

APPENDIX D

Contamination Laboratory Test Results



Scientific Analysis Laboratories Ltd

Certificate of Analysis

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Scientific Analysis Laboratories is a
limited company registered in England and
Wales (No 2514788) whose address is at
Hadfield House, Hadfield Street, Manchester M16 9FE

Report Number: 480464-1

Date of Report: 03-Jun-2015

Customer: Southern Testing Laboratories
Keeble House
Stuart Way
East Grinstead
West Sussex
RH19 4QA

Customer Contact: Mr Harris Coombs

Customer Job Reference: J12252

Customer Purchase Order: J12252_1

Customer Site Reference: 2 Gayton Road (London NW3)

Date Job Received at SAL: 26-May-2015

Date Analysis Started: 28-May-2015

Date Analysis Completed: 03-Jun-2015

The results reported relate to samples received in the laboratory
Opinions and interpretations expressed herein are outside the scope of UKAS accreditation
This report should not be reproduced except in full without the written approval of the laboratory
Tests covered by this certificate were conducted in accordance with SAL SOPs
All results have been reviewed in accordance with Section 25 of the SAL Quality Manual



Report checked
and authorised by :
Miss Claire Brown
Customer Service Manager

Issued by :
Miss Claire Brown
Customer Service Manager

SAL Reference: 480464						
Project Site: 2 Gayton Road (London NW3)						
Customer Reference: J12252						
Soil			Analysed as Soil			
STL Key Contamination Suite						
		SAL Reference	480464 001		480464 002	
		Customer Sample Reference	TP1 @ 0.40m		WS1 @ 1.00m	
		Date Sampled	18-MAY-2015		18-MAY-2015	
		Type	Clay		Clay	
Determinand	Method	Test Sample	LOD	Units		
Arsenic	T257	A40	2	mg/kg	15	21
Cadmium	T257	A40	0.1	mg/kg	<0.1	<0.1
Chromium	T257	A40	0.5	mg/kg	38	42
Copper	T257	A40	2	mg/kg	17	21
Lead	T257	A40	2	mg/kg	21	18
Mercury	T245	A40	1.0	mg/kg	<1.0	<1.0
Nickel	T257	A40	0.5	mg/kg	20	25
Selenium	T257	A40	3	mg/kg	<3	<3
Zinc	T257	A40	2	mg/kg	71	70
Asbestos ID	T27	A40			Asbestos not detected	-
Chromium VI	T6	A40	1	mg/kg	<1	<1
Fraction Organic Carbon - F(oc)	T21	A40	1	%	<1	<1
pH	T7	A40			7.9	7.7
Soil Organic Matter	T287	A40	0.1	%	0.7	0.5
(Water Soluble) SO4-- expressed as SO4	T242	A40	0.01	g/l	0.04	0.07
Sulphide	T4	A40	10	mg/kg	<10	<10
Cyanide(Total)	T4	AR	1	mg/kg	(64) <1	(64) <1
Phenols(Mono)	T221	AR	1.0	mg/kg	(64) <1.0	(64) <1.0
Moisture @ 105 C	T162	AR	0.1	%	22	25
Retained on 2mm	T2	A40	0.1	%	<0.1	<0.1

