Our Ref: JN0894

8th March 2017

Southern Testing
Environmental & Geotechnical

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Welland Homes Ltd
Council Offices
Priory Road
Spalding
Lincolnshire
PE11 2XE

For the attention of Peter Goodrick

Dear Sir,

Re: Waste Classification: Parkside Crescent, Spalding
National Grid Reference: TF 244 233
Geology: Tidal Flats over Oxford Clay

1 Introduction

Further to the Phase I and II investigation carried out in August 2015 (Ref JN0699), we are pleased to present our waste classification report for the above site.

2 Background Information and Scope

The site is located in the centre of Spalding in Lincolnshire, with the approximate National Grid Reference of the site being TF 244 233. It comprises a grassed area, with domestic garages and open land in the east of the site. It is proposed to redevelop the site with two terraced blocks of five houses, private rear gardens and associated infrastructure.

A desk study was carried out and indicates that the site has a history of railway sidings in the east. The western portion of the site was undeveloped until the early 1970s, when the domestic garages were constructed. The railway siding were removed in the late 1970s, leaving that part of the site clear (Ref; JN0699 – August 2015)

We also undertook a Phase II investigation in August 2015 (Ref; JN0699), to which the reader is referred for further investigation. The soils encountered comprised MADE GROUND (GL-0.3/1.0m), over medium dense (becoming wet, loose and runny) orange brown silty fine SAND (1.9/3.8), over loose silty fine SANDS (4.45m+).

It is understood that some of the excavated soil materials will require off-site disposal as part of the development work. The object of this additional investigation is to provide characterisation of the likely different material types taken off-site, using data from the initial investigation and new data from this investigation.

As part of this investigation, another five 1-2m deep trial holes were drilled using a windowless sampler (A-E), the locations of which are shown on Figure 1 appended (the trial hole locations from the previous investigation were also shown on this). The soils as found were similar to those encountered in the initial investigation, with between 0.3m and 1.1m of MADE GROUND over silty fine SAND.

A desk study and geotechnical issues were outside the requested scope of works.

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The recommendations contained in this report may not be appropriate to alternative development schemes. The contamination screening values used 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.

3 Sampling and Chemical Testing

Selected soil samples were scheduled for laboratory testing as detailed in the table below. The results of the analysis are presented in Appendix B of this report. The Testing from the initial investigation has been combined with that from this assessment, to produce the following dataset:

Determinant	No. of tests
Metals and semi-metals (arsenic, cadmium, chromium, copper, lead, mercury, nickel, selenium and zinc)	8
Polycyclic aromatic hydrocarbons (PAH) (speciated into USEPA 16 compounds)	8
Speciated petroleum hydrocarbons (TPH CWG)	4
Asbestos screen	8
Organic Matter	8
Sulphate	8
Sulphide	8
Moisture Content	8
pH	8
Waste Acceptance Criteria (WAC)	2

4 Waste Characterisation

If arisings from the constructions works are intended for disposal, then there is a requirement to determine prior to disposal whether these would classify as:

- Hazardous
- Non hazardous

The current relevant waste legislation and technical guidance (WM3 1st edition 2015) on the assessment and classification of hazardous waste, sets out the requirement for classification and provides the basis for the methodology employed to ensure compliance with the regulations. This report sets out to fulfil the requirements of basic characterisation.

Waste classification indicates whether the material is hazardous or non-hazardous. If material is classified as non-hazardous, there is a choice of sending the material to a non-hazardous or an inert landfill (subject to meeting inert waste acceptance levels based on WAC analysis). Where the waste is classified as hazardous, WAC analysis will be required to demonstrate that the concentrations meet the acceptance levels for hazardous landfill or stable non-reactive hazardous (SNRH) landfill.

The List of Wastes (England) Regulations 2005 shows those wastes that are absolute entries (i.e. hazardous waste regardless of their concentration) and mirror entries (hazardous waste only if hazardous substances are present above the specified threshold concentrations).

Section 17 of the List of Wastes relates to Construction and Demolition Wastes (including Excavated Soil from Contaminated Sites, stones and dredging spoil). Contaminated soil is a "mirror entry" under code '17 05 03* (17 05 04)', and is not automatically assigned a hazardous or non-hazardous nature.

Instead, an assessment of the composition of the soil is undertaken to determine the concentrations of hazardous substances, and the waste classified accordingly. The assessment of contaminated soil to determine whether it is hazardous waste is dependent on the presence of "hazardous substances" exceeding particular thresholds.

4.1 Results of the Assessment

The waste classification assessment has been undertaken using the results of the chemical analyses on the samples analysed from both investigations. The classification of the material was conducted using the concentration of each identified substance attributed to its 'worst-case' compound (where relevant), as per Environment Agency (EA) document WM3 (2015) and The Classification, Labelling and Packaging of Substances and Mixtures Regulation 1272/2008 (CLP). The assessment was carried out using the HazWaste Online Toolkit together with Tables 3.1 and 3.2 of CLP Regulation. The details of the waste classification are presented in Appendix C.

The results of the chemical analysis carried out indicate that the recorded concentrations for PAHs, metals and TPH in the soils were generally low and no exceedances above any of the hazardous waste thresholds were recorded.

Insulation lagging (asbestos) was detected in sample WS6 @ 0.2m. No quantification analysis was carried out on this sample. No asbestos was detected in any other sample analysed.

A summary of the assessment results is presented below:

Sample ID	Material	Initial Classification (based on test results)	Hazardous Properties	STL Classification
WS1 @ 0.4m	Made Ground	Non-Hazardous	n/a	Non-Hazardous
WS3 @ 0.5m	Made Ground	Non-Hazardous	n/a	Non-Hazardous
WS4 @ 0.1m	Topsoil	Non-Hazardous	n/a	Non-Hazardous
WS6 @ 0.2m	Topsoil	Non-Hazardous**	n/a	Non-Hazardous
WS7@ 0.3m	Made Ground	Non-Hazardous	n/a	Non-Hazardous
WLSB @ 0.4m	Made Ground	Non-Hazardous	n/a	Non-Hazardous
WLSC @ 0.7m	Made ground	Non-Hazardous	n/a	Non-Hazardous
WLSC @ 1.3m	Natural Soil	Non-Hazardous	n/a	Non-Hazardous

**Insulation lagging was detected in the sample WS6. No asbestos quantification analysis was carried out on this sample. In the absence of quantification analysis, the receiving landfill may assume the worst case and consider this material hazardous.

In general, on the basis of the results of the chemical analysis, the soil materials are classified as **Non-Hazardous with LoW (EWC) code 17 05 04.**

4.2 Results of Waste Acceptance Criteria (WAC) Analysis

Waste Acceptance Criteria Analysis was carried out on two samples WLS A @ 0.2m (Made Ground) and WLS B @ 1.0m (natural soil).

A summary of the results is presented below:

WLS A @ 0.2m (Made Ground

Total Organic Carbon (TOC) concentration was recorded at 3.9%. This exceeds the inert landfill criteria of 3%. Loss-on-Ignition (LOI) was recorded at 15%. This also exceeds the hazardous landfill acceptance criteria of 10%).

Based on the description of this material as MADE GROUND, coupled with the high organic content, this material could not be accepted in Inert landfill. It could however be accepted in a Non-Hazardous landfill.

WLS B @1.0m (natural soil)

The recorded concentrations of all parameters analysed were well within the threshold of the Inert landfill acceptance criteria.

The natural soil at this location and any other excavated natural soils could be disposed of at an Inert landfill.

5 Summary and Recommendation

Made Ground

On the basis of the basic waste characterisation carried out, the made ground materials across the site are classified as **Non-Hazardous** with **LoW (EWC) Code 17 05 04** and could be sent to a Non-Hazardous landfill.

The results of WAC analysis carried out on a single made ground samples WLS A @ 0.2m indicate that due high content of organic matter content (TOC) and loss on ignition (LOI), the material may not be accepted as Inert waste but rather as Non-Hazardous.

Topsoil

Basic waste characterisation carried out on two topsoil samples indicate that the materials meet the Non-Hazardous classification with EWC 17 05 04.

However, unquantified asbestos insulation lagging was detected in the soil at WS6. Our experience shows that quantification analysis carried out on similar materials tends to record asbestos mass concentrations of less than hazardous threshold of 0.1%.

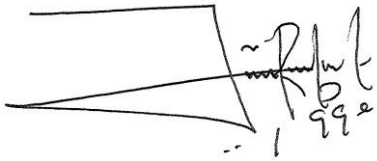
By default, topsoil material is not considered inert material due to the generic high organic matter content.

Natural Soil

The results of the WAC analysis indicate that the natural soil meet inert landfill acceptance criteria and could therefore be send to Inert landfill.

