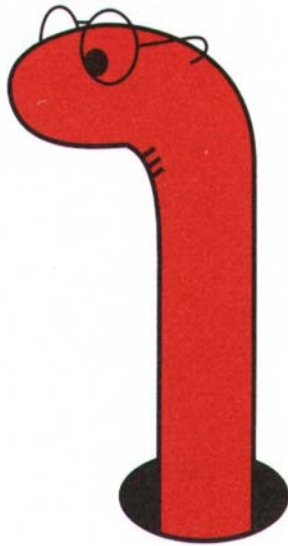


Electronic Report



WORMS EYE

Worms Eye Limited
PO Box 1157
COLNE
BB9 4HS

01282 414649
info@wormseye.co.uk

Our Ref: Brookthorpe Road / BL8 3AD / 2022
Date: 29 May 2023

Nigel Smith
12 Holkar Meadows
Bromley Cross
Bolton
BL7 9NA

Copy to: Jema Thomas
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nandsmith@gmail.com

4 BROOKTHORPE ROAD, WALSHAW, BURY, BL8 3AD
INTRUSIVE REPORT

INTRODUCTION

A residential development is proposed. Following a Preliminary Risk Assessment (PRA 27/9/22) instructions were to carry out boreholes and tests to investigate geotechnical and contamination issues.

SITE LOCATION

The site is rectangular, about 35 by 30m, located to the northwest of Brookthorpe Road in Bury and at OS Grid Reference 378032, 411455. The site is a house and gardens having a tarmac drive at the northeast, tarmac/gravel path at the northwest, patio at the west and garden at the southwest. The garden being lower than the house. There are a mixture of trees along the northeast and southeast boundary and a hedge along the southwest boundary (not an accurate arboricultural survey).

The area slopes down to the southeast. There are houses on all sides.

PROPOSED DEVELOPMENT

It is proposed to demolish the existing house and build a new detached house on a similar footprint.

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PRELIMINARY RISK ASSESSMENT

Worms Eye carried out a PRA dated 27/9/22, the salient points were:

Contamination

The site was undeveloped until the existing house was built circa 1970s/80s. There has been no use of the site from which high levels of contaminants would be expected, although low levels (exceeding stringent residential thresholds) from building materials or limited made ground cannot be ruled out.

There is no indication from historical mapping that significant thicknesses of made ground would be imported prior to construction. However, the house is raised above the southwest garden and the presence of made ground cannot be ruled out at this stage, especially at the middle/northeast.

The development will be a house with gardens. Potential pollutant linkages are:

- Direct contact with and ingestion of soil.
- From homegrown vegetables and soil attached to vegetables.
- Inhalation and ingestion of dust.

A low risk is anticipated, with possible localised contaminants present especially if made ground is seen at the middle/northeast. A limited intrusive investigation is suggested, consisting of boreholes/trial holes, there are no specific point sources for contamination.

Controlled Waters

There is an underlying Secondary A aquifer beneath clay. There are no nearby water abstraction points or source protection zone. There is a stream 220m southwest.

Although the gardens will allow rainwater to pass through the surface soils, contamination is not expected at high levels. The underlying clay will impede the migration of water and it is anticipated there will be no risk to the controlled waters and no further action is considered necessary.

Radon

Radon protection measures are not required.

Landfill Gas/Ground Gas

There are no landfill sites or significant filled features within 250m. The nearest filled pond, 70m northwest, was a small pond, probably less than 2m deep, with limited material for gas generation. Gases would not be expected at levels which would migrate through the clay to the site. Furthermore, the pond is about 2m above the site. A mine shaft to the northwest is reported as filled which will prevent or significantly reduce, potential for gas to migrate to the surface. Furthermore, the shaft is above the site and gases will migrate up to the northwest, not down to the site.

PRA Re-Cap Continued

The shallowest coal workings are reported as about 40m deep, below about 20m of mudstone and 20m of drift deposits (probably clay). The thickness of working suggest a worst case 15m intact rock is likely, which would impede the passage of gases (if any), as will overlying clay.

The findings suggest no credible on or off-site landfill or ground gas sources and no risk to the site. Subject to Local Authority agreement, it is considered no special precautions are required.

Foundations

The geology map and site inspection suggests the site is underlain by clay which often provides a good bearing strata for traditional shallow foundations. If foundations are to be on clay the shrinkage potential of the clay needs to be determined.

Industry Profile

The site has had no industrial use. Made ground cannot be ruled out at this stage.

Source of Contaminants	Possible Contaminants
Made Ground	Metals: copper, zinc, chromium, nickel, lead, cadmium, arsenic, Inorganic compounds: cyanide, sulphates Phenols Mineral oils, fuel oils (TPHs) Asbestos General hydrocarbons (PAHs)

Pollutant Linkages

The potential pollutant linkages revealed by the PRA as requiring further investigation were:

Source	Receptors	Pathway	Potential/Likely Pollutant Linkage
Asbestos	End-users	Inhalation	No
	Off-site	Migration off-site	No
Inorganic contaminants	Householders	Direct contact, ingestion, from home grown vegetables, ingestion and inhalation of dust	Possible
	Groundwater	Leaching towards	No
	River/stream	Leaching towards	No
Sulphate	Building fabric	Concrete directly in contact with soil	No
Hydrocarbons	Householders	Direct contact, ingestion, from home grown vegetables, ingestion and inhalation of dust	Possible
	Service pipes	Seeping into drinking water pipes	Unlikely
	Groundwater	Leaching towards	No
	River/stream	Leaching towards	No
Hydrocarbon vapours	Householders	Inhalation of vapours indoors and outdoors	No
Landfill gas	End-users (inside)	Seeping into buildings, explosion, asphyxiation	No
Radon	End-users (inside)	Seeping into buildings	No

End of PRA Re-Cap

GROUND INVESTIGATIONS

Five boreholes, each preceded by a starter pit, and two trial holes were carried out. Details are given on the location plan, borehole logs and trial hole logs enclosed with this report.

THA (southeast middle) encountered made ground (rubble, sandy soil and wood) to 0.3m where it refused on brick. However, THB (towards southwest corner) encountered sand with topsoil and roots to 0.5m deep.

BH1 and BH2 encountered made ground (clay, sand, rubble and stone) to about 0.2m overlying clay.

BH1 found medium strength clay at 0.75m, becoming high strength below 2.4m before sand, gravel and cobbles was seen between 5.1m and the base of the borehole at 5.4m deep.

BH3 found topsoil to 0.07m overlying clay, becoming high strength below 0.9m medium strength below 1.8m and returning to high strength clay from 3.0m to 4.0m where sand, gravel and cobbles were seen, extending down to the base of the borehole at 4.5m deep.

BH4 had made ground (clay, sand, gravel, concrete) to 1.1m where low strength sand was seen, becoming high strength clay from 1.9 to 3.1m and medium strength sand, gravel and cobbles between 3.1m and 6.2m where the borehole was stopped.

BH5, at the southeast in the area of the proposed garage, had possible made ground (sand, gravel and soil) to 1.7m overlying medium strength sand. High strength clay was seen below 2.3m, with high strength sand, gravel and cobbles between 3.4m and the base of the borehole at 5.9m deep.

The following approximates to a section looking north.

Findings	BH3 (m)	BH1 (m)	BH4 (m)	BH2 (m)	BH5 (m)
Made ground/possible made ground	-	0.0 – 0.18	0.0 – 1.1	0.0 – 0.16	0.0 – 1.7
Topsoil	0.0 – 0.07	-	-	-	-
Clay	0.07 – 0.9	0.18 – 0.75	-	0.16 – 0.	-
Sand	-	-	1.1 – 1.9 (low)	-	1.7 – 3.4 (medium)
Medium strength clay	-	0.75 – 2.4	-	0.9 – 1.9	
High strength clay	0.9 – 1.8	2.4 – 5.1	1.9 – 3.1	1.9 – 2.6	3.4 – 3.8
Medium strength clay/sand/gravel	1.8 – 3.0	-	-	2.6 – 3.6	-
High strength clay	3.0 – 4.0	-	-	3.6 – 4.6	-
Sand, gravel, cobbles	4.0 – 4.5+	5.1 – 5.4+	3.1 – 6.2+	4.6 – 4.8+	3.8 – 5.9+
Refusal (probably not rock)	Refusal	Almost refusal	No	Refusal	5.9
Water	-	1.7	Dry	2.4	4.6

NEARBY BOREHOLES/PREVIOUS REPORTS/OUTCROPS

The following information, and enclosed borehole logs, contain British Geological Survey materials © NERC (2023). A BGS record for the mine shaft 50m northwest shows drift deposits (marl, sand, gravel) to 20.3m overlying sandstone.

CONTAMINATION TESTING

Seven shallow samples were tested for a range of contaminants indicated by the PRA. The results are included in table form with abbreviations and acronyms given after the appendix list.

The maximum contamination values have been compared with residential C4Ls, soil guideline values provided by CLEA and values based on the LQM/CIEH S4ULS. In accordance with guidance provided by the AGS, threshold values from other sources have been used for screening purposes. This information has been brought together on the Comparison Table included with this report.

Asbestos – No asbestos fibres were detected.

Inorganics (metals etc.) – Inorganic contaminants are below residential thresholds.

Sulphate – Water soluble sulphate levels are below the BRE action level for buried concrete except for THA at 1.2m where the level (1.6 g/l) exceeds the DS-2 threshold (1.5 g/l).

Hydrocarbons – Phenols, TPHs and PAHs are below their respective residential thresholds.

DISPOSAL OF EXCAVATED SOIL

Results have been compared with hazardous waste thresholds and a Hazwaste Report is enclosed. This suggests excavated soil would not be classed as hazardous waste.

Levels of Total Organic Carbon (TOC) are below the threshold for disposal at waste landfill without treatment except in THA at 0.25m where TOC exceeds the threshold for disposal at inert waste landfill.

PLASTICITY TESTS

Three samples of clay have been tested to determine their plasticity index (PI). These results will be issued when available.

DISCUSSION

Contamination

Contamination tests show levels to be below stringent residential thresholds considered appropriate for this development. These show no risk to householders and no further action is required.

Water Soluble Sulphate levels are raised in THA at 0.25m. However, THA represents the garden at the southeast and levels of water soluble sulphate in the area of the proposed house and garage are low and below the threshold. This shows no risk around the footprint of the buildings and sulphate resistant concrete is not required for the proposed house and garage.

Volatile hydrocarbons are below the thresholds and there is no risk from hydrocarbon vapours.