SAL Reference: 480464						
Project Site: 2 Gayton Road (London NW3)						
Customer Reference: J12252						
Soil			Analysed as Soil			
Total and Speciated USEPA16 PAH (SE) (MCERTS)						
		SAL Reference	480464 001		480464 002	
		Customer Sample Reference	TP1 @ 0.40m		WS1 @ 1.00m	
		Date Sampled	18-MAY-2015		18-MAY-2015	
		Type	Clay		Clay	
Determinand	Method	Test Sample	LOD	Units		
Naphthalene	T16	AR	0.1	mg/kg	<0.1	<0.1
Acenaphthylene	T16	AR	0.1	mg/kg	<0.1	<0.1
Acenaphthene	T16	AR	0.1	mg/kg	<0.1	<0.1
Fluorene	T16	AR	0.1	mg/kg	<0.1	<0.1
Phenanthrene	T16	AR	0.1	mg/kg	<0.1	<0.1
Anthracene	T16	AR	0.1	mg/kg	<0.1	<0.1
Fluoranthene	T16	AR	0.1	mg/kg	<0.1	<0.1
Pyrene	T16	AR	0.1	mg/kg	<0.1	<0.1
Benzo(a)Anthracene	T16	AR	0.1	mg/kg	<0.1	<0.1
Chrysene	T16	AR	0.1	mg/kg	<0.1	<0.1
Benzo(b)fluoranthene	T16	AR	0.1	mg/kg	<0.1	<0.1
Benzo(k)fluoranthene	T16	AR	0.1	mg/kg	<0.1	<0.1
Benzo(a)Pyrene	T16	AR	0.1	mg/kg	<0.1	<0.1
Indeno(123-cd)Pyrene	T16	AR	0.1	mg/kg	<0.1	<0.1
Dibenzo(ah)Anthracene	T16	AR	0.1	mg/kg	<0.1	<0.1
Benzo(ghi)Perylene	T16	AR	0.1	mg/kg	<0.1	<0.1
PAH(total)	T16	AR	0.1	mg/kg	<0.1	<0.1

Index to symbols used in 480464-1

Value	Description
A40	Assisted dried < 40C
AR	As Received
64	Analysis was performed by an alternative technique
S	Analysis was subcontracted
M	Analysis is MCERTS accredited
U	Analysis is UKAS accredited
N	Analysis is not UKAS accredited

Notes

Reported results on as received samples are corrected to a 105 degree centigrade dry weight basis
Sub contracted analysis performed by REC Asbestos Limited
Retained on 2mm is removed before analysis

Method Index

Value	Description
T21	OX/IR
T2	Grav
T6	ICP/OES
T27	PLM
T7	Probe
T16	GC/MS
T242	2:1 Extraction/ICP/OES (TRL 447 T1)
T4	Colorimetry
T162	Grav (1 Dec) (105 C)
T287	Calc TOC/0.58
T245	ICP/OES(Aqua Regia Extraction)
T257	ICP/OES (SIM) (Aqua Regia Extraction)
T221	Colorimetry (CE)

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Arsenic	T257	A40	2	mg/kg	M	001-002
Cadmium	T257	A40	0.1	mg/kg	M	001-002
Chromium	T257	A40	0.5	mg/kg	M	001-002
Copper	T257	A40	2	mg/kg	M	001-002
Lead	T257	A40	2	mg/kg	M	001-002
Mercury	T245	A40	1.0	mg/kg	U	001-002
Nickel	T257	A40	0.5	mg/kg	M	001-002
Selenium	T257	A40	3	mg/kg	U	001-002
Zinc	T257	A40	2	mg/kg	M	001-002
Asbestos ID	T27	A40			SU	001
Chromium VI	T6	A40	1	mg/kg	N	001-002
Fraction Organic Carbon - F(oc)	T21	A40	1	%	N	001-002
pH	T7	A40			M	001-002
Soil Organic Matter	T287	A40	0.1	%	N	001-002
(Water Soluble) SO4-- expressed as SO4	T242	A40	0.01	g/l	M	001-002
Sulphide	T4	A40	10	mg/kg	N	001-002
Cyanide(Total)	T4	AR	1	mg/kg	M	001-002
Phenols(Mono)	T221	AR	1.0	mg/kg	M	001-002
Moisture @ 105 C	T162	AR	0.1	%	N	001-002
Retained on 2mm	T2	A40	0.1	%	N	001-002
Naphthalene	T16	AR	0.1	mg/kg	U	001-002
Acenaphthylene	T16	AR	0.1	mg/kg	U	001-002
Acenaphthene	T16	AR	0.1	mg/kg	M	001-002
Fluorene	T16	AR	0.1	mg/kg	M	001-002
Phenanthrene	T16	AR	0.1	mg/kg	U	001-002
Anthracene	T16	AR	0.1	mg/kg	M	001-002
Fluoranthene	T16	AR	0.1	mg/kg	N	001-002
Pyrene	T16	AR	0.1	mg/kg	N	001-002
Benzo(a)Anthracene	T16	AR	0.1	mg/kg	M	001-002
Chrysene	T16	AR	0.1	mg/kg	M	001-002
Benzo(b)fluoranthene	T16	AR	0.1	mg/kg	U	001-002
Benzo(k)fluoranthene	T16	AR	0.1	mg/kg	N	001-002
Benzo(a)Pyrene	T16	AR	0.1	mg/kg	M	001-002