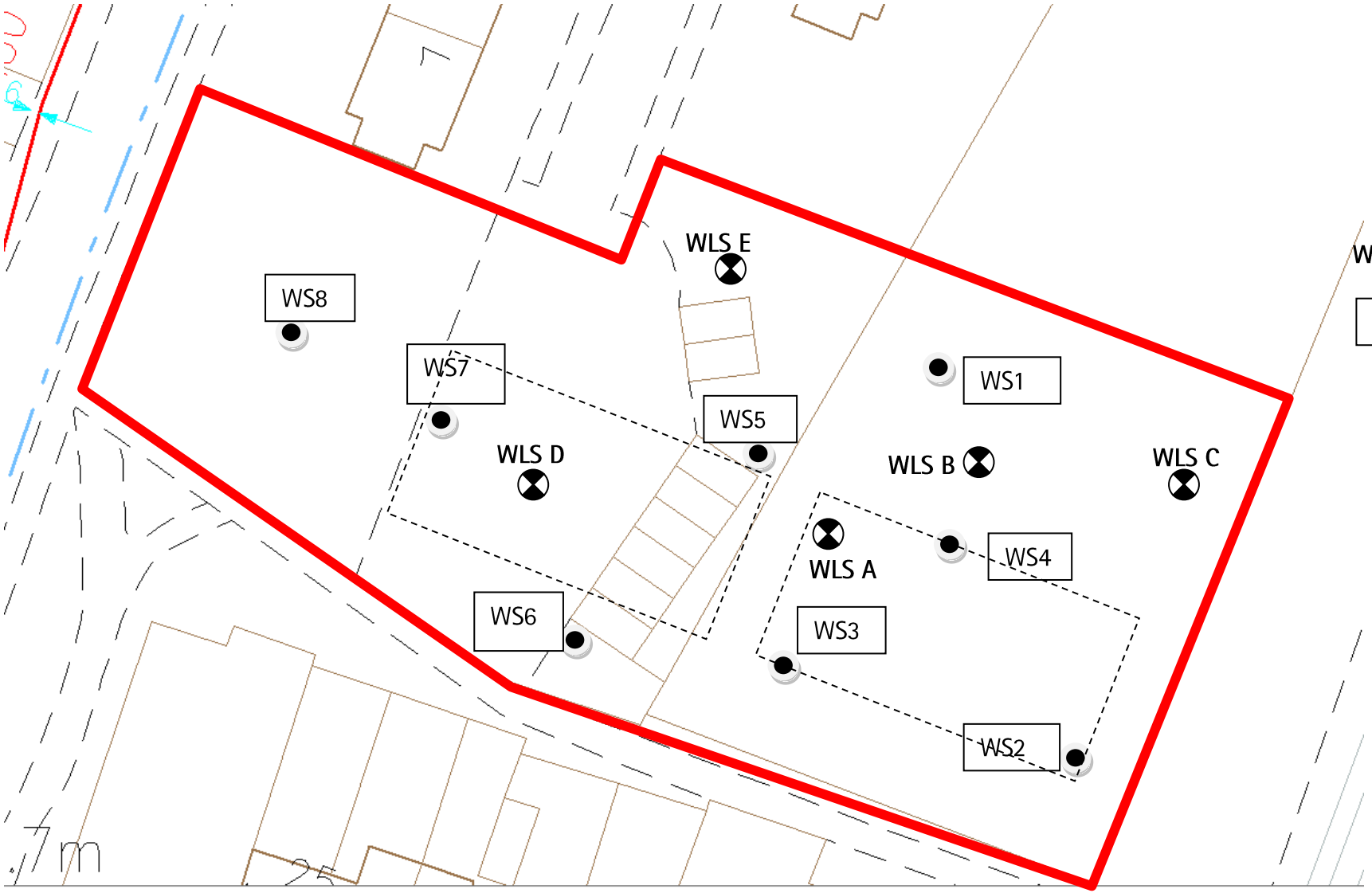
We trust that the above meets your requirements but if you have any queries please do not hesitate to contact us.

Yours faithfully,



Robert Jiagge BSc (Hons) MSc MIEnvSc FGS CSci
For and on behalf of
Southern Testing Laboratories Limited
DDI: 01342-333119
Email: rjiagge@southerntesting.co.uk

APPENDIX A – SITE PLAN & TRIAL PIT LOGS



NB: Positions of Boreholes are only indicative unless dimensioned

Site: Parkside Crescent, Spalding	STL: JN0894	Fig No: 1
Date: February 2017	Fieldwork Location Plan	

Southern Testing

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ST Consult: Twigden Barns, Brixworth Road, Creaton, Northampton NN6 8NN

ST Consult

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Start - End Date	Project ID:	Hole Type:	WLS A
07/02/2017	JN0894	WLS	Sheet 1 of 1

Project Name:	Parkside Crescent	Remarks:	Co-ordinates:	Level:	Logger:
					AP
Location:	Spalding	No groundwater encounted			
Client:	Wellend Homes Ltd				

Backfill	Water Strikes	Samples and Insitu Testing: Depth (m bgl)	Type	Results	Level (m AOD)	Thickness (m)	Legend	Depth (m bgl)	Stratum Description
						(0.15)		0.15	Grey black silty sandy topsoil material with frequent rootlets (MADE GROUND).
		0.20	ES			(0.25)		0.40	Black dark grey sand and gravel including clinker, slag, ash, brick, concrete (MADE GROUND).
						(0.10)		0.50	Black grey silty sandy clay with ash and clinker (MADE GROUND).
		0.60	ES			(0.20)		0.70	Grey black sand and gravel including coal, ash, brick and flint (MADE GROUND).
						(0.15)		0.85	Grey black sand and gravel including coal, ash, brick and flint.
		1.30	ES			(1.15)		2.00	Brown orange, very silty fine SAND.
									End of borehole at 2.00m

1

2

Hole Details		Casing Details		Water Strike (m bgl)				Readings (m bgl)			Standing/Chiselling (m bgl)			
Depth (m bgl)	Dia. (mm)	Depth (m bgl)	Dia. (mm)	Date	Depth	Casing	Sealed	Rose to:	Time (min)	Remarks	From	To	Time	Remarks
2.00	100													

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Start - End Date	Project ID:	Hole Type:	WLS B
07/02/2017	JN0894	WLS	Sheet 1 of 1

Project Name:	Parkside Crescent	Remarks:	Co-ordinates:	Level:	Logger:
					AP
Location:	Spalding	No groundwater encounted			
Client:	Wellend Homes Ltd				

Backfill	Water Strikes	Samples and Insitu Testing: Depth (m bgl)	Type	Results	Level (m AOD)	Thickness (m)	Legend	Depth (m bgl)	Stratum Description
						(0.20)		0.20	Grey black silty sandy topsoil material with frequent rootlets (MADE GROUND).
						(0.15)		0.35	Black dark grey sand and gravel including clinker, slag, ash, brick, concrete (MADE GROUND).
		0.40	ES			(0.35)		0.70	Grey black sand and gravel including coal, ash, brick and flint (MADE GROUND).
						(0.10)		0.80	Brown orange black sand with gravels including flint, brick and coal (MADE GROUND).
		1.00	ES			(1.20)		2.00	Brown orange, very silty fine SAND.
									End of borehole at 2.00m

1

2

Hole Details		Casing Details		Water Strike (m bgl)				Readings (m bgl)			Standing/Chiselling (m bgl)			
Depth (m bgl)	Dia. (mm)	Depth (m bgl)	Dia. (mm)	Date	Depth	Casing	Sealed	Rose to:	Time (min)	Remarks	From	To	Time	Remarks

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Start - End Date	Project ID:	Hole Type:	WLS C
07/02/2017	JN0894	WLS	Sheet 1 of 1

Project Name:	Parkside Crescent	Remarks:	Co-ordinates:	Level:	Logger:
					AP
Location:	Spalding	No groundwater encounted			
Client:	Wellend Homes Ltd				

Backfill	Water Strikes	Samples and Insitu Testing: Depth (m bgl)	Type	Results	Level (m AOD)	Thickness (m)	Legend	Depth (m bgl)	Stratum Description
						(0.15)		0.15	Grey black silty sandy topsoil material with frequent rootlets (MADE GROUND).
		0.20	ES			(0.25)		0.40	Brown orange grey sand (MADE GROUND).
						(0.20)		0.60	Black dark grey sand and gravel including clinker, slag and ash (MADE GROUND).
		0.70	ES			(0.20)		0.80	Brown black, silty clay with rare fine brick fragments (MADE GROUND).
						(0.30)		1.10	Grey brown, silty sandy clay topsoil material with rare fine brick fragments (MADE GROUND).
		1.30	ES			(0.90)		2.00	Light Brown, very silty fine SAND.
									End of borehole at 2.00m

1

2

Hole Details		Casing Details		Water Strike (m bgl)				Readings (m bgl)			Standing/Chiselling (m bgl)			
Depth (m bgl)	Dia. (mm)	Depth (m bgl)	Dia. (mm)	Date	Depth	Casing	Sealed	Rose to:	Time (min)	Remarks	From	To	Time	Remarks
2.00	100													

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Start - End Date	Project ID:	Hole Type:	WLS D
07/02/2017	JN0894	WLS	Sheet 1 of 1

Project Name:	Parkside Crescent	Remarks:	Co-ordinates:	Level:	Logger:
					AP
Location:	Spalding	No groundwater encounted			
Client:	Wellend Homes Ltd				

Backfill	Water Strikes	Samples and Insitu Testing			Level (m AOD)	Thickness (m)	Legend	Depth (m bgl)	Stratum Description
		Depth (m bgl)	Type	Results					
		0.15	ES			(0.30)			Black brown silty clay TOPSOIL with rare brick, glass and rootets.
								0.30	
		0.50	ES			(0.40)			Brown silty sandy CLAY.
								0.70	
						(0.30)			Brown sandy SILT.
								1.00	End of borehole at 1.00m