Excavated Soils

Results suggest excavated soil would not be classed as hazardous waste and, around BHs 1–5, and THB (house and garage), would be suitable for disposal at inert waste landfill.

Levels of TOC in THA may pose difficulties for disposal to inert waste landfill without treatment.

Controlled Waters

Regarding risks to controlled waters:

- The site is underlain by a Secondary A aquifer.
- The nearest water course is a stream 220m southwest.
- There are no nearby source protection zones or water abstraction points.
- The levels of contaminants are low and are not excessive.
- Clay underlying the site will be an aquitard.

Bearing in mind all of the above factors, it is considered that there are no risks to controlled waters and no further action is required.

Landfill Gas/Ground Gas

There are no landfill sites or significant filled features within 250m.

The shallowest coal workings are reported as about 40m deep, below about 20m of mudstone and 20m of drift deposits (probably clay). The thickness of working suggest a worst case 15m intact rock is likely, which would impede the passage of gases (if any), as will overlying clay.

The findings suggest no credible on or off-site landfill or ground gas sources and no risk to the site. Subject to Local Authority agreement, it is considered no special precautions are required.

Foundations

The following comments are subject to the findings of the plasticity test results.

Ground conditions under the proposed house show medium strength clay from 0.9m deep over most of the footprint (BHs 1, 2 and 3), generally becoming high strength with depth, with sand bands in BH3 below 2.0m deep. BH4, just south of the south corner, shows more sandy gravelly conditions with low strength sand to 1.9m over high strength sandy gravelly clay to 3.1m, with sand gravel below.

Three boreholes refused (or almost refused) at about 5.0m, and shallow ground water was not seen.

At the northwest of the house, strip footings could be used at a depth of 0.9m sitting on firm clay, using an allowable bearing capacity of 150 KN/m². Moving towards the southeast there is medium strength clay (BH2) and made ground over loose sand (BH4) and the firm clay needs to be followed down to 1.9m where the same bearing capacity (150 KN/m²) could be used at this depth.

An alternative is to strip the shallow topsoil, and topsoil rich made ground, and construct a reinforced concrete raft on a rolled and compacted formation, with an allowable bearing capacity of 50 KN/m².

In BH5, at the proposed garage, conditions were different having 1.7m of made ground over sands and gravels. A reinforced concrete raft is recommended for the proposed garage, on a rolled and compacted formation, using a bearing capacity of 50 KN/m².

CONCEPTUAL MODEL

Source	Receptors	Pathway	Complete Pollutant Linkage
Asbestos (none detected)	End-users	Inhalation	No
	Off-site	Migration off-site	No
Inorganic contaminants (low)	Householders	Direct contact, ingestion, from home grown vegetables, ingestion and inhalation of dust	No
	Groundwater	Leaching towards	No
	River/stream	Leaching towards	No
Sulphate (raised in THA)	Building fabric	Concrete directly in contact with soil	Yes – around THA No – around proposed house and garage
Hydrocarbons (low)	Householders	Direct contact, ingestion, from home grown vegetables, ingestion and inhalation of dust	No
	Groundwater	Leaching towards	No
	River/stream	Leaching towards	No
Hydrocarbon vapours (very low)	Householders	Inhalation of vapours indoors and outdoors	No
Landfill gas	End-users (inside)	Seeping into buildings, explosion, asphyxiation	No
Radon	End-users (inside)	Seeping into buildings	No

BREAKING PATHWAYS

Construction Workers

Site workers should be made aware of the hazards of working with contaminated soils, and appropriate procedures and PPE adopted to ensure the health and safety of the site operative. All site personnel should be briefed on the discovery strategy in the watching brief and what actions they must take in the event that further evidence of contamination is identified or suspected.

Normal precautions for an urban renewal type project are required. These would include the use of gloves and the provision of washing facilities to avoid ingestion of contaminants.

Watching Brief

A watching brief for unexpected contaminants should be maintained. If unexpected contaminants (e.g. asbestos, oily material, unusual smells) are seen, especially during excavations, work should cease and the consultant be notified and the site inspected.

We suggest taking regular photographs (daily or more frequent) of excavations to include in the validation report.

Excavated Soils

Excavated in the area of the proposed house and garage (BHs 1-5 and THB) would not be classed as hazardous waste and would be suitable for disposal at inert waste landfill.

However, levels of TOC in THA may pose difficulties for disposal to inert waste landfill without treatment. The results should be issued to the receiving site for confirmation.

Imported Soils

All soils (e.g. topsoil, bulk fill hardcore) and similar materials imported on-site to be proved to be uncontaminated. Imported material will require testing as follows:

- Greenfield soils – minimum of 3 tests or 1 test per 100m³ (whichever is greater). Testing to include arsenic, cadmium, chromium (total), chromium VI, copper, mercury, nickel, lead, selenium, zinc, PAH (16 USEPA speciation), asbestos, TPHs (speciated), boron, cyanide, thiocyanate, sulphide, sulphur, sulphate, pH, Som.
- Brownfield/screened/manufactured soils – minimum of 3 tests or 1 test per 50m³ (whichever is greater). Testing to include arsenic, cadmium, chromium (total), chromium VI, copper, mercury, nickel, lead, selenium, zinc, PAH (16 USEPA speciation) asbestos, TPHs (speciated), boron, cyanide, thiocyanate, sulphide, sulphur, sulphate, pH, Som.

Soil Screen Values

Tests carried out on the imported material, either by the supplier or the consultant, to be screened against residential values, based on 1% SOM. If these are exceeded, site specific value may be derived, subject to them being appropriate.

Validation

A validation report will be required on completion, this will require but not necessarily be limited to:

- Tickets from waste removal contractor and receiving landfill.
- Contamination test results for tests on imported soils.
- Photographs to confirm thickness of imported soil types.
- Document (receipt, delivery notes) to show soil types and sources.

This report is usually a collaboration between the contractor, who will collect the above documentation and Worms Eye, who can assist in preparing the Validation Report

CONCLUSION

Contaminated Soils

Contamination tests show levels below thresholds appropriate for the development. It is considered these suggest a risk to end-users and no further action is required.

Sulphate resistant concrete is not required for the proposed house and garage.

There are no risks from hydrocarbon vapours.

Excavated Soils

Excavated in the area of the proposed house and garage (BHs 1-5 and THB) would not be classed as hazardous waste and would be suitable for disposal at inert waste landfill.

However, levels of TOC in THA may pose difficulties for disposal to inert waste landfill without treatment. The results should be issued to the receiving site for confirmation.

Controlled Waters

The findings show no risk to controlled waters and no further action is required.

Gas Testing

The findings suggest no credible on or off-site landfill or ground gas sources and no risk to the site. Subject to Local Authority agreement, it is considered no special precautions are required.

Foundations

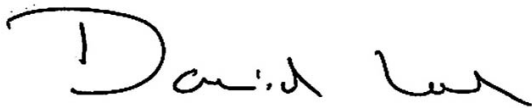
The following comments are subject to the findings of the plasticity test results.

Foundation options are considered to be:

- At the northeast of the proposed house, strip footings could be used at 0.9m on firm clay, with an allowable bearing capacity of 150 KN/m². Moving southeast, the firm clay needs to be followed down to at least 1.9m where the same bearing capacity could be used.
- An alternative is to strip the shallow topsoil/topsoil rich made ground, and construct a reinforced concrete raft on a rolled and compacted formation, with an allowable bearing capacity of 50 KN/m².
- In BH5, at the proposed garage, conditions were different having 1.7m of made ground over sands and gravels. A reinforced concrete raft is recommended for the proposed garage, on a rolled and compacted formation, using a bearing capacity of 50 KN/m².

Yours faithfully

on behalf of Worms Eye Ltd

A handwritten signature in black ink, appearing to read 'David Lord', with a stylized flourish at the end.

David Lord

BSc (Hons)

