

Exercise #1: Soil Vapor Intrusion Screening (Case Study)

SB-2—Analytical Data

Substance	CAS No.	SB-2		SHS MSCs		VI Screening Values	
		Depth (ft)	Date Collected	Soil–Ground-water	Direct Contact (0–15 ft)	Soil Screening Value	Exceed?
Soil Type (USCS)	ML	mg/kg	mg/kg	mg/kg	mg/kg	(yes/no)	
Benzene	71-43-2	18		0.5	57		
1,2-Dibromoethane	106-93-4	1	U	0.005	0.74		
1,2-Dichloroethane	107-06-2	1	U	0.5	17		
Ethylbenzene	100-41-4	210		70	180		
Cumene	98-82-8	26		600	7,700		
Methyl tert-Butyl Ether	1634-04-4	0.51	U	2	1,700		
Naphthalene	91-20-3	63		25	160		
Toluene	108-88-3	810		100	10,000		
1,2,4-Trimethylbenzene	95-63-6	510		8.4	130		
1,3,5-Trimethylbenzene	108-67-8	170		74	2,200		
Xylene (Total)	1330-20-7	1,200		1,000	1,900		

Bolded data entries indicate exceedences of Statewide health standard MSCs.