8-C10	8.76E-01	8.76E-01	4.50E+04 *	1.03E+02	6.30E+04 *	2.52E+03	1.54E+06 +	1.45E+02 #	6.39E+04 #	NA
TPH-DRO	1.05E+01	1.05E+01	2.02E+06 *	1.46E+04 *	8.89E+06 *	3.03E+04 +	1.84E+07 +	1.71E+03 #	7.60E+05 #	NA
Aliphatics - >C10-C12	4.38E+00	4.38E+00	8.42E+04 *	5.30E+02 *	3.23E+05 *	1.26E+04 +	7.71E+06 +	5.45E+00 #	2.40E+03 #	NA
Aliphatics - >C12-C16	4.38E+00	4.38E+00	8.55E+04 *	9.19E+03 *	5.60E+06 *	1.26E+04 +	7.71E+06 +	4.74E+00 #	2.09E+03 #	NA
Aliphatics - >C16-C21	NA	NA	1.76E+06 *	NA	NA	NA	NA	NA	NA	NA
Aromatics - >C10-C12	8.76E-01	8.76E-01	3.22E+04 *	4.88E+02	2.97E+05 *	2.52E+03	1.53E+06 +	3.69E+02 #	1.64E+05 #	NA
Aromatics - >C12-C16	8.76E-01	8.76E-01	3.39E+04 *	4.43E+03 *	2.67E+06 *	2.47E+03 +	1.49E+06 +	1.33E+03 #	5.92E+05 #	NA
Aromatics - >C16-C21	NA	NA	1.75E+04 *	NA	NA	NA	NA	NA	NA	NA
TPH-ORO	NA	NA	1.78E+06 *	NA	NA	NA	NA	NA	NA	NA
Aliphatics - >C21-C35	NA	NA	1.76E+06 *	NA	NA	NA	NA	NA	NA	NA
Aromatics - >C21-C35	NA	NA	1.75E+04 *	NA	NA	NA	NA	NA	NA	NA

Notes:

*: Calculated RBSL exceeded saturated soil concentration and calculated value is shown.

#: Calculated RBSL exceeded pure component water solubility and calculated value is shown.

+: Calculated RBSL exceeded saturated soil vapor concentration and calculated value is shown.

Soil concentrations are presented on a dry weight basis.

**: These values may change when the Division develops the vapor intrusion pathway.

NA: Not available due to lack of an input parameter.

Table 5-11
Risk-Based Screening Levels for a Constrcuction Worker

Chemicals of Concern	Air	Soil Upto Depth of Construction		Groundwater			
	Outdoor	Ingestion, Inhalation (Vapor Emissions and Particulates), and Dermal Contact		Outdoor Inhalation		Incidental Dermal Contact	
	[mg/m^3-air]	[mg/kg]		[mg/L]			
Benzene	1.09E-01	6.91E+02		1.38E+04	#	4.71E+00	
Toluene	6.08E+01	6.46E+04	*	7.67E+06	#	1.32E+02	
Ethylbenzene	3.41E-01	3.18E+03	*	4.22E+04	#	6.20E+00	
Xylenes (total)	1.22E+00	2.39E+04	*	1.75E+05	#	1.81E+02	#
Ethylene dibromide (EDB)	1.42E-03	1.78E+01		2.06E+03		3.58E-01	
Ethylene dichloride (EDC (1,2-DCA))	3.28E-02	3.04E+02		1.57E+04	#	8.97E+00	
Methyl tertiary butyl ether (MTBE)	3.28E+00	8.49E+03		3.31E+06	#	1.16E+02	
Tertiary butyl alcohol (TBA)	NA	9.68E+04	*	NA		2.89E+03	
Ethanol	NA	3.55E+07	*	NA		3.83E+06	#
Acenaphthene	NA	3.71E+04	*	NA		1.82E+01	#
Anthracene	NA	1.86E+05	*	NA		8.10E+02	#
Benzo(a)anthracene	7.74E-03	5.92E+01	*	1.15E+05	#	4.42E-03	
Benzo(a)pyrene	7.74E-04	5.92E+00		1.45E+04	#	2.60E-04	
Benzo(b)fluoranthene	7.74E-03	5.92E+01	*	2.35E+05	#	2.55E-03	#
Benzo(g,h,i)perylene	NA	2.02E+04	*	NA		6.28E-01	#
Benzo(k)fluoranthene	7.74E-03	5.80E+02	*	2.35E+05	#	3.66E-02	#
Chrysene	7.74E-02	5.78E+03	*	1.96E+06	#	4.42E-01	#
Fluoranthene	NA	2.48E+04	*	NA		4.62E+00	#
Fluorene	NA	2.48E+04	*	NA		1.62E+01	#
Naphthalene	2.50E-02	4.16E+03	*	3.95E+04	#	1.79E+01	
Phenanthrene	NA	2.02E+04	*	NA		6.30E+00	#
Pyrene	NA	1.86E+04	*	NA		3.93E+00	#
TPH-GRO	NA	1.04E+09	*	NA		3.32E+05	#
Aliphatics - > C6-C8	2.24E+02	2.24E+06	*	1.47E+05	#	NA	
Aliphatics - > C8-C10	1.22E+01	7.10E+04	*	7.28E+03	#	NA	
Aromatics - >C8-C10	2.43E+00	2.74E+04	*	1.78E+05	#	NA	
TPH-DRO	NA	1.27E+08	*	NA		2.11E+06	#
Aliphatics - >C10-C12	1.22E+01	8.39E+04	*	6.67E+03	#	NA	
Aliphatics - >C12-C16	1.22E+01	1.01E+05	*	5.80E+03	#	NA	
Aliphatics - >C16-C21	NA	2.15E+06	*	NA		NA	
Aromatics - >C10-C12	2.43E+00	3.40E+04	*	4.54E+05	#	NA	
Aromatics - >C12-C16	2.43E+00	3.94E+04	*	1.65E+06	#	NA	
Aromatics - >C16-C21	NA	2.02E+04	*	NA		NA	
TPH-ORO	NA	NA		NA		NA	
Aliphatics - >C21-C35	NA	2.15E+06	*	NA		NA	
Aromatics - >C21-C35	NA	2.02E+04	*	NA		NA	