Determinand	Method	Test Sample	LOD	Units	Symbol	SAL References
Indeno(123-cd)Pyrene	T16	AR	0.1	mg/kg	M	001-002
Dibenzo(ah)Anthracene	T16	AR	0.1	mg/kg	M	001-002
Benzo(ghi)Perylene	T16	AR	0.1	mg/kg	M	001-002
PAH(total)	T16	AR	0.1	mg/kg	U	001-002





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Keeble House
Stuart Way
East Grinstead
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RH19 4QA

Customer Contact: Mr Harris Coombs

Customer Job Reference: J12252

Customer Purchase Order: J12252_1

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Date Job Received at SAL: 26-May-2015

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All results have been reviewed in accordance with Section 25 of the SAL Quality Manual



Report checked
and authorised by :
Miss Claire Brown
Customer Service Manager

Issued by :
Miss Claire Brown
Customer Service Manager

Appendix B Geology map and summary of local boreholes

Waste Acceptance Criteria

Customer Sample Reference : TP1 @ 0.40m
 SAL Sample Reference : 480464 001
 Project Site : 2 Gayton Road (London NW3)
 Customer Reference : J12252
 Test Portion Mass (g) : 175
 Date Sampled : 18-MAY-2015
 Type : Clay

Soil Summary					Result	Inert Waste Landfill	Stable non reactive	Hazardous Waste Landfill
Determinand	Technique	LOD	Units	Symbol				
pH	Probe			M	7.9		>6.0	
Loss on Ignition @450C	Ign 450C/Grav	0.1	%	M	4.2			10.0
Total Organic Carbon	OX/IR	0.1	%	N	0.4	3.0	5.0	6.0
Acid Neutralising Capacity (pH 7)	Titration	2.0	Mol/kg	N	<2.0			
BTEX (Sum)	Calc	0.040	mg/kg	U	<0.040	6.0		
Coronene	GC/MS (MCERTS)	0.1	mg/kg	N	<0.1			
PAH (Sum)	Calc	1.6	mg/kg	N	<1.6	100.0		
PCB EC7 (Sum)	Calc	0.00035	mg/kg	U	<0.14	1.0		
TPH (C10-C40)	GC/FID (SE)	10	mg/kg	M	<10	500.0		
Moisture @ 105 C	Grav (1 Dec) (105 C)	0.1	%	N	22			
Retained on 2mm	Grav	0.1	%	N	<0.1			