FGS, MIEEnvSc, AIEEMA

4 BROOKTHORPE ROAD, WALSHAW, BURY, BL8 3AD

List of Appendices – Intrusive Report

List of Acronyms

Proposed site plan – showing borehole and trial hole locations

Window Samper Borehole Logs

Trial Hole Logs

Contamination Test Results - Soil

Contamination Comparison Table – Soil

Hazwaste Report

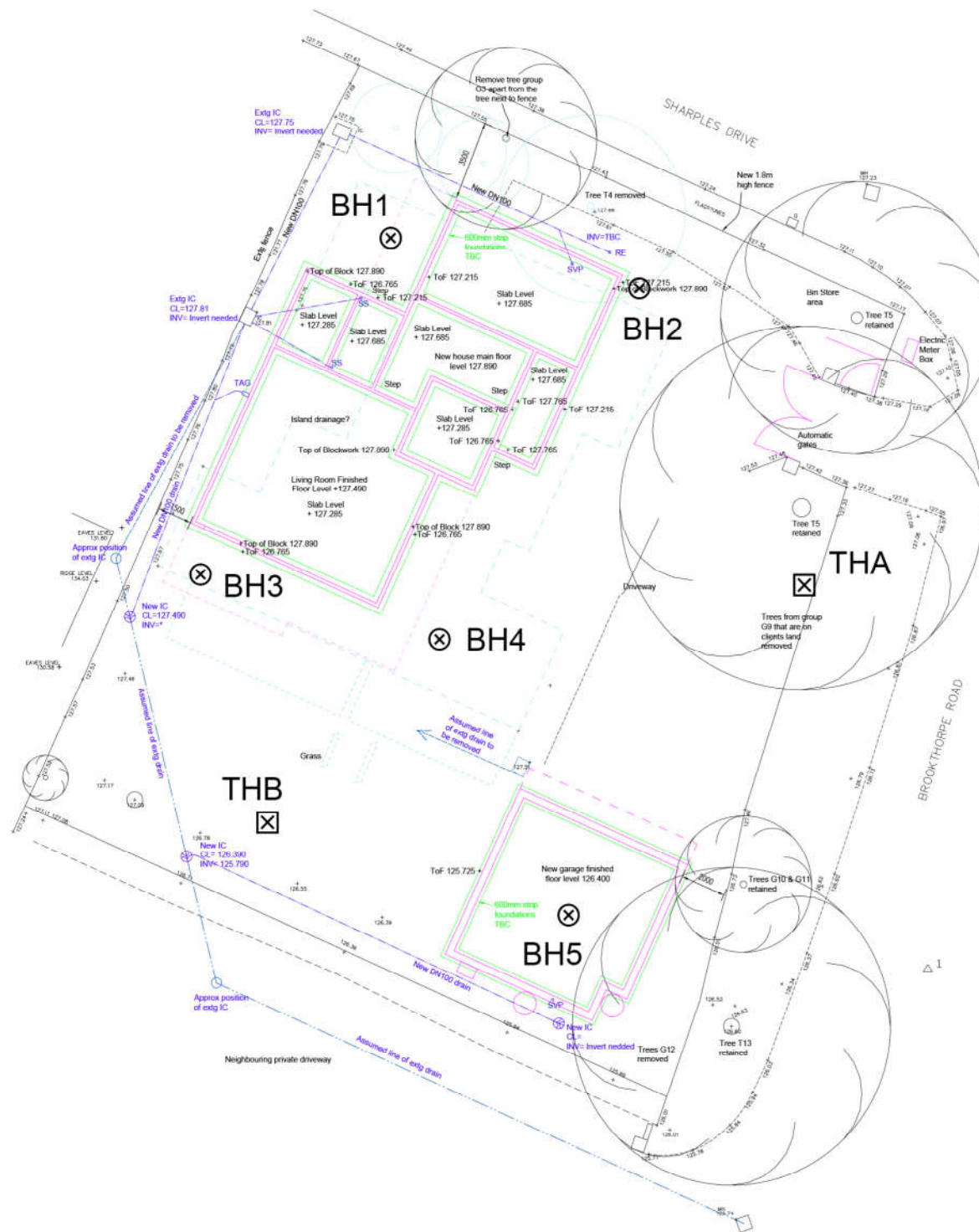
CONTAMINATION TEST UNITS

Conversion factor	Name	Symbol	Numerical Value	Alternative description	Commonly used for:
	per cent	%	1 in 100 (10 ²)		total sulphur, hazardous waste
% x10	parts per thousand	‰	1 in 1000 (10 ³)	g/l (grams per litre)	water soluble sulphate test
‰ x 1,000	parts per million	ppm	1 in 1,000,000 (10 ⁶)	mg/kg (milligrams per kilogram)	most soil tests
				mg/l (milligrams per litre)	water tests
ppm x 1,000	parts per billion	ppb	1 in 1,000,000,000 (10 ⁹)	µg/kg (micrograms per kilogram)	PAH soil tests
				µg/l (micrograms per litre)	water/leachate tests
ppb x 1,000	parts per trillion	ppt	1 in 1,000,000,000,000 (10 ¹²)	ng/kg (nanograms per kilogram)	PAH soil tests
				ng/l (nanograms per litre)	water/leachate tests

ABBREVIATIONS

<u>Chemical</u>	BAP	Benzo(a)pyrene
	BTEX	Benzene, toluene, ethylbenzene, xylene
	DAHA	Dibenzo(ah)anthracene
	MTBE	Methyl tertiaryt-butyl ether (additive to petrol)
	EPH	Extractable petroleum hydrocarbons (formerly diesel range organics – DRO)
	NFD	No fibres detected (asbestos test)
	PAH	Polycyclic aromatic hydrocarbons
	PCB	Polychlorinated biphenyls
	PCE	Perchloroethylene or tetrachloroethylene
	PID	Photo ionisation detector (screen for VOC)
	PRO/GRO	Petrol range organics/gasoline range organics
	SVOC	Semi-volatile organic compounds
	TCE	Trichloroethylene
	TPH	Total petroleum hydrocarbons
	VOC	Volatile organic compounds
<u>Other</u>	AGS	Association of Geotechnical Specialists
	BGS	British Geological Survey
	BRE	Building Research Establishment
	CBR	California Bearing Ratio
	CIEH	Chartered Institute of Environmental Health
	CIRIA	Construction Industry Research and Information Association
	CLEA	Contaminated Land Exposure Assessment (Environment Agency/DEFRA)
	CLR 8	Contaminated Land Research Report 8 (Environment Agency/DEFRA)
	DWQ	Drinking water quality
	EA	Environment Agency
	EQS	Environmental quality standards (for rivers etc.)
	ICRCL	Inter-departmental Commission for the Reclamation of Contaminated Land
	LQM	Land Quality Management Ltd (Land and Environmental Consultancy).
	NHBC	National House Builders Council
	SGV	Soil Guideline Values
	SPT	Standard penetration test

1. This report should be considered in relation to the objectives agreed between Worms Eye and the Client, outlined in the introduction.
2. For the work, reliance has been placed on publicly available data, obtained from the sources identified in the report. The information is not exhaustive and further information may be available from other sources. When using the information it has been assumed it is correct, and no attempt has been made to verify the information.
3. This report has been produced in accordance with current UK policy and guidelines, for land and groundwater contamination, enforced by the Local Authority and the Environment Agency.
4. During the site walkover, reasonable effort was made to obtain an overview of the site. However, no attempt was made to enter areas that are unsafe, a risk to health and safety, locked, barricaded, overgrown, or areas not made accessible.
5. Access, the presence of services and activities on the site, limited locations where sampling could be carried out and the techniques that could be used.
6. Assessments are based on available information at the time of writing and are ultimately for the decision of the regulatory authorities.
7. The conclusions and recommendations provide an overview and guidance only and should not be specifically relied upon without considering the context of the report in full.
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Do not scale from this drawing.

All dimensions are to be checked on site prior to construction, manufacture of any components and ordering of materials and equipment.

Any discrepancies are to be reported to the architect for clarification.

All materials and workmanship to be in accordance with the current British Standards and codes of practice.

BELOW GROUND DRAINAGE:

- Start of new drains to be either a gully or rest bend (from SVP). New drains to be uPVC pipes with flexible joints, and be nominally 100mm (DN100). Pipes to be bedded and backfilled in accordance with BS5565-1, and generally laid to falls of 1 in 80. Drains passing under buildings within 300mm of underside of slab to be encased all around with 100mm concrete. Provide openings in walls that drains pass through with pcc inlets, allow min 50mm clearance around pipes and fill these gaps with compressible filter to prevent gas entry.
- TAG denotes trapped access gully, Role.

FOUNDATIONS:

- Provide new concrete strip foundations minimum 600 x 225mm under new external walls and 450 x 200mm under new internal walls, minimum 750mm below ground level, or in accordance with Engineers requirements. Any pad foundations to be as Engineers design.
- Where stepped foundations are needed they should overlap by either twice the height of the step, or the thickness of the foundation, or 300mm, whichever is greatest. The height of step should not be greater than foundation thickness.

Client	Mr & Mrs Smith
Project	Proposed replacement of dwelling Brookthorpe Road, Bury
Working Drawing - Below Ground Plan	
Date	January 2023
Drawn by	Trinity Woodman
Scales	1:100 @ A1
Job No - Draw No - Rev	22018 - 201-B

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Worms Eye Limited				PO Box 1157 COLNE, BB9 4HS		Site 4 Brookthorpe Road, Bury, Lancashire		Number BH1		
Excavation Method Drive-in Windowless Sampler		Dimensions		Ground Level (mOD)		Client		Job Number BL8 3AD		
		Location Northwest corner, See TH1		Dates 10/05/2023		Project Contractor Worms Eye Ltd.		Sheet 1/1		
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description		Legend	Water	
1.00-1.45 1.30	SPT N=10 VANE 88kPa		1,1/2,2,3,3		(0.18)	Sandy clayey MADE GROUND with rubble and sandstone.				
	(0.29)				Brownish grey, slightly sandy, clay with sandstone.					
	(0.47)				Brownish red clay.					
1.70-2.15 2.20	SPT N=10 VANE 112kPa		1,1/2,2,3,3		(0.28)	Medium strength, brown and grey mottled, sandy, gravelly CLAY with stone cobbles (becoming high strength with depth).				
	(0.75)									
	(1.65)									
2.70-3.15 3.10	SPT N=23 VANE 130kPa		2,3/3,5,7,8			Medium strength, dark brown, sandy, gravelly CLAY.				
	(1.10)									
	3.50				Medium strength, brown, very sandy, gravelly CLAY.					
4.20	VANE 130kPa				(0.90)	Stiff, brown, sandy, gravelly CLAY.				
					4.40					
					(0.70)	Brown, SAND, GRAVEL and stone COBBLES.				
					5.10					
					(0.30)	Complete at 5.40m				
					5.40					
Remarks Standing water encountered at 1.7m deep. Almost refusal.								Scale (approx)		Logged By
								1:50		EW
								Figure No. BL8 3AD.BH1		

Worms Eye Limited				PO Box 1157 COLNE, BB9 4HS		Site 4 Brookthorpe Road, Bury, Lancashire		Number BH2	
Excavation Method Drive-in Windowless Sampler		Dimensions		Ground Level (mOD)		Client		Job Number BL8 3AD	
		Location Northeast middle, See TH2		Dates 10/05/2023		Project Contractor Worms Eye Ltd.		Sheet 1/1	
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description		Legend	Water
1.00 1.10-1.55	VANE 48kPa SPT N=9		1,2/2,2,2,3		0.06	MADE GROUND - Rubble.			
					0.16	Greyish brown sandy MADE GROUND with gravel and rubble.			
					(0.39)	Greyish brown sandstone and clay.			
					0.55	Brownish grey clay (probed).			
2.00 2.00-2.45	VANE 122kPa SPT N=15		2,2/3,4,4,4		(0.35)	Medium strength, brown and grey mottled, sandy, gravelly, CLAY with stone cobbles (becoming high strength with depth).			
					0.90				
					(1.70)				
					2.60	Medium strength, mid to dark brown, very sandy, silty, CLAY (becoming low strength from approximately 2.8m deep).			
2.70 2.90-3.35	VANE 46kPa SPT N=3		1,1/0,1,1,1		(0.50)				
					3.10	Medium strength, brown, sandy, gravelly, CLAY with stone cobbles (becoming high strength from approximately 3.6m deep).			
					(1.50)				
					4.60	Brown, SAND, GRAVEL and stone COBBLES.			
4.20	VANE 130kPa				(0.20)				
					4.80	Complete at 4.80m			
Remarks Standing water encountered at 2.4m deep. Refusal.								Scale (approx) 1:50	Logged By EW
								Figure No. BL8 3AD.BH2	