Hole Details		Casing Details		Water Strike (m bgl)				Readings (m bgl)			Standing/Chiselling (m bgl)			
Depth (m bgl)	Dia. (mm)	Depth (m bgl)	Dia. (mm)	Date	Depth	Casing	Sealed	Rose to:	Time (min)	Remarks	From	To	Time	Remarks
1.00	100													

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Start - End Date	Project ID:	Hole Type:	WLS E
07/02/2017	JN0894	WLS	Sheet 1 of 1

Project Name:	Parkside Crescent	Remarks:	Co-ordinates:	Level:	Logger:
					AP
Location:	Spalding	No groundwater encounted			
Client:	Wellend Homes Ltd				

Backfill	Water Strikes	Samples and Insitu Testing: Depth (m bgl)	Type	Results	Level (m AOD)	Thickness (m)	Legend	Depth (m bgl)	Stratum Description
						(0.05)		0.05	BLACKTOP
						(0.15)			Blacktop and coarse sandstone gravels (MADE GROUND).
						(0.25)		0.20	Black grey silty clay with rare brick fragments and rootlets (MADE GROUND).
						(0.55)		0.45	Light Brown, very silty fine SAND.
								1.00	End of borehole at 1.00m

1

2

Hole Details		Casing Details		Water Strike (m bgl)				Readings (m bgl)			Standing/Chiselling (m bgl)			
Depth (m bgl)	Dia. (mm)	Depth (m bgl)	Dia. (mm)	Date	Depth	Casing	Sealed	Rose to:	Time (min)	Remarks	From	To	Time	Remarks
1.00	100													

APPENDIX B – LABORATORY TEST RESULTS

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Watford,
Herts,
WD18 8YS

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f: 01923 237404
e: reception@i2analytical.com

Analytical Report Number : 17-39556

Project / Site name:	Parkside Crescent, Spalding	**Samples received on:**	08/02/2017
Your job number:	JN0894-1	**Samples instructed on:**	08/02/2017
Your order number:	JN0894	**Analysis completed by:**	16/02/2017
Report Issue Number:	1	**Report issued on:**	16/02/2017
Samples Analysed:	3 soil samples		

Signed:

Dr Irma Doyle
Senior Account Manager
For & on behalf of i2 Analytical Ltd.

Signed:

Emma Winter
Assistant Reporting Manager
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 17-39556

Project / Site name: Parkside Crescent, Spalding
Your Order No: JN0894

Lab Sample Number				699713	699714	699715		
Sample Reference				WLS B	WLS C	WLS C		
Sample Number				ES	ES	ES		
Depth (m)				0.40	0.70	1.30		
Date Sampled				Deviating	Deviating	Deviating		
Time Taken				None Supplied	None Supplied	None Supplied		
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1		
Moisture Content	%	N/A	NONE	12	21	21		
Total mass of sample received	kg	0.001	NONE	1.5	1.3	1.3		
Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected		
General Inorganics								
pH - Automated	pH Units	N/A	MCERTS	7.9	7.7	8.0		
Organic Matter	%	0.1	MCERTS	5.6	1.7	1.3		
Speciated PAHs								
Naphthalene	mg/kg	0.05	MCERTS	0.86	< 0.05	< 0.05		
Acenaphthylene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10		
Acenaphthene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10		
Fluorene	mg/kg	0.1	MCERTS	< 0.10	< 0.10	< 0.10		
Phenanthrene	mg/kg	0.1	MCERTS	1.5	< 0.10	< 0.10		
Anthracene	mg/kg	0.1	MCERTS	0.24	< 0.10	< 0.10		
Fluoranthene	mg/kg	0.1	MCERTS	3.2	< 0.10	< 0.10		
Pyrene	mg/kg	0.1	MCERTS	2.8	< 0.10	< 0.10		
Benzo(a)anthracene	mg/kg	0.1	MCERTS	1.7	< 0.10	< 0.10		
Chrysene	mg/kg	0.05	MCERTS	1.6	< 0.05	< 0.05		
Benzo(b)fluoranthene	mg/kg	0.1	MCERTS	1.9	< 0.10	< 0.10		
Benzo(k)fluoranthene	mg/kg	0.1	MCERTS	1.3	< 0.10	< 0.10		
Benzo(a)pyrene	mg/kg	0.1	MCERTS	1.6	< 0.10	< 0.10		
Indeno(1,2,3-cd)pyrene	mg/kg	0.1	MCERTS	0.90	< 0.10	< 0.10		
Dibenz(a,h)anthracene	mg/kg	0.1	MCERTS	0.20	< 0.10	< 0.10		
Benzo(ghi)perylene	mg/kg	0.05	MCERTS	1.1	< 0.05	< 0.05		
Total PAH								
Speciated Total EPA-16 PAHs	mg/kg	1.6	MCERTS	18.9	< 1.60	< 1.60		
Heavy Metals / Metalloids								
Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	38	27	6.0		
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.2	< 0.2	< 0.2		
Chromium (hexavalent)	mg/kg	4	MCERTS	< 4.0	< 4.0	< 4.0		
Chromium (III)	mg/kg	1	NONE	27	38	15		
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	29	38	16		
Copper (aqua regia extractable)	mg/kg	1	MCERTS	380	20	9.8		
Lead (aqua regia extractable)	mg/kg	1	MCERTS	180	23	17		
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	0.8	0.4	0.6		
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	31	30	12		
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0		
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	180	66	33		

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The results included within the report are representative of the samples submitted for analysis.

Analytical Report Number: 17-39556

Project / Site name: Parkside Crescent, Spalding
Your Order No: JN0894

Lab Sample Number				699713	699714	699715		
Sample Reference				WLS B	WLS C	WLS C		
Sample Number				ES	ES	ES		
Depth (m)				0.40	0.70	1.30		
Date Sampled				Deviating	Deviating	Deviating		
Time Taken				None Supplied	None Supplied	None Supplied		
Analytical Parameter (Soil Analysis)	**Units**	**Limit of detection**	**Accreditation Status**					
Monoaromatics								
Benzene	ug/kg	1	MCERTS	< 1.0	< 1.0	< 1.0		
Toluene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0		
Ethylbenzene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0		
p & m-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0		
o-xylene	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0		
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0		
Petroleum Hydrocarbons								
TPH-CWG - Aliphatic >EC5 - EC6	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1		
TPH-CWG - Aliphatic >EC6 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1		
TPH-CWG - Aliphatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1		
TPH-CWG - Aliphatic >EC10 - EC12	mg/kg	1	MCERTS	1.5	< 1.0	< 1.0		
TPH-CWG - Aliphatic >EC12 - EC16	mg/kg	2	MCERTS	2.2	< 2.0	< 2.0		
TPH-CWG - Aliphatic >EC16 - EC21	mg/kg	8	MCERTS	11	< 8.0	< 8.0		
TPH-CWG - Aliphatic >EC21 - EC35	mg/kg	8	MCERTS	190	< 8.0	< 8.0		
TPH-CWG - Aliphatic (EC5 - EC35)	mg/kg	10	MCERTS	210	< 10	< 10		
TPH-CWG - Aromatic >EC5 - EC7	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1		
TPH-CWG - Aromatic >EC7 - EC8	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1		
TPH-CWG - Aromatic >EC8 - EC10	mg/kg	0.1	MCERTS	< 0.1	< 0.1	< 0.1		
TPH-CWG - Aromatic >EC10 - EC12	mg/kg	1	MCERTS	1.3	< 1.0	< 1.0		
TPH-CWG - Aromatic >EC12 - EC16	mg/kg	2	MCERTS	3.4	< 2.0	< 2.0		
TPH-CWG - Aromatic >EC16 - EC21	mg/kg	10	MCERTS	14	< 10	< 10		
TPH-CWG - Aromatic >EC21 - EC35	mg/kg	10	MCERTS	59	< 10	< 10		
TPH-CWG - Aromatic (EC5 - EC35)	mg/kg	10	MCERTS	78	< 10	< 10		

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Analytical Report Number : 17-39556

Project / Site name: Parkside Crescent, Spalding

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
699713	WLS B	ES	0.40	Brown loam and sand with gravel.
699714	WLS C	ES	0.70	Brown clay and sand.
699715	WLS C	ES	1.30	Brown clay and sand.