10:1 Leachate					Result	Inert Waste Landfill	Stable non reactive	Hazardous Waste Landfill
Determinand	Technique	LOD	Units	Symbol				
Antimony (Dissolved)	Calc / ICP/MS (Filtered)	0.010	mg/kg	N	<0.010	0.06	0.7	5.0
Arsenic (Dissolved)	Calc / ICP/MS (Filtered)	0.0020	mg/kg	N	0.038	0.5	2.0	25.0
Barium (Dissolved)	Calc / ICP/MS (Filtered)	0.010	mg/kg	N	0.014	20.0	100.0	300.0
Cadmium (Dissolved)	Calc / ICP/MS (Filtered)	0.00020	mg/kg	N	<0.00020	0.04	1.0	5.0
Chloride	Calc / Discrete Analyser	10	mg/kg	N	14	800.0	15000.0	25000.0
Chromium (Dissolved)	Calc / ICP/MS (Filtered)	0.010	mg/kg	N	0.011	0.5	10.0	70.0
Copper (Dissolved)	Calc / ICP/MS (Filtered)	0.0050	mg/kg	N	0.0098	2.0	50.0	100.0
Dissolved Organic Carbon	Calc / OX/IR	10	mg/kg	N	30	500.0	800.0	1000.0
Fluoride	Calc / Discrete Analyser	0.50	mg/kg	N	<0.50	10.0	150.0	500.0
Lead (Dissolved)	Calc / ICP/MS (Filtered)	0.0030	mg/kg	N	<0.0030	0.5	10.0	50.0
Mercury (Dissolved)	Calc / ICP/MS (Filtered)	0.00050	mg/kg	N	<0.00050	0.01	0.2	2.0
Molybdenum (Dissolved)	Calc / ICP/MS (Filtered)	0.010	mg/kg	N	0.031	0.5	10.0	30.0
Nickel (Dissolved)	Calc / ICP/MS (Filtered)	0.015	mg/kg	N	⁽³⁾ <0.015	0.4	10.0	40.0
Phenols(Mono)	Calc / Colorimetry	1.0	mg/kg	N	<1.0	1.0		
Selenium (Dissolved)	Calc / ICP/MS (Filtered)	0.0050	mg/kg	N	<0.0050	0.1	0.5	7.0
SO4--	Calc / Discrete Analyser	5.0	mg/kg	N	39	1000.0	20000.0	50000.0
Total Dissolved Solids	Calc	100	mg/kg	N	200	4000.0	60000.0	100000.0
Zinc (Dissolved)	Calc / ICP/MS (Filtered)	0.020	mg/kg	N	0.066	4.0	50.0	200.0

From: EC Directive 99/31/EC and Landfill Regulations 2002 (as amended)

Note:- Sample failed to produce sufficient eluate within the specified time after vacuum filtration for 1 hour and centrifugation for 30 minutes. Therefore, the exact application of the two-step leaching test is precluded on technical grounds. (ref: Section 5.2.4 BS EN 12457-3:2002) Results are derived from a single step leaching at L/S 10/1 as prescribed by the EA guidance. (Ref Section C4.1.1 Guidance on Sampling and Testing of Wastes to meet Landfill Waste Acceptance Procedures Version 1 April 2005, Environment Agency)

Notes:- Cumulative release at L/S=10 (mg/kg of dry matter) in accordance with BS EN 12457. Soil leaching procedure is not covered by our UKAS accreditation

Waste Acceptance Criteria

Customer Sample Reference : WS1 @ 1.00m
 SAL Sample Reference : 480464 002
 Project Site : 2 Gayton Road (London NW3)
 Customer Reference : J12252
 Test Portion Mass (g) : 175
 Date Sampled : 18-MAY-2015
 Type : Clay

Soil Summary					Result	Inert Waste Landfill	Stable non reactive	Hazardous Waste Landfill
Determinand	Technique	LOD	Units	Symbol				
pH	Probe			M	7.7		>6.0	
Loss on Ignition @450C	Ign 450C/Grav	0.1	%	M	4.5			10.0
Total Organic Carbon	OX/IR	0.1	%	N	0.3	3.0	5.0	6.0
Acid Neutralising Capacity (pH 7)	Titration	2.0	Mol/kg	N	<2.0			
BTEX (Sum)	Calc	0.040	mg/kg	U	<0.040	6.0		
Coronene	GC/MS (MCERTS)	0.1	mg/kg	N	<0.1			
PAH (Sum)	Calc	1.6	mg/kg	N	<1.6	100.0		
PCB EC7 (Sum)	Calc	0.00035	mg/kg	U	<0.14	1.0		
TPH (C10-C40)	GC/FID (SE)	10	mg/kg	M	<10	500.0		
Moisture @ 105 C	Grav (1 Dec) (105 C)	0.1	%	N	25			
Retained on 2mm	Grav	0.1	%	N	<0.1			