Worms Eye Limited				PO Box 1157 COLNE, BB9 4HS		Site 4 Brookthorpe Road, Bury, Lancashire		Number BH3	
Excavation Method Drive-in Windowless Sampler		Dimensions		Ground Level (mOD)		Client		Job Number BL8 3AD	
		Location Northwest middle, See TH3		Dates 11/05/2023		Project Contractor Worms Eye Ltd.		Sheet 1/1	
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description		Legend	Water
1.10 1.10-1.55	VANE 130kPa SPT N=9		2,2/2,2,2,3		0.07	Brown topsoil.			
					(0.83)	Light greyish brown sandy clay (approximate depth).			
1.70 1.85-2.30	VANE 118kPa SPT N=6		2,1/2,1,1,2		0.90	High strength, brown and grey mottled, sandy, gravelly CLAY.			
					(0.90)				
1.70 1.85-2.30	VANE 118kPa SPT N=6		2,1/2,1,1,2		1.80	Brown SAND over medium to high strength, brown and grey mottled, sandy, very silty CLAY.			
					(0.20)				
2.40 2.50-2.95	VANE 47kPa SPT N=14		3,2/2,5,4,3		2.30	Brown, very clayey, very gravelly SAND.			
					(0.30)	Medium strength, brown, sandy, silty CLAY.			
					2.60	Medium strength, brown, slightly clayey SAND, GRAVEL and stone COBBLES.			
					(0.40)	High strength, brown, sandy, gravelly CLAY with stone cobbles.			
3.30	VANE 130kPa		1,2/3,5,7,6		(1.00)				
3.50-3.95	SPT N=21				4.00	High strength, brown, SAND, GRAVEL and stone COBBLES.			
					4.50	Complete at 4.50m			
Remarks Refusal.								Scale (approx)	Logged By
								1:50	EW
								Figure No. BL8 3AD.BH3	

Worms Eye Limted PO Box 1157 COLNE, BB9 4HS					Site 4 Brookthorpe Road, Bury, Lancashire		Number BH4	
Excavation Method Drive-in Windowless Sampler		Dimensions		Ground Level (mOD)		Client		Job Number BL8 3AD
		Location Towards middle, See TH4		Dates 11/05/2023		Project Contractor Worms Eye Ltd.		Sheet 1/1
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
1.20-1.65	SPT N=6	1,0/1,1,2,2			(0.85)	MADE GROUND - Brown sandy clayey soil with pieces of sandstone, becoming reddish at base.		
					0.85 (0.25) 1.10	MADE GROUND - Concrete (possible old foundation).		
					(0.80)	Low strength, brown, gravelly SAND.		
2.00-2.45	SPT N=19	2,3/3,4,5,7			1.90	High strength, brown, very sandy, gravelly CLAY (with roots visible up to 2.1m deep).		
2.30	VANE 88kPa				(1.20)			
2.80-3.25	SPT N=22				3.10			
3.50-3.95	SPT N=11	3,3/3,3,2,3			(2.00)	Medium strength, brown, SAND, GRAVEL and stone COBBLES.		
					5.10			
					(1.10)			
					6.20	Complete at 6.20m		
Remarks Borehole dry during drilling.							Scale (approx) 1:50	Logged By EW
							Figure No. BL8 3AD.BH4	

Worms Eye Limited				PO Box 1157 COLNE, BB9 4HS		Site 4 Brookthorpe Road, Bury, Lancashire		Number BH5	
Excavation Method Drive-in Windowless Sampler		Dimensions		Ground Level (mOD)		Client		Job Number BL8 3AD	
		Location Southeast corner, See TH5		Dates 11/05/2023		Project Contractor Worms Eye Ltd.		Sheet 1/1	
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description		Legend	Water
1.40-1.85	SPT N=9		2,3/2,2,3,2			Possible MADE GROUND - Light orangish brown sand with roots and rare gravel.			
					1.20 (0.50)	Probable MADE GROUND - Brown, sand with soil and traces of red brick.			
					1.70 (0.60)	Medium strength, brown SAND.			
2.10-2.55	SPT N=13		1,1/2,5,3,3		2.30	High strength, brown, slightly clayey SAND and GRAVEL with stone cobbles.			
2.90-3.35	SPT(C) N=27		2,2/4,4,10,9		(1.10)				
					3.40 (0.40)	High strength,, brown, very sandy, gravelly CLAY with stone cobbles.			
4.20-4.65	SPT N=18		3,4/4,4,4,6		3.80 (0.80)	High strength, brown, clayey SAND, GRAVEL and stone COBBLES.			
					4.60	Brown, SAND, GRAVEL and stone COBBLES.			
					(1.30)				
					5.90	Complete at 5.90m			
Remarks Standing water encountered at 4.6m deep. Refusal.							Scale (approx) 1:50	Logged By EW	
							Figure No. BL8 3AD.BH5		

Worms Eye Limited					PO Box 1157 COLNE, BB9 4HS		Site 4 Brookthorpe Road, Bury, Lancashire		Trial Pit Number TH1	
Excavation Method Trial Pit		Dimensions		Ground Level (mOD)		Client		Job Number BL8 3AD		
		Location Northwest corner, See BH1		Dates 09/05/2023		Project Contractor Worms Eye Ltd.		Sheet 1/1		
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description		Legend	Water	
						Sandy clayey MADE GROUND with rubble and sandstone.				
						Brownish grey, slightly sandy, clay with sandstone.				
						Brownish red clay.				
						Complete at 0.75m				
Plan					Remarks					
					Continued as BH1. Water at 0.5m.					
					Scale (approx)		Logged By		Figure No.	
					1:10		EW		BL8 3AD.TH1	

Worms Eye Limted				PO Box 1157 COLNE, BB9 4HS		Site 4 Brookthorpe Road, Bury, Lancashire		Trial Pit Number TH5	
Excavation Method Trial Pit		Dimensions		Ground Level (mOD)		Client		Job Number BL8 3AD	
		Location Southeast corner, See BH5		Dates 09/05/2023		Project Contractor Worms Eye Ltd.		Sheet 1/1	
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description		Legend	Water
						Possible MADE GROUND - Light orangish brown sand with roots and rare gravel.			
					(1.20)				
					1.20	Complete at 1.20m			
Plan					Remarks				
.					Continued as BH5.				
.									
.									
.									
.									
.									
					Scale (approx)		Logged By		Figure No.
					1:10		EW		BL8 3AD.TH5

Worms Eye Limted				PO Box 1157 COLNE, BB9 4HS		Site 4 Brookthorpe Road, Bury, Lancashire		Trial Pit Number THA	
Excavation Method Trial Pit		Dimensions		Ground Level (mOD)		Client		Job Number BL8 3AD	
		Location Southeast middle		Dates 09/05/2023		Project Contractor Worms Eye Ltd.		Sheet 1/1	
Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description		Legend	Water
						MADE GROUND - Rubble.			
						Brown sandy soil with piece of wood.			
						Complete at 0.30m			
Plan					Remarks				
.					Obstructed on brick.				
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.									
.									
.									
					Scale (approx)		Logged By		Figure No.
					1:10		EW		BL8 3AD.THA

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Analytical Report Number : 23-33286

Project / Site name:	Brookthorpe Road, Bury	Samples received on:	12/05/2023
Your job number:	8 3AD	Samples instructed on/ Analysis started on:	12/05/2023
Your order number:		Analysis completed by:	18/05/2023
Report Issue Number:	1	Report issued on:	18/05/2023
Samples Analysed:	7 soil samples		

Izabela Wójcik
Signed:
Izabela Wójcik
Reporting Specialist
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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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

Analytical Report Number: 23-33286
Project / Site name: Brookthorpe Road, Bury

Lab Sample Number				2676205	2676206	2676207	2676208	2676209
Sample Reference				BH1	BH2	BH3	BH4	BH5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.25	0.25	0.25	0.25	0.25
Date Sampled				09/05/2023	09/05/2023	09/05/2023	09/05/2023	09/05/2023
Time Taken				1300	1300	1300	1300	1300
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	16	6	21	19	14
Total mass of sample received	kg	0.001	NONE	1	1.5	0.6	1.5	2

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	KWB	KWB	KWB	KWB	KWB

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.6	8.2	6.3	6.5	7
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Thiocyanate as SCN	mg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Total Sulphate as SO4	%	0.005	MCERTS	0.059	0.034	0.041	0.051	0.141
Water Soluble Sulphate as SO4 16hr extraction (2:1)	mg/kg	2.5	MCERTS	460	240	24	120	950
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	0.23	0.12	0.012	0.058	0.48
Water Soluble SO4 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	228	121	11.8	58	477
Sulphide	mg/kg	1	NONE	< 1.0	40	42	45	26
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	1	0.2	2	2.5	1.7

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthylene	mg/kg	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluorene	mg/kg	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Phenanthrene	mg/kg	0.05	NONE	< 0.05	< 0.05	0.11	0.19	0.07
Anthracene	mg/kg	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Fluoranthene	mg/kg	0.05	NONE	< 0.05	< 0.05	0.18	0.35	0.15
Pyrene	mg/kg	0.05	NONE	< 0.05	< 0.05	0.16	0.34	0.16
Benzo(a)anthracene	mg/kg	0.05	NONE	< 0.05	< 0.05	0.08	0.16	0.09
Chrysene	mg/kg	0.05	NONE	< 0.05	< 0.05	0.1	0.2	0.09
Benzo(b)fluoranthene	mg/kg	0.05	NONE	< 0.05	< 0.05	0.12	0.25	0.14
Benzo(k)fluoranthene	mg/kg	0.05	NONE	< 0.05	< 0.05	< 0.05	0.1	< 0.05
Benzo(a)pyrene	mg/kg	0.05	NONE	< 0.05	< 0.05	0.08	0.17	0.08
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	< 0.05	< 0.05	0.06	0.12	0.05
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05
Benzo(ghi)perylene	mg/kg	0.05	NONE	< 0.05	< 0.05	0.06	0.13	0.06

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	< 0.80	< 0.80	0.95	2.01	0.89
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Analytical Report Number: 23-33286
Project / Site name: Brookthorpe Road, Bury

Lab Sample Number				2676205	2676206	2676207	2676208	2676209
Sample Reference				BH1	BH2	BH3	BH4	BH5
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied
Depth (m)				0.25	0.25	0.25	0.25	0.25
Date Sampled				09/05/2023	09/05/2023	09/05/2023	09/05/2023	09/05/2023
Time Taken				1300	1300	1300	1300	1300
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status					

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	6.8	7.6	18	22	9.9
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	< 0.2	0.3	< 0.2	< 0.2	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8	< 1.8	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	20	27	19	17	12
Copper (aqua regia extractable)	mg/kg	1	MCERTS	26	30	28	45	30
Lead (aqua regia extractable)	mg/kg	1	MCERTS	17	26	56	75	36
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	18	41	14	18	14
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	47	96	54	85	52