Notes:

***:** Calculated RBSL exceeded saturated soil concentration and calculated value is shown.

#: Calculated RBSL exceeded pure component water solubility and calculated value is shown.

+: Calculated RBSL exceeded saturated soil vapor concentration and calculated value is shown.
Soil concentrations are presented on a dry weight basis.

****:** These values may change when the Division develops the vapor intrusion pathway.

NA: Not available due to lack of an input parameter.

Table 5-12
Tier 1 RBSLs for Soil Concentrations (for Leaching to Groundwater) for Different Distances to the Groundwater Exposure Point

Chemicals of Concern	Water Standard† [mg/L]	Tiier 1 RBTLs for Soil Concentration at the Source for Different Distances to the Exposure Point											
		0 ft. [mg/kg]	50 ft. [mg/kg]	100 ft. [mg/kg]	150 ft. [mg/kg]	200 ft. [mg/kg]	250 ft. [mg/kg]	300 ft. [mg/kg]	350 ft. [mg/kg]	400 ft. [mg/kg]	450 ft. [mg/kg]	500 ft. [mg/kg]	1000 ft. [mg/kg]
Benzene	5.00E-03	3.08E-02	4.03E-02	9.57E-02	1.92E-01	3.27E-01	5.01E-01	7.14E-01	9.65E-01	1.26E+00	1.58E+00	1.95E+00	7.76E+00
Toluene	1.00E+00	9.60E+00	1.26E+01	2.98E+01	5.98E+01	1.02E+02	1.56E+02	2.23E+02	3.01E+02	3.91E+02	4.94E+02	6.08E+02	2.42E+03 *
Ethylbenzene	7.00E-01	1.25E+01	1.64E+01	3.89E+01	7.79E+01	1.33E+02	2.04E+02	2.90E+02	3.92E+02	5.10E+02	6.44E+02	7.93E+02 *	3.15E+03 *
Xylenes (total)	1.00E+01	1.54E+02	2.01E+02	4.78E+02 *	9.59E+02 *	1.63E+03 *	2.50E+03 *	3.57E+03 *	4.82E+03 *	6.27E+03 *	7.92E+03 *	9.75E+03 *	3.88E+04 *
Ethylene dibromide (EDB)	1.18E-05	2.34E-05	3.06E-05	7.28E-05	1.46E-04	2.49E-04	3.81E-04	5.43E-04	7.34E-04	9.55E-04	1.21E-03	1.48E-03	5.90E-03
Ethylene dichloride (EDC (1,2-DCA))	5.00E-03	9.93E-03	1.30E-02	3.08E-02	6.18E-02	1.05E-01	1.61E-01	2.30E-01	3.11E-01	4.05E-01	5.11E-01	6.29E-01	2.50E+00
Methyl tertiary butyl ether (MTBE)	2.20E-02	1.96E-02	2.56E-02	6.08E-02	1.22E-01	2.08E-01	3.18E-01	4.53E-01	6.13E-01	7.97E-01	1.01E+00	1.24E+00	4.93E+00
Tertiary butyl alcohol (TBA)	1.41E+00	8.40E-01	1.10E+00	2.61E+00	5.23E+00	8.92E+00	1.37E+01	1.95E+01	2.63E+01	3.42E+01	4.32E+01	5.32E+01	2.12E+02
Ethanol	5.16E+02	2.47E+02	3.24E+02	7.68E+02	1.54E+03	2.63E+03	4.02E+03	5.73E+03	7.75E+03	1.01E+04	1.27E+04	1.57E+04	6.23E+04 *