10:1 Leachate					Result	Inert Waste Landfill	Stable non reactive	Hazardous Waste Landfill
Determinand	Technique	LOD	Units	Symbol				
Antimony (Dissolved)	Calc / ICP/MS (Filtered)	0.010	mg/kg	N	<0.010	0.06	0.7	5.0
Arsenic (Dissolved)	Calc / ICP/MS (Filtered)	0.0020	mg/kg	N	0.015	0.5	2.0	25.0
Barium (Dissolved)	Calc / ICP/MS (Filtered)	0.010	mg/kg	N	0.010	20.0	100.0	300.0
Cadmium (Dissolved)	Calc / ICP/MS (Filtered)	0.00020	mg/kg	N	0.00029	0.04	1.0	5.0
Chloride	Calc / Discrete Analyser	10	mg/kg	N	11	800.0	15000.0	25000.0
Chromium (Dissolved)	Calc / ICP/MS (Filtered)	0.010	mg/kg	N	0.028	0.5	10.0	70.0
Copper (Dissolved)	Calc / ICP/MS (Filtered)	0.0050	mg/kg	N	0.0077	2.0	50.0	100.0
Dissolved Organic Carbon	Calc / OX/IR	10	mg/kg	N	20	500.0	800.0	1000.0
Fluoride	Calc / Discrete Analyser	0.50	mg/kg	N	<0.50	10.0	150.0	500.0
Lead (Dissolved)	Calc / ICP/MS (Filtered)	0.0030	mg/kg	N	<0.0030	0.5	10.0	50.0
Mercury (Dissolved)	Calc / ICP/MS (Filtered)	0.00050	mg/kg	N	0.0014	0.01	0.2	2.0
Molybdenum (Dissolved)	Calc / ICP/MS (Filtered)	0.010	mg/kg	N	0.043	0.5	10.0	30.0
Nickel (Dissolved)	Calc / ICP/MS (Filtered)	0.015	mg/kg	N	⁽³⁾ <0.015	0.4	10.0	40.0
Phenols(Mono)	Calc / Colorimetry	1.0	mg/kg	N	<1.0	1.0		
Selenium (Dissolved)	Calc / ICP/MS (Filtered)	0.0050	mg/kg	N	<0.0050	0.1	0.5	7.0
SO4--	Calc / Discrete Analyser	5.0	mg/kg	N	31	1000.0	20000.0	50000.0
Total Dissolved Solids	Calc	100	mg/kg	N	160	4000.0	60000.0	100000.0
Zinc (Dissolved)	Calc / ICP/MS (Filtered)	0.020	mg/kg	N	0.23	4.0	50.0	200.0

From: EC Directive 99/31/EC and Landfill Regulations 2002 (as amended)

Note:- Sample failed to produce sufficient eluate within the specified time after vacuum filtration for 1 hour and centrifugation for 30 minutes. Therefore, the exact application of the two-step leaching test is precluded on technical grounds. (ref: Section 5.2.4 BS EN 12457-3:2002) Results are derived from a single step leaching at L/S 10/1 as prescribed by the EA guidance. (Ref Section C4.1.1 Guidance on Sampling and Testing of Wastes to meet Landfill Waste Acceptance Procedures Version 1 April 2005, Environment Agency)

Notes:- Cumulative release at L/S=10 (mg/kg of dry matter) in accordance with BS EN 12457. Soil leaching procedure is not covered by our UKAS accreditation