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Analytical Report Number : 17-39556

Project / Site name: Parkside Crescent, Spalding

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with disperion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
Cr (III) in soil	In-house method by calculation from total Cr and Cr VI.	In-house method by calculation	L080-PL	W	NONE
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in water then by acidification, addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Metals in soil by ICP-OES	Determination of metals in soil by aqua-regia digestion followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil.	L038-PL	D	MCERTS
Moisture Content	Moisture content, determined gravimetrically.	In-house method based on BS1377 Part 2, 1990, Chemical and Electrochemical Tests	L019-UK/PL	W	NONE
Organic matter in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L023-PL	D	MCERTS
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L099-PL	D	MCERTS
Speciated EPA-16 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	MCERTS
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method	L076-PL	W	MCERTS

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

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Sample ID	Other_ID	Sample Type	Job	Sample Number	Sample Deviation Code	test_name	test_ref	Test Deviation code
WLS B	ES	S	17-39556	699713	ab	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
WLS B	ES	S	17-39556	699713	ab	Speciated EPA-16 PAHs in soil	L064-PL	b
WLS B	ES	S	17-39556	699713	ab	TPHCWG (Soil)	L076-PL	b
WLS C	ES	S	17-39556	699714	ab	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
WLS C	ES	S	17-39556	699714	ab	Speciated EPA-16 PAHs in soil	L064-PL	b
WLS C	ES	S	17-39556	699714	ab	TPHCWG (Soil)	L076-PL	b
WLS C	ES	S	17-39556	699715	ab	BTEX and MTBE in soil (Monoaromatics)	L073B-PL	b
WLS C	ES	S	17-39556	699715	ab	Speciated EPA-16 PAHs in soil	L064-PL	b
WLS C	ES	S	17-39556	699715	ab	TPHCWG (Soil)	L076-PL	b

Key: a - No sampling date b - Incorrect container
c - Holding time d - Headspace e - Temperature

Anthony Paton
ST Consult Ltd
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t: 01923 225404
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e: reception@i2analytical.com

Analytical Report Number : 17-39558

Project / Site name:	Parkside Crescent, Spalding	**Samples received on:**	08/02/2017
Your job number:	JN0894-1	**Samples instructed on:**	08/02/2017
Your order number:	JN0894	**Analysis completed by:**	17/02/2017
Report Issue Number:	1	**Report issued on:**	17/02/2017
Samples Analysed:	2 10:1 WAC samples		

Signed:

Dr Claire Stone
Quality Manager
For & on behalf of i2 Analytical Ltd.

Signed:

Emma Winter
Assistant Reporting Manager
For & on behalf of i2 Analytical Ltd.

Standard Geotechnical, Asbestos and Chemical Testing Laboratory located at: ul. Pionierów 39, 41 -711 Ruda Śląska, Poland.

Accredited tests are defined within the report, opinions and interpretations expressed herein are outside the scope of accreditation.

Standard sample disposal times, unless otherwise agreed with the laboratory, are :

soils	- 4 weeks from reporting
leachates	- 2 weeks from reporting
waters	- 2 weeks from reporting
asbestos	- 6 months from reporting

Excel copies of reports are only valid when accompanied by this PDF certificate.

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Waste Acceptance Criteria Analytical Results

Report No:	**17-39558**						
					Client:	**STCONSULT**	
Location	**Parkside Crescent, Spalding**						
Lab Reference (Sample Number)	699717 / 699718				**Landfill Waste Acceptance Criteria**		
					Limits		
Sampling Date	Deviating				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	WLS A ES						
Depth (m)	0.20						
Solid Waste Analysis							
TOC (%)**	3.9				3%	5%	6%
Loss on Ignition (%) **	15				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.007				1	--	--
Mineral Oil (mg/kg)	200				500	--	--
Total PAH (WAC-17) (mg/kg)	55				100	--	--
pH (units)**	7.3				--	>6	--
Acid Neutralisation Capacity (mol / kg)	1.8				--	To be evaluated	To be evaluated
Eluate Analysis	10:1			10:01	Limit values for compliance leaching test		
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	< 0.0011			< 0.0110	0.5	2	25
Barium *	0.0257			0.228	20	100	300
Cadmium *	< 0.0001			< 0.0008	0.04	1	5
Chromium *	0.0009			0.0077	0.5	10	70
Copper *	0.014			0.12	2	50	100
Mercury *	< 0.0005			< 0.0050	0.01	0.2	2
Molybdenum *	0.0020			0.0173	0.5	10	30
Nickel *	< 0.0003			< 0.0030	0.4	10	40
Lead *	0.0023			0.020	0.5	10	50
Antimony *	< 0.0017			< 0.017	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.011			0.094	4	50	200
Chloride *	0.89			7.9	800	4000	25000
Fluoride	0.56			4.9	10	150	500
Sulphate *	3.7			33	1000	20000	50000
TDS	68			600	4000	60000	100000
Phenol Index (Monhydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	5.32			47.2	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	1.2						
Dry Matter (%)	90						
Moisture (%)	10						

Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and I2 cannot be held responsible for any discrepencies with current legislation

*= UKAS accredited (liquid eluate analysis only)
** = MCERTS accrediited

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email:reception@i2analytical.com

Waste Acceptance Criteria Analytical Results

Report No:	**17-39558**						
					Client: STCONSULT		
Location	**Parkside Crescent, Spalding**						
Lab Reference (Sample Number)	699719 / 699720				**Landfill Waste Acceptance Criteria Limits**		
Sampling Date	Deviating				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	WLS B ES						
Depth (m)	1.00						
Solid Waste Analysis							
TOC (%)**	0.8				3%	5%	6%
Loss on Ignition (%) **	2.0				--	--	10%
BTEX (µg/kg) **	< 10				6000	--	--
Sum of PCBs (mg/kg) **	< 0.007				1	--	--
Mineral Oil (mg/kg)	< 10				500	--	--
Total PAH (WAC-17) (mg/kg)	< 1.6				100	--	--
pH (units)**	8.0				--	>6	--
Acid Neutralisation Capacity (mol / kg)	6.0				--	To be evaluated	To be evaluated
Eluate Analysis	10:1			10:01	Limit values for compliance leaching test		
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	0.0030			0.0282	0.5	2	25
Barium *	0.0140			0.130	20	100	300
Cadmium *	< 0.0001			< 0.0008	0.04	1	5
Chromium *	< 0.0004			< 0.0040	0.5	10	70
Copper *	0.0072			0.067	2	50	100
Mercury *	< 0.0005			< 0.0050	0.01	0.2	2
Molybdenum *	0.0035			0.0324	0.5	10	30
Nickel *	0.0013			0.012	0.4	10	40
Lead *	0.0027			0.025	0.5	10	50
Antimony *	< 0.0017			< 0.017	0.06	0.7	5
Selenium *	< 0.0040			< 0.040	0.1	0.5	7
Zinc *	0.0052			0.048	4	50	200
Chloride *	1.3			12	800	4000	25000
Fluoride	0.50			4.7	10	150	500
Sulphate *	2.4			22	1000	20000	50000
TDS	51			480	4000	60000	100000
Phenol Index (Monhydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	4.10			38.0	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	0.92						
Dry Matter (%)	79						
Moisture (%)	21						

Results are expressed on a dry weight basis, after correction for moisture content where applicable
Stated limits are for guidance only and I2 cannot be held responsible for any discrepencies with current legislatior

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** = MCERTS accrediited

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Analytical Report Number : 17-39558

Project / Site name: Parkside Crescent, Spalding

* These descriptions are only intended to act as a cross check if sample identities are questioned. The major constituent of the sample is intended to act with respect to MCERTS validation. The laboratory is accredited for sand, clay and loam (MCERTS) soil types. Data for unaccredited types of solid should be interpreted with care.

Stone content of a sample is calculated as the % weight of the stones not passing a 10 mm sieve. Results are not corrected for stone content.

Lab Sample Number	Sample Reference	Sample Number	Depth (m)	Sample Description *
699717	WLS A	ES	0.20	Brown loam and sand with gravel.
699719	WLS B	ES	1.00	Brown clay and sand.

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Analytical Report Number : 17-39558

Project / Site name: Parkside Crescent, Spalding

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Acid neutralisation capacity of soil	Determination of acid neutralisation capacity by addition of acid or alkali followed by electronic probe.	In-house method based on Guidance an Sampling and Testing of Wastes to Meet Landfill Waste Acceptance""	L046-UK	W	NONE
BS EN 12457-2 (10:1) Leachate Prep	10:1 (as recieved, moisture adjusted) end over end extraction with water for 24 hours. Eluate filtered prior to analysis.	In-house method based on BSEN12457-2.	L043-PL	W	NONE
BTEX in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS.	In-house method based on USEPA8260	L073B-PL	W	MCERTS
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
Dissolved organic carbon 10:1 WAC	Determination of dissolved inorganic carbon in leachate by TOC/DOC NDIR Analyser.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L037-PL	W	NONE
Fluoride 10:1 WAC	Determination of fluoride in leachate by 1:1ratio with a buffer solution followed by Ion Selective Electrode.	In-house method based on Use of Total Ionic Strength Adjustment Buffer for Electrode Determination"	L033-PL	W	NONE
Loss on ignition of soil @ 450oC	Determination of loss on ignition in soil by gravimetrically with the sample being ignited in a muffle furnace.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L047-PL	D	MCERTS
Metals in leachate by ICP-OES	Determination of metals in leachate by acidification followed by ICP-OES.	In-house method based on MEWAM 2006 Methods for the Determination of Metals in Soil""	L039-PL	W	ISO 17025
Mineral Oil (Soil) C10 - C40	Determination of mineral oil fraction extractable hydrocarbons in soil by GC-MS/GC-FID.	in-house method	L076-PL	D	NONE
Moisture Content	Moisture content, determined gravimetrically.	In-house method based on BS1377 Part 2, 1990, Chemical and Electrochemical Tests	L019-UK/PL	W	NONE
Monohydric phenols 10:1 WAC	Determination of phenols in leachate by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L080-PL	W	ISO 17025
PCB's By GC-MS in soil	Determination of PCB by extraction with acetone and hexane followed by GC-MS.	In-house method based on USEPA 8082	L027-PL	D	MCERTS
pH in soil	Determination of pH in soil by addition of water followed by electrometric measurement.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L005-PL	W	MCERTS
Speciated WAC-17 PAHs in soil	Determination of PAH compounds in soil by extraction in dichloromethane and hexane followed by GC-MS with the use of surrogate and internal standards.	In-house method based on USEPA 8270	L064-PL	D	NONE
Stones content of soil	Standard preparation for all samples unless otherwise detailed. Gravimetric determination of stone > 10 mm as % dry weight.	In-house method based on British Standard Methods and MCERTS requirements.	L019-UK/PL	D	NONE
Sulphate 10:1 WAC	Determination of sulphate in leachate by ICP-OES	In-house method based on MEWAM 1986 Methods for the Determination of Metals in Soil""	L039-PL	W	ISO 17025
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by electrometric measurement.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L004-PL	W	NONE
Total organic carbon in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In-house method based on BS1377 Part 3, 1990, Chemical and Electrochemical Tests	L023-PL	D	MCERTS