Monoaromatics & Oxygenates

Benzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Toluene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
p & m-xylene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0##	< 5.0##
o-xylene	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0	< 5.0	< 5.0	< 5.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6 _{HS_1D_AL}	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8 _{HS_1D_AL}	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10 _{HS_1D_AL}	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12 _{EH_CU_1D_AL}	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 _{EH_CU_1D_AL}	mg/kg	2	NONE	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 _{EH_CU_1D_AL}	mg/kg	8	NONE	< 8.0	< 8.0	< 8.0	< 8.0	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 _{EH_CU_1D_AL}	mg/kg	8	NONE	32	< 8.0	< 8.0	< 8.0	9.8
TPH-CWG - Aliphatic (EC5 - EC35) _{EH_CU+HS_1D_AL}	mg/kg	10	NONE	34	< 10	< 10	< 10	10

TPH-CWG - Aromatic >EC5 - EC7 _{HS_1D_AR}	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8 _{HS_1D_AR}	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10 _{HS_1D_AR}	mg/kg	0.001	NONE	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12 _{EH_CU_1D_AR}	mg/kg	1	NONE	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 _{EH_CU_1D_AR}	mg/kg	2	NONE	< 2.0	< 2.0	< 2.0	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 _{EH_CU_1D_AR}	mg/kg	10	NONE	< 10	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic >EC21 - EC35 _{EH_CU_1D_AR}	mg/kg	10	NONE	41	< 10	< 10	< 10	< 10
TPH-CWG - Aromatic (EC5 - EC35) _{EH_CU+HS_1D_AR}	mg/kg	10	NONE	43	< 10	< 10	< 10	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number: 23-33286
Project / Site name: Brookthorpe Road, Bury

Lab Sample Number				2676210	2676211
Sample Reference				THA	THB
Sample Number				None Supplied	None Supplied
Depth (m)				0.25	0.25
Date Sampled				09/05/2023	09/05/2023
Time Taken				1300	1300
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		
Stone Content	%	0.1	NONE	< 0.1	< 0.1
Moisture Content	%	0.01	NONE	18	18
Total mass of sample received	kg	0.001	NONE	2	2

Asbestos in Soil	Type	N/A	ISO 17025	Not-detected	Not-detected
Asbestos Analyst ID	N/A	N/A	N/A	KWB	KWB

General Inorganics

pH - Automated	pH Units	N/A	MCERTS	7.4	5.9
Total Cyanide	mg/kg	1	MCERTS	< 1.0	< 1.0
Thiocyanate as SCN	mg/kg	5	NONE	< 5.0	< 5.0
Total Sulphate as SO ₄	%	0.005	MCERTS	0.54	0.053
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)	mg/kg	2.5	MCERTS	3200	17
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	g/l	0.00125	MCERTS	1.6	0.0084
Water Soluble SO ₄ 16hr extraction (2:1 Leachate Equivalent)	mg/l	1.25	MCERTS	1590	8.4
Sulphide	mg/kg	1	NONE	25	52
Total Organic Carbon (TOC) - Automated	%	0.1	MCERTS	4.1	2.7

Total Phenols

Total Phenols (monohydric)	mg/kg	1	MCERTS	< 1.0	< 1.0
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Speciated PAHs

Naphthalene	mg/kg	0.05	NONE	0.15	0.05
Acenaphthylene	mg/kg	0.05	NONE	< 0.05	< 0.05
Acenaphthene	mg/kg	0.05	NONE	< 0.05	0.07
Fluorene	mg/kg	0.05	NONE	< 0.05	0.05
Phenanthrene	mg/kg	0.05	NONE	0.36	0.45
Anthracene	mg/kg	0.05	NONE	0.07	0.07
Fluoranthene	mg/kg	0.05	NONE	0.64	0.68
Pyrene	mg/kg	0.05	NONE	0.69	0.66
Benzo(a)anthracene	mg/kg	0.05	NONE	0.34	0.36
Chrysene	mg/kg	0.05	NONE	0.34	0.37
Benzo(b)fluoranthene	mg/kg	0.05	NONE	0.41	0.35
Benzo(k)fluoranthene	mg/kg	0.05	NONE	0.2	0.25
Benzo(a)pyrene	mg/kg	0.05	NONE	0.36	0.34
Indeno(1,2,3-cd)pyrene	mg/kg	0.05	NONE	0.16	0.19
Dibenz(a,h)anthracene	mg/kg	0.05	NONE	< 0.05	0.05
Benzo(ghi)perylene	mg/kg	0.05	NONE	0.19	0.24

Total PAH

Speciated Total EPA-16 PAHs	mg/kg	0.8	NONE	3.91	4.18
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Analytical Report Number: 23-33286
Project / Site name: Brookthorpe Road, Bury

Lab Sample Number				2676210	2676211
Sample Reference				THA	THB
Sample Number				None Supplied	None Supplied
Depth (m)				0.25	0.25
Date Sampled				09/05/2023	09/05/2023
Time Taken				1300	1300
Analytical Parameter (Soil Analysis)	Units	Limit of detection	Accreditation Status		

Heavy Metals / Metalloids

Arsenic (aqua regia extractable)	mg/kg	1	MCERTS	16	30
Cadmium (aqua regia extractable)	mg/kg	0.2	MCERTS	0.7	< 0.2
Chromium (hexavalent)	mg/kg	1.8	MCERTS	< 1.8	< 1.8
Chromium (aqua regia extractable)	mg/kg	1	MCERTS	17	16
Copper (aqua regia extractable)	mg/kg	1	MCERTS	61	45
Lead (aqua regia extractable)	mg/kg	1	MCERTS	78	85
Mercury (aqua regia extractable)	mg/kg	0.3	MCERTS	< 0.3	< 0.3
Nickel (aqua regia extractable)	mg/kg	1	MCERTS	18	18
Selenium (aqua regia extractable)	mg/kg	1	MCERTS	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	1	MCERTS	90	100

Monoaromatics & Oxygenates

Benzene	µg/kg	5	NONE	< 5.0	< 5.0
Toluene	µg/kg	5	NONE	< 5.0	< 5.0
Ethylbenzene	µg/kg	5	NONE	< 5.0	< 5.0
p & m-xylene	µg/kg	5	NONE	< 5.0##	< 5.0##
o-xylene	µg/kg	5	NONE	< 5.0	< 5.0
MTBE (Methyl Tertiary Butyl Ether)	µg/kg	5	NONE	< 5.0	< 5.0

Petroleum Hydrocarbons

TPH-CWG - Aliphatic >EC5 - EC6 _{HS_1D_AL}	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC6 - EC8 _{HS_1D_AL}	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC8 - EC10 _{HS_1D_AL}	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aliphatic >EC10 - EC12 _{EH_CU_1D_AL}	mg/kg	1	NONE	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16 _{EH_CU_1D_AL}	mg/kg	2	NONE	2.1	< 2.0
TPH-CWG - Aliphatic >EC16 - EC21 _{EH_CU_1D_AL}	mg/kg	8	NONE	14	< 8.0
TPH-CWG - Aliphatic >EC21 - EC35 _{EH_CU_1D_AL}	mg/kg	8	NONE	120	< 8.0
TPH-CWG - Aliphatic (EC5 - EC35) _{EH_CU+HS_1D_AL}	mg/kg	10	NONE	140	< 10

TPH-CWG - Aromatic >EC5 - EC7 _{HS_1D_AR}	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC7 - EC8 _{HS_1D_AR}	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC8 - EC10 _{HS_1D_AR}	mg/kg	0.001	NONE	< 0.001	< 0.001
TPH-CWG - Aromatic >EC10 - EC12 _{EH_CU_1D_AR}	mg/kg	1	NONE	< 1.0	< 1.0
TPH-CWG - Aromatic >EC12 - EC16 _{EH_CU_1D_AR}	mg/kg	2	NONE	< 2.0	< 2.0
TPH-CWG - Aromatic >EC16 - EC21 _{EH_CU_1D_AR}	mg/kg	10	NONE	13	< 10
TPH-CWG - Aromatic >EC21 - EC35 _{EH_CU_1D_AR}	mg/kg	10	NONE	150	< 10
TPH-CWG - Aromatic (EC5 - EC35) _{EH_CU+HS_1D_AR}	mg/kg	10	NONE	160	< 10

U/S = Unsuitable Sample I/S = Insufficient Sample ND = Not detected

Analytical Report Number : 23-33286

Project / Site name: Brookthorpe Road, Bury

* 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 *
2676205	BH1	None Supplied	0.25	Brown clay and sand with gravel.
2676206	BH2	None Supplied	0.25	Brown clay and sand with gravel.
2676207	BH3	None Supplied	0.25	Brown clay and sand with gravel.
2676208	BH4	None Supplied	0.25	Brown clay and loam with vegetation.
2676209	BH5	None Supplied	0.25	Brown sand with gravel.
2676210	THA	None Supplied	0.25	Brown loam and sand with gravel and vegetation.
2676211	THB	None Supplied	0.25	Brown loam and clay with vegetation.

Analytical Report Number : 23-33286

Project / Site name: Brookthorpe Road, Bury

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil (16hr extraction)	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	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
Asbestos identification in soil	Asbestos Identification with the use of polarised light microscopy in conjunction with dispersion staining techniques.	In house method based on HSG 248	A001-PL	D	ISO 17025
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
Monohydric phenols in soil	Determination of phenols in soil by extraction with sodium hydroxide followed by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	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	NONE
pH in soil (automated)	Determination of pH in soil by addition of water followed by automated electrometric measurement.	In house method.	L099-PL	D	MCERTS
Sulphide in soil	Determination of sulphide in soil by acidification and heating to liberate hydrogen sulphide, trapped in an alkaline solution then assayed by ion selective electrode.	In-house method	L010-PL	D	NONE
Thiocyanate in soil	Determination of thiocyanate in soil by extraction in water followed by acidification followed by addition of ferric nitrate followed by discrete analyser (spectrophotometer).	In-house method	L082-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
Total cyanide in soil	Determination of total cyanide by distillation followed by colorimetry.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton (Skalar)	L080-PL	W	MCERTS
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
BTEX and MTBE in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	NONE
TPHCWG (Soil)	Determination of hexane extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L088/76-PL	W	NONE
Hexavalent chromium in soil	Determination of hexavalent chromium in soil by extraction in NaOH and addition of 1,5 diphenylcarbazide followed by colorimetry.	In-house method	L080-PL	W	MCERTS
Total Sulphate in soil as %	Determination of total sulphate in soil by extraction with 10% HCl followed by ICP-OES.	In house method.	L038-PL	D	MCERTS

Analytical Report Number : 23-33286

Project / Site name: Brookthorpe Road, Bury

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Sulphate, water soluble, in soil	Determination of water soluble sulphate by ICP-OES. Results reported directly (leachate equivalent) and corrected for extraction ratio (soil equivalent).	In house method.	L038-PL	D	MCERTS

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' 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.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
-	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

- Quality control parameter has a high recovery (outside of limit); however the associated result is below the reporting limit, other checks applied prior to reporting the data have been accepted. The result should be considered as being deviating and may be compromised.