SAL Reference: 480464						
Project Site: 2 Gayton Road (London NW3)						
Customer Reference: J12252						
Soil Analysed as Soil						
Total and Speciated USEPA16 PAH (SE) (MCERTS)						
SAL Reference			480464 001	480464 002		
Customer Sample Reference			TP1 @ 0.40m	WS1 @ 1.00m		
Test Sample			AR	AR		
Date Sampled			18-MAY-2015	18-MAY-2015		
Type			Clay	Clay		
Determinand	Method	LOD	Units	Symbol		
Naphthalene	GC/MS	0.1	mg/kg	U	<0.1	<0.1
Acenaphthylene	GC/MS	0.1	mg/kg	U	<0.1	<0.1
Acenaphthene	GC/MS	0.1	mg/kg	M	<0.1	<0.1
Fluorene	GC/MS	0.1	mg/kg	M	<0.1	<0.1
Phenanthrene	GC/MS	0.1	mg/kg	U	<0.1	<0.1
Anthracene	GC/MS	0.1	mg/kg	M	<0.1	<0.1
Fluoranthene	GC/MS	0.1	mg/kg	N	<0.1	<0.1
Pyrene	GC/MS	0.1	mg/kg	N	<0.1	<0.1
Benzo(a)Anthracene	GC/MS	0.1	mg/kg	M	<0.1	<0.1
Chrysene	GC/MS	0.1	mg/kg	M	<0.1	<0.1
Benzo(b)fluoranthene	GC/MS	0.1	mg/kg	U	<0.1	<0.1
Benzo(k)fluoranthene	GC/MS	0.1	mg/kg	N	<0.1	<0.1
Benzo(a)Pyrene	GC/MS	0.1	mg/kg	M	<0.1	<0.1
Indeno(123-cd)Pyrene	GC/MS	0.1	mg/kg	M	<0.1	<0.1
Dibenzo(ah)Anthracene	GC/MS	0.1	mg/kg	M	<0.1	<0.1
Benzo(ghi)Perylene	GC/MS	0.1	mg/kg	M	<0.1	<0.1
Polyaromatic Hydrocarbons (Total)	GC/MS	0.1	mg/kg	U	<0.1	<0.1

SAL Reference: 480464						
Project Site: 2 Gayton Road (London NW3)						
Customer Reference: J12252						
Soil Analysed as Soil						
BTEX						
SAL Reference			480464 001	480464 002		
Customer Sample Reference			TP1 @ 0.40m	WS1 @ 1.00m		
Test Sample			AR	AR		
Date Sampled			18-MAY-2015	18-MAY-2015		
Type			Clay	Clay		
Determinand	Method	LOD	Units	Symbol		
Benzene	GC/MS(Head Space)(MCERTS)	10	µg/kg	M	<10	<10
EthylBenzene	GC/MS(Head Space)(MCERTS)	10	µg/kg	M	<10	<10
Meta/Para-Xylene	GC/MS(Head Space)(MCERTS)	10	µg/kg	M	<10	<10
Ortho-Xylene	GC/MS(Head Space)(MCERTS)	10	µg/kg	M	<10	<10
Toluene	GC/MS(Head Space)(MCERTS)	10	µg/kg	M	<10	<10

SAL Reference: 480464						
Project Site: 2 Gayton Road (London NW3)						
Customer Reference: J12252						
Soil Analysed as Soil						
PCBs EC7 (SE)						
SAL Reference			480464 001	480464 002		
Customer Sample Reference			TP1 @ 0.40m	WS1 @ 1.00m		
Test Sample			AR	AR		
Date Sampled			18-MAY-2015	18-MAY-2015		
Type			Clay	Clay		
Determinand	Method	LOD	Units	Symbol		
Polychlorinated biphenyl BZ#101	GC/MS	20	µg/kg	M	<20	<20
Polychlorinated biphenyl BZ#118	GC/MS	20	µg/kg	M	<20	<20
Polychlorinated biphenyl BZ#138	GC/MS	20	µg/kg	M	<20	<20
Polychlorinated biphenyl BZ#153	GC/MS	20	µg/kg	M	<20	<20
Polychlorinated biphenyl BZ#180	GC/MS	20	µg/kg	M	<20	<20
Polychlorinated biphenyl BZ#28	GC/MS	20	µg/kg	M	<20	<20
Polychlorinated biphenyl BZ#52	GC/MS	20	µg/kg	M	<20	<20