Acenaphthene	9.39E-01	1.84E+02	2.41E+02 *	5.72E+02 *	1.15E+03 *	1.96E+03 *	3.00E+03 *	4.27E+03 *	5.77E+03 *	7.51E+03 *	9.47E+03 *	1.17E+04 *	4.64E+04 *
Anthracene	4.69E+00	2.99E+03 *	3.91E+03 *	9.29E+03 *	1.86E+04 *	3.18E+04 *	4.87E+04 *	6.93E+04 *	9.38E+04 *	1.22E+05 *	1.54E+05 *	1.90E+05 *	7.53E+05 *
Benzo(a)anthracene	5.29E-05	3.64E-01	4.77E-01	1.13E+00	2.27E+00	3.87E+00	5.93E+00	8.44E+00	1.14E+01	1.48E+01	1.87E+01 *	2.31E+01 *	9.17E+01 *
Benzo(a)pyrene	2.00E-04	4.58E+00	5.98E+00	1.42E+01 *	2.85E+01 *	4.86E+01 *	7.44E+01 *	1.06E+02 *	1.43E+02 *	1.86E+02 *	2.35E+02 *	2.90E+02 *	1.15E+03 *
Benzo(b)fluoranthene	5.29E-05	1.23E+00	1.61E+00	3.83E+00	7.69E+00	1.31E+01 *	2.01E+01 *	2.86E+01 *	3.87E+01 *	5.03E+01 *	6.35E+01 *	7.82E+01 *	3.11E+02 *
Benzo(g,h,i)perylene	4.69E-01	2.90E+04 *	3.79E+04 *	9.00E+04 *	1.80E+05 *	3.08E+05 *	4.71E+05 *	6.71E+05 *	9.08E+05 *	1.18E+06 *	1.49E+06 *	1.84E+06 *	7.29E+06 *
Benzo(k)fluoranthene	7.85E-05	1.80E+00	2.35E+00	5.58E+00 *	1.12E+01 *	1.91E+01 *	2.92E+01 *	4.16E+01 *	5.63E+01 *	7.32E+01 *	9.24E+01 *	1.14E+02 *	4.52E+02 *
Chrysene	7.85E-04	5.52E+00 *	7.22E+00 *	1.71E+01 *	3.44E+01 *	5.86E+01 *	8.98E+01 *	1.28E+02 *	1.73E+02 *	2.25E+02 *	2.84E+02 *	3.50E+02 *	1.39E+03 *
Fluoranthene	6.26E-01	1.35E+03 *	1.77E+03 *	4.20E+03 *	8.42E+03 *	1.44E+04 *	2.20E+04 *	3.13E+04 *	4.24E+04 *	5.51E+04 *	6.95E+04 *	8.56E+04 *	3.40E+05 *
Fluorene	6.26E-01	2.24E+02 *	2.92E+02 *	6.94E+02 *	1.39E+03 *	2.37E+03 *	3.64E+03 *	5.18E+03 *	7.00E+03 *	9.11E+03 *	1.15E+04 *	1.42E+04 *	5.63E+04 *
Naphthalene	2.68E-04	1.63E-02	2.13E-02	5.05E-02	1.01E-01	1.73E-01	2.64E-01	3.77E-01	5.09E-01	6.63E-01	8.36E-01	1.03E+00	4.09E+00
Phenanthrene	4.69E-01	2.58E+02 *	3.38E+02 *	8.03E+02 *	1.61E+03 *	2.74E+03 *	4.20E+03 *	5.99E+03 *	8.10E+03 *	1.05E+04 *	1.33E+04 *	1.64E+04 *	6.51E+04 *
Pyrene	4.69E-01	9.94E+02 *	1.30E+03 *	3.09E+03 *	6.19E+03 *	1.05E+04 *	1.62E+04 *	2.30E+04 *	3.11E+04 *	4.05E+04 *	5.11E+04 *	6.30E+04 *	2.50E+05 *
TPH-GRO	3.45E+01	6.83E+03 *	8.93E+03 *	2.12E+04 *	4.25E+04 *	7.25E+04 *	1.11E+05 *	1.58E+05 *	2.14E+05 *	2.78E+05 *	3.51E+05 *	4.33E+05 *	1.72E+06 *
Aliphatics - > C6-C8	3.32E+01	5.52E+03 *	7.21E+03 *	1.71E+04 *	3.43E+04 *	5.86E+04 *	8.97E+04 *	1.28E+05 *	1.73E+05 *	2.25E+05 *	2.84E+05 *	3.49E+05 *	1.39E+06 *
