APPENDIX B

SOIL ASSESSMENT CRITERIA FOR RESIDENTIAL LAND USE (WITHOUT HOME GROWN PRODUCE)

SOIL ASSESSMENT CRITERIA FOR RESIDENTIAL LAND USE (WITHOUT HOME GROWN PRODUCE)

Contaminant	Assessment Criteria for Residential at 1% SOM (mg/kg)	Assessment Criteria for Residential at 2.5% SOM (mg/kg)	Assessment Criteria for Residential at 6% SOM (mg/kg)
Metals			
Arsenic	40	40	40
Boron	11000	11000	11000
Cadmium	85	85	85
Chromium III	910	910	910
Chromium VI	6	6	6
Copper	7100	7100	7100
*Lead	310	310	310
Mercury	1.2	1.2	1.2
Nickel	180	180	180
Selenium	430	430	430
Vanadium	1200	1200	1200
Zinc	40000	40000	40000
Non-Metals			
Phenol	750	1300	2300
Polyaromatic Hydrocarbons (PAH)			
Acenaphthene	3000	4700	6000
Acenaphthylene	2900	4600	6000
Anthracene	31000	35000	37000
Benz[a[anthracene	11	14	15
Benzo[a]pyrene	3.2	3.2	3.2
Benzo[b]fluoranthene	3.9	4.0	4.0
Benzo[ghi]perylene	360	360	360
Benzo[k]fluoranthene	110	110	110
Chrysene	30	31	32
Dibenz[ah]anthracene	0.31	0.32	0.32
Fluoranthene	1500	1600	1600
Fluorene	2800	3800	4500
Indeno[123-cd]pyrene	45	46	46
Naphthalene	2.3	5.6	13
Phenanthrene	1300	1500	1500
Pyrene	3700	3800	3800
Coal Tar [Bap as surrogate marker)	1.2	1.2	1.2
Petroleum Hydrocarbons			
Aliphatic EC 5-6	42	78	160
Aliphatic EC >6-8	100	230	530
Aliphatic EC>8-10	27	65	150
Aliphatic EC>10-12	130	330	770
Aliphatic EC>12-16	1100	2400	4400
Aliphatic EC>16-35	65000	92000	110000
Aliphatic EC>35-44	65000	92000	110000
Aromatic EC5-7 (Benzene)	370	690	1400
Aromatic EC>7-8 (Toluene)	860	1800	3900
Aromatic EC>8-10	47	110	270
Aromatic EC>10-12	250	590	1200
Aromatic EC>12-16	1800	2300	2500
Aromatic EC>16-21	1900	1900	1900
Aromatic EC>21-35	1900	1900	1900
Aromatic EC>35-44	1900	1900	1900
Aliphatic – Aromatic EC>44-70	1900	1900	1900

Copyright: Land Quality Management Limited (LQM)

The above is based on criteria contained in publication LQM/CIEH S4UL`s for Human Health Risk Assessment (2015) (***CCG*** Licence No. S4UL3233), applicable to the "Residential" land use (**without** home grown produce) scenario for soil organic matter (SOM) content of 1% - 6%.

*This document does not provide criteria for Lead, for which the results were compared to the C4SL published by DEFRA SP1010 Development of Category 4 Screening Levels.