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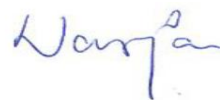
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Analytical Report Number : 23-33289

Project / Site name:	Brookthorpe Road, Bury	Samples received on:	12/05/2023
Your job number:	8 3AD	Samples instructed on/ Analysis started on:	12/05/2023
Your order number:		Analysis completed by:	18/05/2023
Report Issue Number:	1	Report issued on:	18/05/2023
Samples Analysed:	2 10:1 WAC samples		



Signed:

Dominika Warjan
Junior Reporting Specialist
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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Any assessments of compliance with specifications are based on actual analytical results with no contribution from uncertainty of measurement.
Application of uncertainty of measurement would provide a range within which the true result lies.
An estimate of measurement uncertainty can be provided on request.

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Waste Acceptance Criteria Analytical Results

Waste Acceptance Criteria Analytical Results							
Report No:	23-33289						
					Client: WORMSEYE		
Location	Brookthorpe Road, Bury						
Lab Reference (Sample Number)	2676222 / 2676223				Landfill Waste Acceptance Criteria		
					Limits		
Sampling Date	09/05/2023				Inert Waste Landfill	Stable Non- reactive HAZARDOUS waste in non- hazardous Landfill	Hazardous Waste Landfill
Sample ID	BH1						
Depth (m)	0.25						
Solid Waste Analysis							
TOC (%)**	1.0				3%	5%	6%
Loss on Ignition (%) **	3.1				--	--	10%
BTEX (µg/kg)	< 5.0				6000	--	--
Sum of PCBs (mg/kg)	< 0.007				1	--	--
Mineral Oil (mg/kg) EH, ID, CU, AL	87				500	--	--
Total PAH (WAC-17) (mg/kg)	< 0.85				100	--	--
pH (units)**	8.7				--	>6	--
Acid Neutralisation Capacity (mmol / kg)	9.8				--	To be evaluated	To be evaluated
Eluate Analysis							
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	10:1			10:1	Limit values for compliance leaching test		
	mg/l			mg/kg	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
Arsenic *	0.0036			0.0291	0.5	2	25
Barium *	0.0105			0.0855	20	100	300
Cadmium *	< 0.0001			< 0.0008	0.04	1	5
Chromium *	0.0031			0.025	0.5	10	70
Copper *	0.013			0.10	2	50	100
Mercury *	< 0.0005			< 0.0050	0.01	0.2	2
Molybdenum *	0.0011			0.0089	0.5	10	30
Nickel *	< 0.0003			< 0.0030	0.4	10	40
Lead *	0.0019			0.015	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 *	0.0019			0.015	4	50	200
Chloride *	1.8			15	800	15000	25000
Fluoride*	0.16			1.3	10	150	500
Sulphate *	47			380	1000	20000	50000
TDS*	110			880	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	22.5			182	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	1.0						
Dry Matter (%)	84						
Moisture (%)	16						
Results are expressed on a dry weight basis, after correction for moisture content where applicable.					* = UKAS accredited (liquid eluate analysis only)		
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation					** = MCERTS accredited		

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.
This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.

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Waste Acceptance Criteria Analytical Results

Report No:	23-33289						
					Client: WORMSEYE		
Location	Brookthorpe Road, Bury						
Lab Reference (Sample Number)	2676224 / 2676225				Landfill Waste Acceptance Criteria		
					Limits		
Sampling Date	09/05/2023				Inert Waste Landfill	Stable Non-reactive HAZARDOUS waste in non-hazardous Landfill	Hazardous Waste Landfill
Sample ID	BH5						
Depth (m)	0.25						
Solid Waste Analysis							
TOC (%)**	1.7				3%	5%	6%
Loss on Ignition (%) **	3.8				--	--	10%
BTEX (µg/kg)	< 5.0				6000	--	--
Sum of PCBs (mg/kg)	< 0.007				1	--	--
Mineral Oil (mg/kg) EH, ID, CU, AL	15				500	--	--
Total PAH (WAC-17) (mg/kg)	0.87				100	--	--
pH (units)**	6.8				--	>6	--
Acid Neutralisation Capacity (mmol / kg)	-3.2				--	To be evaluated	To be evaluated
Eluate Analysis					Limit values for compliance leaching test		
(BS EN 12457 - 2 preparation utilising end over end leaching procedure)	10:1			10:1	using BS EN 12457-2 at L/S 10 l/kg (mg/kg)		
	mg/l			mg/kg			
Arsenic *	< 0.0010			< 0.0100	0.5	2	25
Barium *	0.0033			0.0280	20	100	300
Cadmium *	< 0.0001			< 0.0008	0.04	1	5
Chromium *	0.0008			0.0066	0.5	10	70
Copper *	0.0024			0.021	2	50	100
Mercury *	< 0.0005			< 0.0050	0.01	0.2	2
Molybdenum *	0.0010			0.0083	0.5	10	30
Nickel *	< 0.0003			< 0.0030	0.4	10	40
Lead *	< 0.0010			< 0.010	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 *	0.0022			0.019	4	50	200
Chloride *	1.2			10	800	15000	25000
Fluoride*	0.099			0.85	10	150	500
Sulphate *	3.7			32	1000	20000	50000
TDS*	20			170	4000	60000	100000
Phenol Index (Monohydric Phenols) *	< 0.010			< 0.10	1	-	-
DOC	14.6			125	500	800	1000
Leach Test Information							
Stone Content (%)	< 0.1						
Sample Mass (kg)	2.0						
Dry Matter (%)	86						
Moisture (%)	14						
Results are expressed on a dry weight basis, after correction for moisture content where applicable.					* = UKAS accredited (liquid eluate analysis only)		
Stated limits are for guidance only and i2 cannot be held responsible for any discrepancies with current legislation					** = MCERTS accredited		

Landfill WAC analysis (specifically leaching test results) must not be used for hazardous waste classification purposes as defined by the Waste (England and Wales) Regulations 2011 (as amended) and EA Guidance WM3.

This analysis is only applicable for landfill acceptance criteria (The Environmental Permitting (England and Wales) Regulations) and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Analytical Report Number : 23-33289

Project / Site name: Brookthorpe Road, Bury

* 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 *
2676222	BH1	None Supplied	0.25	Brown clay and sand with gravel.
2676224	BH5	None Supplied	0.25	Brown sand with gravel.

Analytical Report Number : 23-33289

Project / Site name: Brookthorpe Road, Bury

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
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
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-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.	L047-PL	D	MCERTS
Mineral Oil (Soil) C10 - C40	Determination of mineral oil fraction extractable hydrocarbons in soil by GC-MS/GC-FID.	In-house method with silica gel split/clean up.	L076-PL	D	NONE
Moisture Content	Moisture content, determined gravimetrically. (30 oC)	In house method.	L019-UK/PL	W	NONE
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
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	NONE
pH at 20oC in soil	Determination of pH in soil by addition of water followed by electrometric measurement.	In house method.	L005-PL	W	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
Total organic carbon (Automated) in soil	Determination of organic matter in soil by oxidising with potassium dichromate followed by titration with iron (II) sulphate.	In house method.	L009-PL	D	MCERTS
BTEX in soil (Monoaromatics)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073B-PL	W	NONE
Total BTEX in soil (Poland)	Determination of BTEX in soil by headspace GC-MS. Individual components MCERTS accredited	In-house method based on USEPA8260	L073-PL	W	NONE
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
Chloride 10:1 WAC	Determination of Chloride colorimetrically by discrete analyser.	In house based on MEWAM Method ISBN 0117516260.	L082-PL	W	ISO 17025
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"	L033B-PL	W	ISO 17025
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

Analytical Report Number : 23-33289

Project / Site name: Brookthorpe Road, Bury

Water matrix abbreviations:

Surface Water (SW) Potable Water (PW) Ground Water (GW) Process Waters (PrW) Final Sewage Effluent (FSE) Landfill Leachate (LL)

Analytical Test Name	Analytical Method Description	Analytical Method Reference	Method number	Wet / Dry Analysis	Accreditation Status
Total dissolved solids 10:1 WAC	Determination of total dissolved solids in water by EC probe using a factor of 0.6.	In-house method based on Examination of Water and Wastewater 20th Edition: Clesceri, Greenberg & Eaton	L031	W	ISO 17025
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
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

For method numbers ending in 'UK or A' analysis have been carried out in our laboratory in the United Kingdom (WATFORD).

For method numbers ending in 'F' analysis have been carried out in our laboratory in the United Kingdom (East Kilbride).

For method numbers ending in 'PL or B' 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.

Unless otherwise indicated, site information, order number, project number, sampling date, time, sample reference and depth are provided by the client. The instructed on date indicates the date on which this information was provided to the laboratory.