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Analytical Report Number : 17-39558

Project / Site name: Parkside Crescent, Spalding

Water matrix abbreviations: Surface Water (SW) Potable Water (PW) Ground Water (GW)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status

For method numbers ending in 'UK' analysis have been carried out in our laboratory in the United Kingdom.
For method numbers ending in 'PL' analysis have been carried out in our laboratory in Poland.
Soil analytical results are expressed on a dry weight basis. Where analysis is carried out on as-received the results obtained are multiplied by a moisture correction factor that is determined gravimetrically using the moisture content which is carried out at a maximum of 30oC.

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Sample ID	Other_ID	Sample Type	Job	Sample Number	Sample Deviation Code	test_name	test_ref	Test Deviation code
WLS A	ES	L	17-39558	699718	a			
WLS A	ES	S	17-39558	699717	ab	BTEX in soil (Monoaromatics)	L073B-PL	b
WLS A	ES	S	17-39558	699717	ab	Mineral Oil (Soil) C10 - C40	L076-PL	b
WLS A	ES	S	17-39558	699717	ab	PCB's By GC-MS in soil	L027-PL	b
WLS A	ES	S	17-39558	699717	ab	Speciated WAC-17 PAHs in soil	L064-PL	b
WLS A	ES	S	17-39558	699717	ab	Total BTEX in soil (Poland)	L073-PL	b
WLS B	ES	L	17-39558	699720	a			
WLS B	ES	S	17-39558	699719	ab	BTEX in soil (Monoaromatics)	L073B-PL	b
WLS B	ES	S	17-39558	699719	ab	Mineral Oil (Soil) C10 - C40	L076-PL	b
WLS B	ES	S	17-39558	699719	ab	PCB's By GC-MS in soil	L027-PL	b
WLS B	ES	S	17-39558	699719	ab	Speciated WAC-17 PAHs in soil	L064-PL	b
WLS B	ES	S	17-39558	699719	ab	Total BTEX in soil (Poland)	L073-PL	b

Key: a - No sampling date b - Incorrect container
c - Holding time d - Headspace e - Temperature

APPENDIX C – WASTE CLASSIFICATION SUMMARY

Southern Testing
Environmental & Geotechnical

HazWasteOnline™

Waste Classification Report

P3VVX-3CA6J-G7LQG

Job name

Parkside Crescent, Spalding

Description/Comments

The site is former railway tracks and garage area with soft landscaping. It is proposed to construct residential houses & gardens. Ground investigation carried out encountered made ground over natural soil. It is anticipated that some of the excavated made ground materials will be removed from the site. A limited chemical laboratory analysis comprising metals/metalloid, asbestos, PAHs and TPH was carried out on the recovered samples. A worst case compound based on the history of the site was assumed where necessary in the classification of the materials.

Project

JN0894

Site

Parkside Crescent, Spalding

Waste Stream Template

STL Contaminated Soil Waste Stream

Classified by

Name:
Robert Jiagge
Date:
25/02/2017 07:28:00 UTC
Telephone:
01342 333100

Company:
Southern Testing
Keeble House
Stuart Way
East Grinstead
RH19 4QA

Report

Created by: Robert Jiagge
Created date: 25/02/2017 07:28 UTC

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	WS4	0.10	Non Hazardous		2
2	WS1	0.40	Non Hazardous		4
3	WS3	0.50	Non Hazardous		6
4	WS6	0.20	Non Hazardous		8
5	WS7	0.30	Non Hazardous		10
6	WLS B	0.40	Non Hazardous		12
7	WLS C	0.70	Non Hazardous		14
8	WLS C[1]	1.30	Non Hazardous		16

Appendices	Page
Appendix A: Classifier defined and non CLP determinands	18
Appendix B: Rationale for selection of metal species	19
Appendix C: Version	20

Classification of sample: WS4

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS4
Sample Depth:
0.10 m
Moisture content:
4%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 4% Dry Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	pH			PH		8.1	pH		8.1	pH	8.1 pH		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		21	mg/kg	1.32	26.66	mg/kg	0.00267 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	231-152-8 [1] 215-146-2 [2]	7440-43-9 [1] 1306-19-0 [2]		<0.2	mg/kg	1.14	<0.22	mg/kg	<0.000022 %	✓	<**LOD**
4	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		29	mg/kg	1.46	40.755	mg/kg	0.00408 %	✓	
5	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4	mg/kg	1.92	<7.397	mg/kg	<0.00074 %	✓	<**LOD**
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		73	mg/kg	1.13	79.029	mg/kg	0.0079 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	110	mg/kg	1.56	164.98	mg/kg	0.010577 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.3	mg/kg	1.35	<0.39	mg/kg	<0.000039 %	✓	<**LOD**
9	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		27	mg/kg	2.98	77.268	mg/kg	0.00773 %	✓	
10	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1	mg/kg	2.55	<2.455	mg/kg	<0.000246 %	✓	<**LOD**
11	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		160	mg/kg	1.24	191.494	mg/kg	0.0191 %	✓	
12	naphthalene	601-052-00-2	202-049-5	91-20-3		1.1	mg/kg		1.058	mg/kg	0.000106 %	✓	
13	acenaphthylene		205-917-1	208-96-8		0.69	mg/kg		0.663	mg/kg	0.000066 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		acenaphthene				5.1	mg/kg		4.904	mg/kg	0.00049 %	✓	
			201-469-6	83-32-9									
15		fluorene				2.7	mg/kg		2.596	mg/kg	0.00026 %	✓	
			201-695-5	86-73-7									
16		phenanthrene				20	mg/kg		19.231	mg/kg	0.00192 %	✓	
			201-581-5	85-01-8									
17		anthracene				4.6	mg/kg		4.423	mg/kg	0.000442 %	✓	
			204-371-1	120-12-7									
18		fluoranthene				31	mg/kg		29.808	mg/kg	0.00298 %	✓	
			205-912-4	206-44-0									
19		pyrene				26	mg/kg		25	mg/kg	0.0025 %	✓	
			204-927-3	129-00-0									
20		benzo[a]anthracene				7.6	mg/kg		7.308	mg/kg	0.000731 %	✓	
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				5.1	mg/kg		4.904	mg/kg	0.00049 %	✓	
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				5.3	mg/kg		5.096	mg/kg	0.00051 %	✓	
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				1.5	mg/kg		1.442	mg/kg	0.000144 %	✓	
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				3.3	mg/kg		3.173	mg/kg	0.000317 %	✓	
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				1.6	mg/kg		1.538	mg/kg	0.000154 %	✓	
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.35	mg/kg		0.337	mg/kg	0.000034 %	✓	
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				1.5	mg/kg		1.442	mg/kg	0.000144 %	✓	
			205-883-8	191-24-2									
										Total:	0.0644 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS1