Aliphatics - > C8-C10	1.04E+00	1.30E+03 *	1.70E+03 *	4.03E+03 *	8.08E+03 *	1.38E+04 *	2.11E+04 *	3.01E+04 *	4.07E+04 *	5.29E+04 *	6.67E+04 *	8.22E+04 *	3.27E+05 *
Aromatics - >C8-C10	3.13E-01	1.95E+01	2.55E+01	6.05E+01	1.21E+02	2.07E+02	3.17E+02	4.51E+02	6.10E+02	7.94E+02	1.00E+03	1.23E+03 *	4.90E+03 *
TPH-DRO	3.45E+01	7.69E+08 *	1.01E+09 *	2.39E+09 *	4.79E+09 *	8.17E+09 *	1.25E+10 *	1.78E+10 *	2.41E+10 *	3.13E+10 *	3.96E+10 *	4.87E+10 *	1.94E+11 *
Aliphatics - >C10-C12	1.04E+00	1.02E+04	1.34E+04	3.17E+04	6.36E+04	1.08E+05	1.66E+05	2.37E+05	3.20E+05	4.16E+05	5.25E+05	6.47E+05	2.57E+06
Aliphatics - >C12-C16	1.04E+00	2.04E+05 *	2.66E+05 *	6.32E+05 *	1.27E+06 *	2.16E+06 *	3.31E+06 *	4.72E+06 *	6.38E+06 *	8.30E+06 *	1.05E+07 *	1.29E+07 *	5.13E+07 *
Aliphatics - >C16-C21	3.13E+01	7.69E+08 *	1.01E+09 *	2.39E+09 *	4.79E+09 *	8.16E+09 *	1.25E+10 *	1.78E+10 *	2.41E+10 *	3.13E+10 *	3.95E+10 *	4.87E+10 *	1.94E+11 *
Aromatics - >C10-C12	3.13E-01	3.08E+01	4.02E+01	9.55E+01	1.92E+02	3.27E+02	5.00E+02	7.13E+02 *	9.64E+02 *	1.25E+03 *	1.58E+03 *	1.95E+03 *	7.74E+03 *
Aromatics - >C12-C16	3.13E-01	6.12E+01	8.01E+01	1.90E+02	3.81E+02 *	6.50E+02 *	9.96E+02 *	1.42E+03 *	1.92E+03 *	2.49E+03 *	3.15E+03 *	3.88E+03 *	1.54E+04 *
Aromatics - >C16-C21	4.69E-01	2.90E+02 *	3.79E+02 *	9.00E+02 *	1.81E+03 *	3.08E+03 *	4.72E+03 *	6.72E+03 *	9.08E+03 *	1.18E+04 *	1.49E+04 *	1.84E+04 *	7.30E+04 *
TPH-ORO	3.18E+01	7.69E+08 *	1.01E+09 *	2.39E+09 *	4.79E+09 *	8.16E+09 *	1.25E+10 *	1.78E+10 *	2.41E+10 *	3.13E+10 *	3.95E+10 *	4.87E+10 *	1.94E+11 *
Aliphatics - >C21-C35	3.13E+01	7.69E+08	1.01E+09	2.39E+09	4.79E+09	8.16E+09	1.25E+10	1.78E+10	2.41E+10	3.13E+10	3.95E+10	4.87E+10	1.94E+11
Aromatics - >C21-C35	4.69E-01	2.30E+03 *	3.01E+03 *	7.15E+03 *	1.43E+04 *	2.44E+04 *	3.74E+04 *	5.33E+04 *	7.21E+04 *	9.38E+04 *	1.18E+05 *	1.46E+05 *	5.79E+05 *

Notes:

*: Calculated Tier 1 RBSLs for soil concentrations exceeded saturated soil concentration and calculated values are shown.

†: MCL, health advisory, or domestic water use Tier 1 RBSL for a resident (minimum of child and adult).
Soil concentrations are presented on a dry weight basis.