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Tier 1 Risk-Based Screening Levels (RBSLs)

Media	Surficial Soil [mg/kg]	Subsurface Soil [mg/kg]	Soil Vapor [µg/m ³]	Groundwater [mg/l]	Groundwater [mg/l]
Complete Exposure Pathway	Ingestion/Dermal/ Inhalation	Leachate to Groundwater Ingestion	Indoor Air Inhalation	Indoor Air Inhalation	Groundwater Ingestion [MCLs]
Benzene	2.8	0.26	2,900	0.016	0.005
Toluene	4,000	140	> VP ²	10	1.0
Ethylbenzene	2,100	190	> VP ²	26	0.7
Xylenes	10,000	>Sat* or 260 **	> VP ²	2.9	10* or 1.4**
Methyl tertiary-butyl ether (MTBE)	N/A	N/A	N/A	N/A	0.020
Acenaphthene	3,600	> Sat ¹	> VP ²	> Sol ³	0.420
Acenaphthylene	NTD ⁴	NTD ⁴	NTD ⁴	NTD ⁴	N/A
Anthracene	18,000	> Sat ¹	> VP ²	> Sol ³	2.1
Benzo(a)-anthracene	0.62	1.6	> VP ²	> Sol ³	4.8 E-6
Benzo(a)-pyrene	0.062	4.8** or > Sat ^{1*}	> VP ²	> Sol ³	4.8 E-6** or 2 E-4*
Benzo(b)-fluoranthene	0.62	4.5	> VP ²	> Sol ³	4.8 E-6
Benzo(g,h,i)-perylene	NTD ⁴	NTD ⁴	NTD ⁴	NTD ⁴	N/A
Benzo(k)-fluoranthene	6.2	4.4	> VP ²	> Sol ³	4.8 E-6
Chrysene	62	1.5	> VP ²	> Sol ³	4.8 E-6
Dibenzo(a,h)-anthracene	0.062	14	> VP ²	> Sol ³	4.8 E-6
Flouranthene	2,300	> Sat ¹	> VP ²	> Sol ³	0.280
Fluorene	2,400	> Sat ¹	> VP ²	> Sol ³	0.280
Indeno(1,2,3-CD)pyrene	0.62	> Sat ¹	> VP ²	> Sol ³	4.8 E-6
Naphthalene	850	> Sat ¹	> VP ²	0.9	0.140
Phenanthrene	NTD ⁴	NTD ⁴	NTD ⁴	NTD ⁴	N/A
Pyrene	1,800	> Sat ¹	> VP ²	> Sol ³	0.210
Total Petroleum Hydrocarbons	500***	500***	N/A	N/A	N/A

¹ > Sat denotes that even at a concentration equal to the saturation of the chemical, a hazard quotient of 1 and a cancer risk of 1^{E-6} is not exceeded.

² > VP denotes that even at a concentration equal to the vapor pressure of the chemical, a hazard quotient of 1 and a cancer risk of 1^{E-6} is not exceeded.

³ > Sol denotes that even at a concentration equal to the solubility of the chemical, a hazard quotient of 1 and a cancer risk of 1^{E-6} is not exceeded.

⁴ Health based risk levels for this compound are currently under development (NTD denotes no toxicological data).

* This RBSL will be in effect for releases that occurred prior to September 14, 2004.

** This RBSL will be in effect for releases that occurred on or after September 14, 2004.

*** To identify sites where priority PAHs may pose a risk to human health and the environment, a threshold value of 500 mg/kg for TPH in soil has been established by the OPS.