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS1
Sample Depth:
0.40 m
Moisture content:
6%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 6% Dry Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	pH			PH		8.4	pH		8.4	pH	8.4 pH		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		23	mg/kg	1.32	28.649	mg/kg	0.00286 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	231-152-8 [1] 215-146-2 [2]	7440-43-9 [1] 1306-19-0 [2]		<0.2	mg/kg	1.14	<0.216	mg/kg	<0.000022 %	✓	<LOD
4	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		23	mg/kg	1.46	31.713	mg/kg	0.00317 %	✓	
5	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4	mg/kg	1.92	<7.257	mg/kg	<0.000726 %	✓	<LOD
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		110	mg/kg	1.13	116.837	mg/kg	0.0117 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	87	mg/kg	1.56	128.023	mg/kg	0.008208 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.3	mg/kg	1.35	<0.383	mg/kg	<0.000038 %	✓	<LOD
9	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		41	mg/kg	2.98	115.12	mg/kg	0.0115 %	✓	
10	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1	mg/kg	2.55	<2.409	mg/kg	<0.000241 %	✓	<LOD
11	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		120	mg/kg	1.24	140.911	mg/kg	0.0141 %	✓	
12	naphthalene	601-052-00-2	202-049-5	91-20-3		3.9	mg/kg		3.679	mg/kg	0.000368 %	✓	
13	acenaphthylene		205-917-1	208-96-8		<0.1	mg/kg		<0.094	mg/kg	<0.000009434 %	✓	<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		acenaphthene				0.17	mg/kg		0.16	mg/kg	0.000016 %	✓	
			201-469-6	83-32-9									
15		fluorene				<0.1	mg/kg		<0.094	mg/kg	<0.000009434 %	✓	**<LOD**
			201-695-5	86-73-7									
16		phenanthrene				3.6	mg/kg		3.396	mg/kg	0.00034 %	✓	
			201-581-5	85-01-8									
17		anthracene				0.7	mg/kg		0.66	mg/kg	0.000066 %	✓	
			204-371-1	120-12-7									
18		fluoranthene				4.7	mg/kg		4.434	mg/kg	0.000443 %	✓	
			205-912-4	206-44-0									
19		pyrene				3.6	mg/kg		3.396	mg/kg	0.00034 %	✓	
			204-927-3	129-00-0									
20		benzo[a]anthracene				1.9	mg/kg		1.792	mg/kg	0.000179 %	✓	
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				1.8	mg/kg		1.698	mg/kg	0.00017 %	✓	
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				1.8	mg/kg		1.698	mg/kg	0.00017 %	✓	
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				0.41	mg/kg		0.387	mg/kg	0.000039 %	✓	
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				1.1	mg/kg		1.038	mg/kg	0.000104 %	✓	
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				0.64	mg/kg		0.604	mg/kg	0.00006 %	✓	
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.16	mg/kg		0.151	mg/kg	0.000015 %	✓	
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				0.68	mg/kg		0.642	mg/kg	0.000064 %	✓	
			205-883-8	191-24-2									
28		TPH (C6 to C40) petroleum group				250	mg/kg		235.849	mg/kg	0.0236 %	✓	
				TPH									
										Total:	0.0785 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i) on Flam. Liq. 1; H224, Flam. Liq. 2; H225, Flam. Liq. 3; H226: Force this Hazardous property to non hazardous because No liquid phase present.

Classification of sample: WS3

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS3
Sample Depth:
0.50 m
Moisture content:
5.4%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 5.4% Dry Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	pH			PH		8.1	pH		8.1	pH	8.1 pH		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		33	mg/kg	1.32	41.338	mg/kg	0.00413 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	231-152-8 [1] 215-146-2 [2]	7440-43-9 [1] 1306-19-0 [2]		<0.2	mg/kg	1.14	<0.217	mg/kg	<0.000022 %	✓	<**LOD**
4	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		25	mg/kg	1.46	34.667	mg/kg	0.00347 %	✓	
5	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4	mg/kg	1.92	<7.298	mg/kg	<0.00073 %	✓	<**LOD**
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		180	mg/kg	1.13	192.277	mg/kg	0.0192 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	210	mg/kg	1.56	310.779	mg/kg	0.019924 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.3	mg/kg	1.35	0.385	mg/kg	0.000039 %	✓	
9	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		34	mg/kg	2.98	96.009	mg/kg	0.0096 %	✓	
10	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1	mg/kg	2.55	<2.423	mg/kg	<0.000242 %	✓	<**LOD**
11	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		470	mg/kg	1.24	555.043	mg/kg	0.0555 %	✓	
12	naphthalene	601-052-00-2	202-049-5	91-20-3		3	mg/kg		2.846	mg/kg	0.000285 %	✓	
13	acenaphthylene		205-917-1	208-96-8		0.53	mg/kg		0.503	mg/kg	0.00005 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		acenaphthene				0.15	mg/kg		0.142	mg/kg	0.000014 %	✓	
			201-469-6	83-32-9									
15		fluorene				<0.1	mg/kg		<0.095	mg/kg	<0.000009488 %	✓	<**LOD**
			201-695-5	86-73-7									
16		phenanthrene				4.3	mg/kg		4.08	mg/kg	0.000408 %	✓	
			201-581-5	85-01-8									
17		anthracene				1.5	mg/kg		1.423	mg/kg	0.000142 %	✓	
			204-371-1	120-12-7									
18		fluoranthene				18	mg/kg		17.078	mg/kg	0.00171 %	✓	
			205-912-4	206-44-0									
19		pyrene				16	mg/kg		15.18	mg/kg	0.00152 %	✓	
			204-927-3	129-00-0									
20		benzo[a]anthracene				10	mg/kg		9.488	mg/kg	0.000949 %	✓	
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				6.9	mg/kg		6.546	mg/kg	0.000655 %	✓	
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				10	mg/kg		9.488	mg/kg	0.000949 %	✓	
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				3.1	mg/kg		2.941	mg/kg	0.000294 %	✓	
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				7.1	mg/kg		6.736	mg/kg	0.000674 %	✓	
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				3.9	mg/kg		3.7	mg/kg	0.00037 %	✓	
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.9	mg/kg		0.854	mg/kg	0.000085 %	✓	
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				3.7	mg/kg		3.51	mg/kg	0.000351 %	✓	
			205-883-8	191-24-2									
										Total:	0.121 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS6

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS6
Sample Depth:
0.20 m
Moisture content:
13%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 13% Dry Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	pH			PH		8.1	pH		8.1	pH	8.1 pH		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15	mg/kg	1.32	17.526	mg/kg	0.00175 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	231-152-8 [1] 215-146-2 [2]	7440-43-9 [1] 1306-19-0 [2]		<0.2	mg/kg	1.14	<0.202	mg/kg	<0.00002 %	✓	<**LOD**
4	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		18	mg/kg	1.46	23.281	mg/kg	0.00233 %	✓	
5	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4	mg/kg	1.92	<6.807	mg/kg	<0.000681 %	✓	<**LOD**
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		43	mg/kg	1.13	42.844	mg/kg	0.00428 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	100	mg/kg	1.56	138.037	mg/kg	0.00885 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.3	mg/kg	1.35	0.359	mg/kg	0.000036 %	✓	
9	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		18	mg/kg	2.98	47.41	mg/kg	0.00474 %	✓	
10	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1	mg/kg	2.55	<2.26	mg/kg	<0.000226 %	✓	<**LOD**
11	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		100	mg/kg	1.24	110.152	mg/kg	0.011 %	✓	
12	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.044	mg/kg	<0.000004425 %	✓	<**LOD**
13	acenaphthylene		205-917-1	208-96-8		<0.1	mg/kg		<0.088	mg/kg	<0.00000885 %	✓	<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		acenaphthene				<0.1	mg/kg		<0.088	mg/kg	<0.00000885 %	✓	<**LOD**
			201-469-6	83-32-9									
15		fluorene				<0.1	mg/kg		<0.088	mg/kg	<0.00000885 %	✓	<**LOD**
			201-695-5	86-73-7									
16		phenanthrene				0.49	mg/kg		0.434	mg/kg	0.000043 %	✓	
			201-581-5	85-01-8									
17		anthracene				0.17	mg/kg		0.15	mg/kg	0.000015 %	✓	
			204-371-1	120-12-7									
18		fluoranthene				1.5	mg/kg		1.327	mg/kg	0.000133 %	✓	
			205-912-4	206-44-0									
19		pyrene				1.4	mg/kg		1.239	mg/kg	0.000124 %	✓	
			204-927-3	129-00-0									
20		benzo[a]anthracene				0.97	mg/kg		0.858	mg/kg	0.000086 %	✓	
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				0.94	mg/kg		0.832	mg/kg	0.000083 %	✓	
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				1.2	mg/kg		1.062	mg/kg	0.000106 %	✓	
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				0.63	mg/kg		0.558	mg/kg	0.000056 %	✓	
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				1.1	mg/kg		0.973	mg/kg	0.000097 %	✓	
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				0.58	mg/kg		0.513	mg/kg	0.000051 %	✓	
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.15	mg/kg		0.133	mg/kg	0.000013 %	✓	
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				0.67	mg/kg		0.593	mg/kg	0.000059 %	✓	
			205-883-8	191-24-2									
										Total:	0.0348 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WS7

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WS7
Sample Depth:
0.30 m
Moisture content:
14%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 14% Dry Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	pH			PH		8	pH		8	pH	8pH		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		17	mg/kg	1.32	19.689	mg/kg	0.00197 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	231-152-8 [1] 215-146-2 [2]	7440-43-9 [1] 1306-19-0 [2]		<0.2	mg/kg	1.14	<0.2	mg/kg	<0.00002 %	✓	<LOD
4	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		19	mg/kg	1.46	24.359	mg/kg	0.00244 %	✓	
5	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4	mg/kg	1.92	<6.748	mg/kg	<0.000675 %	✓	<LOD
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		57	mg/kg	1.13	56.294	mg/kg	0.00563 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	160	mg/kg	1.56	218.921	mg/kg	0.014035 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.4	mg/kg	1.35	0.475	mg/kg	0.000047 %	✓	
9	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		20	mg/kg	2.98	52.215	mg/kg	0.00522 %	✓	
10	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1	mg/kg	2.55	<2.24	mg/kg	<0.000224 %	✓	<LOD
11	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		140	mg/kg	1.24	152.86	mg/kg	0.0153 %	✓	
12	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.044	mg/kg	<0.000004386 %	✓	<LOD
13	acenaphthylene		205-917-1	208-96-8		<0.1	mg/kg		<0.088	mg/kg	<0.000008772 %	✓	<LOD