Information in Support of Analytical Results

List of HWOL Acronyms and Operators

Acronym	Descriptions
HS	Headspace Analysis
MS	Mass spectrometry
FID	Flame Ionisation Detector
GC	Gas Chromatography
EH	Extractable Hydrocarbons (i.e. everything extracted by the solvent(s))
CU	Clean-up - e.g. by Florisil®, silica gel
1D	GC - Single coil/column gas chromatography
2D	GC-GC - Double coil/column gas chromatography
Total	Aliphatics & Aromatics
AL	Aliphatics
AR	Aromatics
#1	EH_2D_Total but with humics mathematically subtracted
#2	EH_2D_Total but with fatty acids mathematically subtracted
-	Operator - understore to separate acronyms (exception for +)
+	Operator to indicate cumulative e.g. EH+HS_Total or EH_CU+HS_Total

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Comparison of Contamination Test Results with Various Thresholds

RESIDENTIAL WITH HOMEGROWN VEGETABLES

Hydrocarbons at 1% SOM

Contaminant	Max Value	Threshold	Pass/Fail	SSAC	Pass/ Fail	Failed Samples
HEAVY METALS						
- Arsenic	30	37*	✓			
- Cadmium	0.7	11*	✓			
- Chromium III	27	910*	✓			
- Chromium VI	<1.8	6*	✓			
- Copper	61	2400*	✓			
- Lead	85	200▲	✓			
- Inorganic Mercury	<0.3	40*	✓			
- Methyl Mercury	<0.3	11*	✓			
- Nickel	41	180*	✓			
- Selenium	<1.0	350#	✓			
- Zinc	100	3700*	✓			
OTHER INORGANICS						
- Asbestos	None detected		✓			
- Cyanide (total)	<1.0	20 (D)	✓			
- pH range	5.9 – 8.2		-			
- Sulphate (g/l)	1.6	0.5 (B)	X			THA – 0.25m
- Sulphide	52	250 (E)	✓			
- Thiocyanate	<5.0		✓			
-TOC range (%)	0.2 – 4.1		-			

All units mg/kg (parts per million/ppm) unless shown otherwise

Metals & inorganic values derived using 6% SOM (soil organic mater)

Sources

- Soil Guideline Values ▲ - C4SL

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(D) – Dutch (B) - BRE – Building Research Establishment (E) - EA Disposal Threshold 2002

® - CLEA 1.06 Software

SSAC – Site Specific Assessment Criteria (derived with CLEA 1.06 software)

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Comparison of Contamination Test Results with Various Thresholds

RESIDENTIAL WITH HOMEGROWN VEGETABLES

Hydrocarbons at 1% SOM

Contaminant	Max Value	Threshold	Pass/Fail	SSAC	Pass/Fail	Failed Samples
PAHs						
- Acenaphthene	0.07	210*	✓			
- Acenaphthylene	<0.05	170*	✓			
- Anthracene	0.07	2400*	✓			
- Benz(a)anthracene	0.36	7.2*	✓			
- Benzo(a)pyrene (BAP)*	0.36	2.2*	✓			
- Benzo(b)fluoranthene	0.41	2.6*	✓			
- Benzo(ghi)perylene	0.24	320*	✓			
- Benzo(k)fluoranthene	0.25	77*	✓			
- Chrysene	0.37	15*	✓			
- Dibenzo(ah)anthracene (DBA)	0.05	0.24*	✓			
- Fluoranthene	0.68	280*	✓			
- Fluorene	0.05	170*	✓			
- Indene (123-cd) pyrene	0.19	27*	✓			
- Naphthalene	0.15	2.3*	✓			
- Phenanthrene	0.45	95*	✓			
- Pyrene	0.69	620*	✓			
OTHER COMPOUNDS						
Phenols	<1.0	280*	✓			

All units mg/kg (parts per million/ppm) unless shown otherwise

Hydrocarbon values derived using 1% SOM

BAP is a marker for genotoxic PAHs

Sources

- Soil Guideline Values ▲ - C4SL

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(D) – Dutch (B) - BRE – Building Research Establishment (E) - EA Disposal Threshold 2002

® - CLEA 1.06 Software

SSAC – Site Specific Assessment Criteria (derived with CLEA 1.06 software)

4 BROOKTHORPE ROAD, BURY, LANCASHIRE, BL8 3AD

Comparison of Contamination Test Results with Various Thresholds

RESIDENTIAL WITH HOMEGROWN VEGETABLES

Hydrocarbons at 1% SOM

Contaminant	Max Value	Threshold	Pass/Fail	SSAC	Pass/Fail	Failed Samples
BTEX COMPOUNDS						
- Benzene	<0.005	0.087*	✓			
- Toluene	<0.005	130*	✓			
- Ethyl-benzene	<0.005	47*	✓			
- Xylene - O	<0.005	60*	✓			
- M/P	<0.005	56*	✓			
TPHs						
Aliphatics						
C ₅ – C ₆	<0.001	42*	✓			
C ₆ – C ₈	<0.001	100*	✓			
C ₈ – C ₁₀	<0.001	27*	✓			
C ₁₀ – C ₁₂	<1.0	130 (48 vap)*	✓			
C ₁₂ – C ₁₆	2.1	1100 (24 sol)*	✓			
C ₁₆ – C ₃₅	134	65000 (8.48 sol)*	✓			
Aromatics						
C ₅ – C ₇	<0.001	70*	✓			
C ₇ – C ₈	<0.001	130*	✓			
C ₈ – C ₁₀	<0.001	34*	✓			
C ₁₀ – C ₁₂	<1.0	74*	✓			
C ₁₂ – C ₁₆	<2.0	140*	✓			
C ₁₆ – C ₂₁	13	260*	✓			
C ₂₁ – C ₃₅	150	1100*	✓			

All units mg/kg (parts per million/ppm) unless shown otherwise

Hydrocarbon values derived using 1% SOM

Vap – vapour saturation limit Soil – solubility saturation limit

Sources

- Soil Guideline Values ▲ - C4SL

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(D) – Dutch (B) - BRE – Building Research Establishment (E) - EA Disposal Threshold 2002

(H) – Hazardous Waste

® - CLEA 1.06 Software

SSAC – Site Specific Assessment Criteria (derived with CLEA 1.06 software)

Waste Classification Report

HazWasteOnline™ classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

- understand the origin of the waste
- select the correct List of Waste code(s)
- confirm that the list of determinands, results and sampling plan are fit for purpose
- select and justify the chosen metal species (Appendix B)
- correctly apply moisture correction and other available corrections
- add the meta data for their user-defined substances (Appendix A)
- check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)



6Z0SO-LK21A-OI13I

To aid the reviewer, the laboratory results, assumptions and justifications managed by the classifier are highlighted in pale yellow.

Job name

4 Brookthorpe Road, Bury, Lancashire, BL8 3AD

Description/Comments

Project

4 Brookthorpe Road, Bury, Lancashire, BL8 3AD

Site

4 Brookthorpe Road, Bury, Lancashire, BL8 3AD

Classified by

Name: Emma Whitaker
Date: 24 May 2023 12:37 GMT
Telephone: 01282 414649
Company: Worms Eye Ltd
1st Floor Block C, The Wharf
Manchester Road
Burnley
BB11 1JG

HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

HazWasteOnline™ Certification:

-

Course

Hazardous Waste Classification

Date

-

Purpose of classification

2 - Material Characterisation

Address of the waste

4 Brookthorpe Road, Bury, Lancashire

Post Code BL8 3AD

SIC for the process giving rise to the waste

Description of industry/producer giving rise to the waste

Redevelopment of site.

Description of the specific process, sub-process and/or activity that created the waste

Excavated soil.

Description of the waste

Excavated soil.

Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	BH1 - 0.25m	0.25	Non Hazardous		3
2	BH2 - 0.25m	0.25	Non Hazardous		6
3	BH3 - 0.25m	0.25	Non Hazardous		9
4	BH4 - 0.25m	0.25	Non Hazardous		12
5	BH5 - 0.25m	0.25	Non Hazardous		15
6	THA - 0.25m	0.25	Non Hazardous		18
7	THB - 0.25m	0.25	Non Hazardous		21

Related documents

#	Name	Description
1	Worms Eye v3	waste stream template used to create this Job

Report

Created by: Emma Whitaker

Created date: 24 May 2023 12:37 GMT

Appendices	Page
Appendix A: Classifier defined and non GB MCL determinands	24
Appendix B: Rationale for selection of metal species	25
Appendix C: Version	25

Classification of sample: BH1 - 0.25m

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

Sample details

Sample name:	LoW Code:	
BH1 - 0.25m	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.25 m		
Moisture content:		
16%		
(no correction)		

Hazard properties

None identified

Determinands

Moisture content: 16% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				6.8 mg/kg	1.32	8.978 mg/kg	0.000898 %		
	033-003-00-0	215-481-4	1327-53-3							
2	cadmium { cadmium sulfide }			1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
	048-010-00-4	215-147-8	1306-23-6							
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				20 mg/kg	1.462	29.231 mg/kg	0.00292 %		
		215-160-9	1308-38-9							
4	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
5	copper { dicopper oxide; copper (I) oxide }				26 mg/kg	1.126	29.273 mg/kg	0.00293 %		
	029-002-00-X	215-270-7	1317-39-1							
6	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
7	lead { lead chromate }			1	17 mg/kg	1.56	26.517 mg/kg	0.0017 %		
	082-004-00-2	231-846-0	7758-97-6							
8	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	nickel { nickel dihydroxide }				18 mg/kg	1.579	28.431 mg/kg	0.00284 %		
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
10	pH				7.6 pH		7.6 pH	7.6 pH		
11	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
12	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
	034-002-00-8									
13	zinc { zinc oxide }				47 mg/kg	1.245	58.502 mg/kg	0.00585 %		
	030-013-00-7	215-222-5	1314-13-2							

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number							
14	benzene	601-020-00-8	200-753-7	71-43-2		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
15	toluene	601-021-00-3	203-625-9	108-88-3		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
16	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
17	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
18	TPH (C6 to C40) petroleum group					77 mg/kg		77 mg/kg	0.0077 %		
19	acenaphthene		201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
20	acenaphthylene		205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
21	anthracene		204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
22	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
23	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
24	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
25	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
26	benzo[ghi]perylene		205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
27	chrysene	601-048-00-0	205-923-4	218-01-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
28	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
29	fluoranthene		205-912-4	206-44-0		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
30	fluorene		201-695-5	86-73-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
31	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
32	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
33	phenanthrene		201-581-5	85-01-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
34	pyrene		204-927-3	129-00-0		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
35	asbestos	650-013-00-6	- - - - -	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
Total:									0.0258 %		

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 Determinand - 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): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Low level, below threshold.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0077%)

Classification of sample: BH2 - 0.25m

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

Sample details

Sample name:	LoW Code:
BH2 - 0.25m	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.25 m	
Moisture content:	
6%	
(no correction)	

Hazard properties

None identified

Determinands

Moisture content: 6% No Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number								
1		arsenic { arsenic trioxide }				7.6	mg/kg	1.32	10.034	mg/kg	0.001 %	
		033-003-00-0	215-481-4	1327-53-3								
2		cadmium { cadmium sulfide }			1	0.3	mg/kg	1.285	0.386	mg/kg	0.00003 %	
		048-010-00-4	215-147-8	1306-23-6								
3		chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				27	mg/kg	1.462	39.462	mg/kg	0.00395 %	
			215-160-9	1308-38-9								
4		chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.8	mg/kg	1.923	<3.462	mg/kg	<0.000346 %	<LOD
		024-001-00-0	215-607-8	1333-82-0								
5		copper { dicopper oxide ; copper (I) oxide }				30	mg/kg	1.126	33.777	mg/kg	0.00338 %	
		029-002-00-X	215-270-7	1317-39-1								
6		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %	<LOD
		006-007-00-5										
7		lead { lead chromate }			1	26	mg/kg	1.56	40.555	mg/kg	0.0026 %	
		082-004-00-2	231-846-0	7758-97-6								
8		mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %	<LOD
		080-010-00-X	231-299-8	7487-94-7								
9		nickel { nickel dihydroxide }				41	mg/kg	1.579	64.759	mg/kg	0.00648 %	
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
10		pH		PH		8.2	pH		8.2	pH	8.2 pH	
11		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %	<LOD
		604-001-00-2	203-632-7	108-95-2								
12		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %	<LOD
		034-002-00-8										
13		zinc { zinc oxide }				96	mg/kg	1.245	119.493	mg/kg	0.0119 %	
		030-013-00-7	215-222-5	1314-13-2								

