

Widbury Barn Widbury Hill Ware Herts SG12 7QE

Generic Risk-Based Soil Screening Values

Job Number

J14212

Sheet 01/01

Site

Client

London Borough of Camden

Engineer

Proposed End Use Residential with plant uptake

Kingsgate School, Liddell Road, London NW6 2EW

Soil pH 7

Soil Organic Matter content % 1.0

Contaminant	Screening Value mg/kg	Data Source	Contaminant	Screening Value mg/kg	Data Sou
	Metals		A	nions	
Arsenic	37	C4SL	Soluble Sulphate	500 mg/l	Structure
Cadmium	26	C4SL	Sulphide	50	Structure
Chromium (III)	3000	LQM/CIEH	Chloride	400	Structure
Chromium (VI)	21	C4SL		Others	
Copper	2,330	LQM/CIEH	Organic Carbon (%)	6	Methanogenic p
Lead	200	C4SL	Total Cyanide	140	WRAS
Elemental Mercury	1	SGV	Total Mono Phenols	184	SGV
Inorganic Mercury	170	SGV	РАН		
Nickel	97	LQM/CIEH	Naphthalene	2.20	C4SL exp & LQ
Selenium	350	SGV	Acenaphthylene	170	LQM/CIE
Zinc	3,750	LQM/CIEH	Acenaphthene	210	LQM/CIEI
Hydrocarbons			Fluorene	160	LQM/CIE
Benzene	0.2	C4SL	Phenanthrene	92	LQM/CIE
Toluene	120	SGV	Anthracene	2,300	LQM/CIE
Ethyl Benzene	65	SGV	Fluoranthene	260	LQM/CIE
Xylene	42	SGV	Pyrene	560	LQM/CIE
Aliphatic C5-C6	30	LQM/CIEH	Benzo(a) Anthracene	4.3	C4SL exp & LQ
Aliphatic C6-C8	73	LQM/CIEH	Chrysene	8	C4SL exp & LQ
Aliphatic C8-C10	19	LQM/CIEH	Benzo(b) Fluoranthene	7.7	C4SL exp & LQ
Aliphatic C10-C12	93	LQM/CIEH	Benzo(k) Fluoranthene	12.1	C4SL exp & LQ
Aliphatic C12-C16	740	LQM/CIEH	Benzo(a) pyrene	4.35	C4SL
Aliphatic C16-C35	45,000	LQM/CIEH	Indeno(1 2 3 cd) Pyrene	4.4	C4SL exp & LQI
Aromatic C6-C7	See Benzene	LQM/CIEH	Dibenzo(a h) Anthracene	1.10	C4SL exp & LQI
Aromatic C7-C8	See Toluene	LQM/CIEH	Benzo (g h i) Perylene	65	C4SL exp & LQ
Aromatic C8-C10	27	LQM/CIEH	Screening value for PAH	62.1	B(a)P / 0.1
Aromatic C10-C12	69	LQM/CIEH	Chlorina	ted Solven	ts
Aromatic C12-C16	140	LQM/CIEH	1,1,1 trichloroethane (TCA)	11.7	LQM/CIE
Aromatic C16-C21	250	LQM/CIEH	tetrachloroethane (PCA)	0.56	LQM/CIEI
Aromatic C21-C35	890	LQM/CIEH	tetrachloroethene (PCE)	1.01	LQM/CIE
PRO (C ₅ –C ₁₀)	269	Calc	trichloroethene (TCE)	0.134	LQM/CIE
DRO (C ₁₂ –C ₂₈)	46,130	Calc	1,2-dichloroethane (DCA)	0.0054	LQM/CIE
Lube Oil (C ₂₈ –C ₄₄)	45,890	Calc	vinyl chloride (Chloroethene)	0.000953	LQM/CIE
ТРН	1000	Trigger for speciated	tetrachloromethane (Carbon tetra		LQM/CIE
	1	testing	trichloromethane (Chloroform)	0.888	LQM/CIE

Notes

Concentrations measured below the above values may be considered to represent 'uncontaminated conditions' which pose 'LOW' risk to human

health. Concentrations measured in excess of these values indicate a potential risk which require further, site specific risk assessment.

SGV - Soil Guideline Value, derived from the CLEA model and published by Environment Agency 2009

LQM/CIEH - Generic Assessment Criteria for Human Health Risk Assessment 2nd edition (2009) derived using CLEA 1.04 model 2009

C4SL - Defra Category 4 Screening value based on Low Level of Toxicological Risk

C4SL exp & LQM/CIEH calculated using C4SL revisions to exposure assessment but LQM/CIEH health croiteria values

Calc - sum of nearest available carbon range specified including BTEX for PRO fraction

B(a)P / 0.15 - GEA experince indicates that Benzo(a) pyrene (one of the most common and most carcenogenic of the PAHs) rarely exceeds 15% of the total PAH concentration, hence this Total PAH threshold is regarded as being conservative