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		acenaphthene				<0.1	mg/kg		<0.088	mg/kg	<0.000008772 %	✓	<**LOD**
			201-469-6	83-32-9									
15		fluorene				<0.1	mg/kg		<0.088	mg/kg	<0.000008772 %	✓	<**LOD**
			201-695-5	86-73-7									
16		phenanthrene				0.3	mg/kg		0.263	mg/kg	0.000026 %	✓	
			201-581-5	85-01-8									
17		anthracene				<0.1	mg/kg		<0.088	mg/kg	<0.000008772 %	✓	<**LOD**
			204-371-1	120-12-7									
18		fluoranthene				0.97	mg/kg		0.851	mg/kg	0.000085 %	✓	
			205-912-4	206-44-0									
19		pyrene				0.69	mg/kg		0.605	mg/kg	0.000061 %	✓	
			204-927-3	129-00-0									
20		benzo[a]anthracene				0.52	mg/kg		0.456	mg/kg	0.000046 %	✓	
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				0.59	mg/kg		0.518	mg/kg	0.000052 %	✓	
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				0.81	mg/kg		0.711	mg/kg	0.000071 %	✓	
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				0.14	mg/kg		0.123	mg/kg	0.000012 %	✓	
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				0.57	mg/kg		0.5	mg/kg	0.00005 %	✓	
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				0.29	mg/kg		0.254	mg/kg	0.000025 %	✓	
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				<0.1	mg/kg		<0.088	mg/kg	<0.000008772 %	✓	<**LOD**
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				0.3	mg/kg		0.263	mg/kg	0.000026 %	✓	
			205-883-8	191-24-2									
28		TPH (C6 to C40) petroleum group				13	mg/kg		11.404	mg/kg	0.00114 %	✓	
				TPH									
										Total:	0.0472 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i) on Flam. Liq. 1; H224, Flam. Liq. 2; H225, Flam. Liq. 3; H226: Force this Hazardous property to non hazardous because No liquid phase present.

Classification of sample: WLS B

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WLS B
Sample Depth:
0.40 m
Moisture content:
12%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% Dry Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	pH			PH		7.9	pH		7.9	pH	7.9 pH		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		38	mg/kg	1.32	44.797	mg/kg	0.00448 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	231-152-8 [1] 215-146-2 [2]	7440-43-9 [1] 1306-19-0 [2]		0.2	mg/kg	1.14	0.204	mg/kg	0.00002 %	✓	
4	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		27	mg/kg	1.46	35.234	mg/kg	0.00352 %	✓	
5	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4	mg/kg	1.92	<6.868	mg/kg	<0.000687 %	✓	<**LOD**
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		380	mg/kg	1.13	381.998	mg/kg	0.0382 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	180	mg/kg	1.56	250.685	mg/kg	0.016071 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.8	mg/kg	1.35	0.967	mg/kg	0.000097 %	✓	
9	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		31	mg/kg	2.98	82.379	mg/kg	0.00824 %	✓	
10	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1	mg/kg	2.55	<2.28	mg/kg	<0.000228 %	✓	<**LOD**
11	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		180	mg/kg	1.24	200.043	mg/kg	0.02 %	✓	
12	naphthalene	601-052-00-2	202-049-5	91-20-3		0.86	mg/kg		0.768	mg/kg	0.000077 %	✓	
13	acenaphthylene		205-917-1	208-96-8		<0.1	mg/kg		<0.089	mg/kg	<0.000008929 %	✓	<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		acenaphthene				<0.1	mg/kg		<0.089	mg/kg	<0.000008929 %	✓	**<LOD**
			201-469-6	83-32-9									
15		fluorene				<0.1	mg/kg		<0.089	mg/kg	<0.000008929 %	✓	**<LOD**
			201-695-5	86-73-7									
16		phenanthrene				1.5	mg/kg		1.339	mg/kg	0.000134 %	✓	
			201-581-5	85-01-8									
17		anthracene				0.24	mg/kg		0.214	mg/kg	0.000021 %	✓	
			204-371-1	120-12-7									
18		fluoranthene				3.2	mg/kg		2.857	mg/kg	0.000286 %	✓	
			205-912-4	206-44-0									
19		pyrene				2.8	mg/kg		2.5	mg/kg	0.00025 %	✓	
			204-927-3	129-00-0									
20		benzo[a]anthracene				1.7	mg/kg		1.518	mg/kg	0.000152 %	✓	
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				1.6	mg/kg		1.429	mg/kg	0.000143 %	✓	
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				1.9	mg/kg		1.696	mg/kg	0.00017 %	✓	
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				1.3	mg/kg		1.161	mg/kg	0.000116 %	✓	
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				1.6	mg/kg		1.429	mg/kg	0.000143 %	✓	
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				0.9	mg/kg		0.804	mg/kg	0.00008 %	✓	
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.2	mg/kg		0.179	mg/kg	0.000018 %	✓	
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				1.1	mg/kg		0.982	mg/kg	0.000098 %	✓	
			205-883-8	191-24-2									
28		TPH (C6 to C40) petroleum group				288	mg/kg		257.143	mg/kg	0.0257 %	✓	
				TPH									
										Total:	0.119 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i) on Flam. Liq. 1; H224, Flam. Liq. 2; H225, Flam. Liq. 3; H226: Force this Hazardous property to non hazardous because No liquid phase present.

Classification of sample: WLS C

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WLS C
Sample Depth:
0.70 m
Moisture content:
21%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 21% Dry Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	pH			PH		7.7	pH		7.7	pH	7.7 pH		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		27	mg/kg	1.32	29.462	mg/kg	0.00295 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	231-152-8 [1] 215-146-2 [2]	7440-43-9 [1] 1306-19-0 [2]		<0.2	mg/kg	1.14	<0.189	mg/kg	<0.000019 %	✓	<**LOD**
4	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		38	mg/kg	1.46	45.9	mg/kg	0.00459 %	✓	
5	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4	mg/kg	1.92	<6.357	mg/kg	<0.000636 %	✓	<**LOD**
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		20	mg/kg	1.13	18.61	mg/kg	0.00186 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	23	mg/kg	1.56	29.649	mg/kg	0.001901 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.4	mg/kg	1.35	0.447	mg/kg	0.000045 %	✓	
9	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		30	mg/kg	2.98	73.792	mg/kg	0.00738 %	✓	
10	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1	mg/kg	2.55	<2.11	mg/kg	<0.000211 %	✓	<**LOD**
11	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		66	mg/kg	1.24	67.893	mg/kg	0.00679 %	✓	
12	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.041	mg/kg	<0.000004132 %	✓	<**LOD**
13	acenaphthylene		205-917-1	208-96-8		<0.1	mg/kg		<0.083	mg/kg	<0.000008264 %	✓	<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		acenaphthene				<0.1	mg/kg		<0.083	mg/kg	<0.000008264 %	✓	<**LOD**
			201-469-6	83-32-9									
15		fluorene				<0.1	mg/kg		<0.083	mg/kg	<0.000008264 %	✓	<**LOD**
			201-695-5	86-73-7									
16		phenanthrene				<0.1	mg/kg		<0.083	mg/kg	<0.000008264 %	✓	<**LOD**
			201-581-5	85-01-8									
17		anthracene				<0.1	mg/kg		<0.083	mg/kg	<0.000008264 %	✓	<**LOD**
			204-371-1	120-12-7									
18		fluoranthene				<0.1	mg/kg		<0.083	mg/kg	<0.000008264 %	✓	<**LOD**
			205-912-4	206-44-0									
19		pyrene				<0.1	mg/kg		<0.083	mg/kg	<0.000008264 %	✓	<**LOD**
			204-927-3	129-00-0									
20		benzo[a]anthracene				<0.1	mg/kg		<0.083	mg/kg	<0.000008264 %	✓	<**LOD**
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				<0.05	mg/kg		<0.041	mg/kg	<0.000004132 %	✓	<**LOD**
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				<0.1	mg/kg		<0.083	mg/kg	<0.000008264 %	✓	<**LOD**
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				<0.1	mg/kg		<0.083	mg/kg	<0.000008264 %	✓	<**LOD**
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.083	mg/kg	<0.000008264 %	✓	<**LOD**
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				<0.1	mg/kg		<0.083	mg/kg	<0.000008264 %	✓	<**LOD**
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				<0.1	mg/kg		<0.083	mg/kg	<0.000008264 %	✓	<**LOD**
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				<0.05	mg/kg		<0.041	mg/kg	<0.000004132 %	✓	<**LOD**
			205-883-8	191-24-2									
28		TPH (C6 to C40) petroleum group				<10	mg/kg		<8.264	mg/kg	<0.000826 %	✓	<**LOD**
				TPH									
										Total:	0.0273 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: WLS C[1]

Non Hazardous Waste
Classified as **17 05 04**
in the List of Waste

Sample details

Sample Name:
WLS C[1]
Sample Depth:
1.30 m
Moisture content:
21%
(dry weight correction)