Index to symbols used in 480464-1 A

Value	Description
AR	As Received
A40	Assisted dried < 40C
2:1	Leachate to BS EN 12457-3 (2:1)
8:1	Leachate to BS EN 12457-3 (8:1)
3	LOD Raised Due to Elevated Blank
M	Analysis is MCERTS accredited
U	Analysis is UKAS accredited
N	Analysis is not UKAS accredited

Notes

pH, LOI & TOC were performed on assisted dried samples (<40 degree centigrade). All other results relate to samples as received.
Reported results on as received samples are corrected to a 105 degree centigrade dry weight basis except ANC
Retained on 2mm is removed before analysis



Table 1 – Tier 1 Screening Values

Contaminant	Units	Proposed Land Use					
		Residential with homegrown produce consumption	Residential without homegrown produce consumption	Open Space* (Residential)	Open Space* (Park)	Allotments	Commercial / Industrial
Arsenic (As) [2]	mg/kg	37	40	79	170	43	640
Cadmium (Cd) [2]	mg/kg	11	85	120	555	1.9	190
Trivalent Chromium (CrIII) [2]	mg/kg	910	910	1,500	33,000	18,000	8600
Hexavalent Chromium (CrVI) [2]	mg/kg	6	6	7.7	220	1.8	33
Lead (Pb) [3]	mg/kg	200	310	630	1300	80	2330
Mercury (Hg) [1,2,7]	mg/kg	7.6-11	9.2-15	40	68-71	6.0	29-320
Selenium (Se) [2]	mg/kg	250	430	1,100	1,800	88	12,000
Nickel (Ni) [2,4]	mg/kg	180	180	230	3,400	230	980
Copper (Cu) [2,4]	mg/kg	2,400	7,100	12,000	44,000	520	68,000
Zinc (Zn) [2,4]	mg/kg	3,700	40,000	81,000	170,000	620	730,000
Phenol [1,2]	mg/kg	120-380	440-1200	440-1300	440-1300	23-83	440-1300
Benzo[a]pyrene [1,5]	mg/kg	1.7-2.4	2.6	4.9	10	0.67-2.7	36
Naphthalene [1,2]	mg/kg	2.3-13	2.3-13	77-430 ⁺	77-430 ⁺	4.1-24	77-430 ⁺
Total Cyanide (CN) [6]	mg/kg	/	/	/	/	/	/
Free Cyanide [6]	mg/kg	/	/	/	/	/	/
Complex Cyanides [6]	mg/kg	/	/	/	/	/	/
Thiocyanate [6]	mg/kg	/	/	/	/	/	/

Notes:

* Open Space levels calculated on the basis of the exposure modelling developed in the C4SL research.

+ Screening values constrained to saturation limit. Higher values may be acceptable on a site specific basis.

[1] Where ranges of values are given for organic contaminants the screening value is dependant on the Soil Organic Matter.

[2] LQM/CIEH S4UL (2014). Copyright Land Quality Management Ltd reproduced with permission; Publication Number S4UL 3116. All rights reserved.

[3] C4SL (DEFRA 2014).

[4] Copper, Zinc and Nickel may have phototoxic effects at the given concentrations. Alternative criteria should be adopted for importation of Topsoil or other soils for cultivation. BS3882:2007 and BS8601:2013 suggest values of 200 to 300mg/kg for Zn, 100 to 200mg/kg for Cu, and 60 to 110mg/kg for Ni, for topsoil and subsoil, depending on pH.

[5] Based on the Surrogate Marker approach and modelled using the modified exposure parameters of C4SL but retaining 'minimal risk' HCV.

[6] Screening criteria derived on a site specific basis if test results indicate.

[7] S4UL for Methyl Mercury, higher concentrations may be tolerable if inorganic mercury is the only species present. Lower concentrations apply for elemental Mercury.

These screening values are valid at the time of writing but may be subject to change and any such changes will have implications for the assessments based on them. Their validity should be confirmed at the time of site development.