LoW Code:
Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 21% Dry Weight Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	pH			PH		8	pH		8	pH	8pH		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		6	mg/kg	1.32	6.547	mg/kg	0.000655 %	✓	
3	cadmium { cadmium oxide }	048-002-00-0	231-152-8 [1] 215-146-2 [2]	7440-43-9 [1] 1306-19-0 [2]		<0.2	mg/kg	1.14	<0.189	mg/kg	<0.000019 %	✓	<**LOD**
4	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9		15	mg/kg	1.46	18.118	mg/kg	0.00181 %	✓	
5	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<4	mg/kg	1.92	<6.357	mg/kg	<0.000636 %	✓	<**LOD**
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		9.8	mg/kg	1.13	9.119	mg/kg	0.000912 %	✓	
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	17	mg/kg	1.56	21.915	mg/kg	0.001405 %	✓	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.6	mg/kg	1.35	0.671	mg/kg	0.000067 %	✓	
9	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		12	mg/kg	2.98	29.517	mg/kg	0.00295 %	✓	
10	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1	mg/kg	2.55	<2.11	mg/kg	<0.000211 %	✓	<**LOD**
11	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		33	mg/kg	1.24	33.947	mg/kg	0.00339 %	✓	
12	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05	mg/kg		<0.041	mg/kg	<0.000004132 %	✓	<**LOD**
13	acenaphthylene		205-917-1	208-96-8		<0.1	mg/kg		<0.083	mg/kg	<0.000008264 %	✓	<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
14		acenaphthene				<0.1	mg/kg		<0.083	mg/kg	<0.000008264 %	✓	<**LOD**
			201-469-6	83-32-9									
15		fluorene				<0.1	mg/kg		<0.083	mg/kg	<0.000008264 %	✓	<**LOD**
			201-695-5	86-73-7									
16		phenanthrene				<0.1	mg/kg		<0.083	mg/kg	<0.000008264 %	✓	<**LOD**
			201-581-5	85-01-8									
17		anthracene				<0.1	mg/kg		<0.083	mg/kg	<0.000008264 %	✓	<**LOD**
			204-371-1	120-12-7									
18		fluoranthene				<0.1	mg/kg		<0.083	mg/kg	<0.000008264 %	✓	<**LOD**
			205-912-4	206-44-0									
19		pyrene				<0.1	mg/kg		<0.083	mg/kg	<0.000008264 %	✓	<**LOD**
			204-927-3	129-00-0									
20		benzo[a]anthracene				<0.1	mg/kg		<0.083	mg/kg	<0.000008264 %	✓	<**LOD**
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				<0.05	mg/kg		<0.041	mg/kg	<0.000004132 %	✓	<**LOD**
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				<0.1	mg/kg		<0.083	mg/kg	<0.000008264 %	✓	<**LOD**
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				<0.1	mg/kg		<0.083	mg/kg	<0.000008264 %	✓	<**LOD**
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.083	mg/kg	<0.000008264 %	✓	<**LOD**
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				<0.1	mg/kg		<0.083	mg/kg	<0.000008264 %	✓	<**LOD**
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				<0.1	mg/kg		<0.083	mg/kg	<0.000008264 %	✓	<**LOD**
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				<0.05	mg/kg		<0.041	mg/kg	<0.000004132 %	✓	<**LOD**
			205-883-8	191-24-2									
28		TPH (C6 to C40) petroleum group				<10	mg/kg		<8.264	mg/kg	<0.000826 %	✓	<**LOD**
				TPH									
										Total:	0.013 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Appendix A: Classifier defined and non CLP determinands

pH (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25/05/2015
Risk Phrases: None.
Hazard Statements: None.

chromium(III) oxide (EC Number: 215-160-9, CAS Number: 1308-38-9)

Conversion factor: 1.462
Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17/07/2015
Risk Phrases: R20 , R22 , R36 , R37 , R38 , R42 , R43 , R50/53 , R60 , R61
Hazard Statements: Acute Tox. 4 H332 , Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Resp. Sens. 1 H334 , Skin Sens. 1 H317 , Repr. 1B H360FD , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

dicopper oxide; copper (I) oxide (EC Number: 215-270-7, CAS Number: 1317-39-1)

CLP index number: 029-002-00-X
Data source: Regulation (EU) 2016/1179 of 19 July 2016 (ATP9)
Additional Risk Phrases: N R50/53 , N R50/53 >= 0.25 %
Additional Hazard Statement(s): None.
Reason for additional Hazards Statement(s)/Risk Phrase(s):
10/10/2016 - N R50/53 risk phrase sourced from: WM3 v1 still uses ecotoxic risk phrases
10/10/2016 - N R50/53 >= 0.25 % risk phrase sourced from: WM3 v1 still uses ecotoxic risk phrases

acenaphthylene (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17/07/2015
Risk Phrases: R22 , R26 , R27 , R36 , R37 , R38
Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 1 H330 , Acute Tox. 1 H310 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315

acenaphthene (EC Number: 201-469-6, CAS Number: 83-32-9)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17/07/2015
Risk Phrases: R36 , R37 , R38 , N R50/53 , N R51/53
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Aquatic Chronic 2 H411

fluorene (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06/08/2015
Risk Phrases: N R50/53
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

phenanthrene (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06/08/2015
Risk Phrases: R22 , R36 , R37 , R38 , R40 , R43 , N R50/53
Hazard Statements: Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Carc. 2 H351 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Skin Irrit. 2 H315

anthracene (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17/07/2015
Risk Phrases: R36 , R37 , R38 , R43 , N R50/53
Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **fluoranthene** (EC Number: 205-912-4, CAS Number: 206-44-0)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21/08/2015
Risk Phrases: Xn R22 , N R50/53
Hazard Statements: Acute Tox. 4 H302 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **pyrene** (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 21/08/2015
Risk Phrases: Xi R36/37/38 , N R50/53
Hazard Statements: Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 06/08/2015
Risk Phrases: R40
Hazard Statements: Carc. 2 H351

- **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23/07/2015
Risk Phrases: N R50/53
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

- **TPH (C6 to C40) petroleum group** (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013
Data source: WM3 1st Edition 2015
Data source date: 25/05/2015
Risk Phrases: R10 , R45 , R46 , R51/53 , R63 , R65
Hazard Statements: Flam. Liq. 3 H226 , Asp. Tox. 1 H304 , STOT RE 2 H373 , Muta. 1B H340 , Carc. 1B H350 , Repr. 2 H361d , Aquatic Chronic 2 H411

Appendix B: Rationale for selection of metal species

arsenic {arsenic trioxide}

Reasonable case CLP species based on hazard statements/molecular weight and most common (stable) oxide of arsenic. Industrial sources include: smelting; main precursor to other arsenic compounds (edit as required)

cadmium {cadmium oxide}

Reasonable case CLP species based on hazard statements/molecular weight, very low solubility in water. Industrial sources include: electroplating baths, electrodes for storage batteries, catalysts, ceramic glazes, phosphors, pigments and nematocides. (edit as required) Worst case compounds in CLP: cadmium sulphate, chloride, fluoride & iodide not expected as either very soluble and/or compound's industrial usage not related to site history (edit as required)

chromium in chromium(III) compounds {chromium(III) oxide}

Reasonable case species based on hazard statements/molecular weight. Industrial sources include: tanning, pigment in paint, inks and glass (edit as required)

chromium in chromium(VI) compounds {chromium(VI) oxide}

Worst case CLP species based on hazard statements/molecular weight. Industrial sources include: production stainless steel, electroplating, wood preservation, anti-corrosion agents or coatings, pigments (edit as required)

copper {dicopper oxide; copper (I) oxide}

Reasonable case CLP species based on hazard statements/molecular weight and insolubility in water. Industrial sources include: oxidised copper metal, brake pads, pigments, antifouling paints, fungicide. (edit as required) Worse case copper sulphate is very soluble and likely to have been leached away if ever present and/or not enough soluble sulphate detected. (edit as required)

lead {lead chromate}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

mercury {mercury dichloride}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

nickel {nickel chromate}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

selenium {selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex}

Harmonised group entry used as most reasonable case. Pigment cadmium sulphoselenide not likely to be present in this soil. No evidence for the other CLP entries: sodium selenite, nickel II selenite and nickel selenide, to be present in this soil. (edit as required)

zinc {zinc oxide}

Worst case CLP species based on hazard statements/molecular weight and site history.

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition, May 2015
HazWasteOnline Classification Engine Version: 2017.55.3206.6376 (24 Feb 2017)
HazWasteOnline Database: 2017.55.3206.6376 (24 Feb 2017)

This classification utilises the following guidance and legislation:
WM3 - Waste Classification - May 2015
CLP Regulation - Regulation 1272/2008/EC of 16 December 2008
1st ATP - Regulation 790/2009/EC of 10 August 2009
2nd ATP - Regulation 286/2011/EC of 10 March 2011
3rd ATP - Regulation 618/2012/EU of 10 July 2012
4th ATP - Regulation 487/2013/EU of 8 May 2013
Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013
5th ATP - Regulation 944/2013/EU of 2 October 2013
6th ATP - Regulation 605/2014/EU of 5 June 2014
WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014
Revised List of Wastes 2014 - Decision 2014/955/EU of 18 December 2014
7th ATP - Regulation 2015/1221/EU of 24 July 2015
8th ATP - Regulation (EU) 2016/918 of 19 May 2016
9th ATP - Regulation (EU) 2016/1179 of 19 July 2016
POPs Regulation 2004 - Regulation 850/2004/EC of 29 April 2004
1st ATP to POPs Regulation - Regulation 756/2010/EU of 24 August 2010
2nd ATP to POPs Regulation - Regulation 757/2010/EU of 24 August 2010