WORMS EYE

LIMITED

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
14	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
15	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
16	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
17	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
18	TPH (C6 to C40) petroleum group				<20 mg/kg		<20 mg/kg	<0.002 %		<LOD
			TPH							
19	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
20	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8							
21	anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-371-1	120-12-7							
22	benzo[a]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
23	benzo[a]pyrene; benzo[def]chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
24	benzo[b]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
25	benzo[k]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
26	benzo[ghi]perylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-883-8	191-24-2							
27	chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
28	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
29	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
30	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
31	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
32	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
33	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
34	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
35	asbestos				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	650-013-00-6	-----	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5							
Total:								0.0323 %		

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 Determinand - 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: BH3 - 0.25m

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

Sample details

Sample name:	LoW Code:
BH3 - 0.25m	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.25 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
21%	
(no correction)	

Hazard properties

None identified

Determinands

Moisture content: 21% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
1	 arsenic { arsenic trioxide }				18 mg/kg	1.32	23.766 mg/kg	0.00238 %			
	033-003-00-0	215-481-4	1327-53-3								
2	 cadmium { cadmium sulfide }			1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %			<LOD
	048-010-00-4	215-147-8	1306-23-6								
3	 chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				19 mg/kg	1.462	27.77 mg/kg	0.00278 %			
		215-160-9	1308-38-9								
4	 chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %			<LOD
	024-001-00-0	215-607-8	1333-82-0								
5	 copper { dicopper oxide; copper (I) oxide }				28 mg/kg	1.126	31.525 mg/kg	0.00315 %			
	029-002-00-X	215-270-7	1317-39-1								
6	 cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
	006-007-00-5										
7	 lead { lead chromate }			1	56 mg/kg	1.56	87.35 mg/kg	0.0056 %			
	082-004-00-2	231-846-0	7758-97-6								
8	 mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
	080-010-00-X	231-299-8	7487-94-7								
9	 nickel { nickel dihydroxide }				14 mg/kg	1.579	22.113 mg/kg	0.00221 %			
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
10	 pH				6.3 pH		6.3 pH	6.3 pH			
11	 phenol				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	604-001-00-2	203-632-7	108-95-2								
12	 selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %			<LOD
	034-002-00-8										
13	 zinc { zinc oxide }				54 mg/kg	1.245	67.215 mg/kg	0.00672 %			
	030-013-00-7	215-222-5	1314-13-2								

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number							
14		benzene 601-020-00-8	200-753-7	71-43-2		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
15		toluene 601-021-00-3	203-625-9	108-88-3		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
16	■	ethylbenzene 601-023-00-4	202-849-4	100-41-4		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
17		xylene 601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
18	■	TPH (C6 to C40) petroleum group				<20 mg/kg		<20 mg/kg	<0.002 %		<LOD
				TPH							
19	■	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
			201-469-6	83-32-9							
20	■	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
			205-917-1	208-96-8							
21	■	anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
			204-371-1	120-12-7							
22		benzo[a]anthracene 601-033-00-9	200-280-6	56-55-3		0.08 mg/kg		0.08 mg/kg	0.000008 %		
23		benzo[a]pyrene; benzo[def]chrysene 601-032-00-3	200-028-5	50-32-8		0.08 mg/kg		0.08 mg/kg	0.000008 %		
24		benzo[b]fluoranthene 601-034-00-4	205-911-9	205-99-2		0.12 mg/kg		0.12 mg/kg	0.000012 %		
25		benzo[k]fluoranthene 601-036-00-5	205-916-6	207-08-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
26	■	benzo[ghi]perylene				0.06 mg/kg		0.06 mg/kg	0.000006 %		
			205-883-8	191-24-2							
27		chrysene 601-048-00-0	205-923-4	218-01-9		0.1 mg/kg		0.1 mg/kg	0.00001 %		
28		dibenz[a,h]anthracene 601-041-00-2	200-181-8	53-70-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
29	■	fluoranthene				0.18 mg/kg		0.18 mg/kg	0.000018 %		
			205-912-4	206-44-0							
30	■	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
			201-695-5	86-73-7							
31	■	indeno[123-cd]pyrene				0.06 mg/kg		0.06 mg/kg	0.000006 %		
			205-893-2	193-39-5							
32		naphthalene 601-052-00-2	202-049-5	91-20-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
33	■	phenanthrene				0.11 mg/kg		0.11 mg/kg	0.000011 %		
			201-581-5	85-01-8							
34	■	pyrene				0.16 mg/kg		0.16 mg/kg	0.000016 %		
			204-927-3	129-00-0							
35		asbestos 650-013-00-6	- - - - -	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
Total:									0.0258 %		

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 Determinand - 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: BH4 - 0.25m

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

Sample details

Sample name:	LoW Code:
BH4 - 0.25m	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.25 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
19%	
(no correction)	

Hazard properties

None identified

Determinands

Moisture content: **19% No Moisture Correction applied (MC)**

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number								
1		arsenic { arsenic trioxide }			1	22 mg/kg	1.32	29.047 mg/kg	0.0029 %			
		033-003-00-0	215-481-4	1327-53-3								
2		cadmium { cadmium sulfide }			1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD	
		048-010-00-4	215-147-8	1306-23-6								
3		chromium in chromium(III) compounds {  chromium(III) oxide (worst case) }				17 mg/kg	1.462	24.846 mg/kg	0.00248 %			
			215-160-9	1308-38-9								
4		chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %		<LOD	
		024-001-00-0	215-607-8	1333-82-0								
5		copper { dicopper oxide ; copper (I) oxide }				45 mg/kg	1.126	50.665 mg/kg	0.00507 %			
		029-002-00-X	215-270-7	1317-39-1								
6		cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD	
		006-007-00-5										
7		lead { lead chromate }			1	75 mg/kg	1.56	116.986 mg/kg	0.0075 %			
		082-004-00-2	231-846-0	7758-97-6								
8		mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD	
		080-010-00-X	231-299-8	7487-94-7								
9		nickel { nickel dihydroxide }				18 mg/kg	1.579	28.431 mg/kg	0.00284 %			
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
10		pH				6.5 pH		6.5 pH	6.5 pH			
				PH								
11		phenol				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD	
		604-001-00-2	203-632-7	108-95-2								
12		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD	
		034-002-00-8										
13		zinc { zinc oxide }				85 mg/kg	1.245	105.801 mg/kg	0.0106 %			
		030-013-00-7	215-222-5	1314-13-2								

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
14	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
15	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
16	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
17	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
18	TPH (C6 to C40) petroleum group				<20 mg/kg		<20 mg/kg	<0.002 %		<LOD
			TPH							
19	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
20	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8							
21	anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-371-1	120-12-7							
22	benzo[a]anthracene				0.16 mg/kg		0.16 mg/kg	0.000016 %		
	601-033-00-9	200-280-6	56-55-3							
23	benzo[a]pyrene; benzo[def]chrysene				0.17 mg/kg		0.17 mg/kg	0.000017 %		
	601-032-00-3	200-028-5	50-32-8							
24	benzo[b]fluoranthene				0.25 mg/kg		0.25 mg/kg	0.000025 %		
	601-034-00-4	205-911-9	205-99-2							
25	benzo[k]fluoranthene				0.1 mg/kg		0.1 mg/kg	0.00001 %		
	601-036-00-5	205-916-6	207-08-9							
26	benzo[ghi]perylene				0.13 mg/kg		0.13 mg/kg	0.000013 %		
		205-883-8	191-24-2							
27	chrysene				0.2 mg/kg		0.2 mg/kg	0.00002 %		
	601-048-00-0	205-923-4	218-01-9							
28	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
29	fluoranthene				0.35 mg/kg		0.35 mg/kg	0.000035 %		
		205-912-4	206-44-0							
30	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
31	indeno[123-cd]pyrene				0.12 mg/kg		0.12 mg/kg	0.000012 %		
		205-893-2	193-39-5							
32	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
33	phenanthrene				0.19 mg/kg		0.19 mg/kg	0.000019 %		
		201-581-5	85-01-8							
34	pyrene				0.34 mg/kg		0.34 mg/kg	0.000034 %		
		204-927-3	129-00-0							
35	asbestos				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	650-013-00-6	-----	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5							
Total:								0.0344 %		

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 Determinand - 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: BH5 - 0.25m

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

Sample details

Sample name:	LoW Code:	
BH5 - 0.25m	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.25 m		
Moisture content:		
14%		
(no correction)		

Hazard properties

None identified

Determinands

Moisture content: 14% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
1	arsenic { arsenic trioxide }				9.9 mg/kg	1.32	13.071 mg/kg	0.00131 %			
	033-003-00-0	215-481-4	1327-53-3								
2	cadmium { cadmium sulfide }			1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %			<LOD
	048-010-00-4	215-147-8	1306-23-6								
3	chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				12 mg/kg	1.462	17.539 mg/kg	0.00175 %			
		215-160-9	1308-38-9								
4	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %			<LOD
	024-001-00-0	215-607-8	1333-82-0								
5	copper { dicopper oxide; copper (I) oxide }				30 mg/kg	1.126	33.777 mg/kg	0.00338 %			
	029-002-00-X	215-270-7	1317-39-1								
6	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
	006-007-00-5										
7	lead { lead chromate }			1	36 mg/kg	1.56	56.153 mg/kg	0.0036 %			
	082-004-00-2	231-846-0	7758-97-6								
8	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
	080-010-00-X	231-299-8	7487-94-7								
9	nickel { nickel dihydroxide }				14 mg/kg	1.579	22.113 mg/kg	0.00221 %			
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
10	pH				7 pH		7 pH	7pH			
11	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	604-001-00-2	203-632-7	108-95-2								
12	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %			<LOD
	034-002-00-8										
13	zinc { zinc oxide }				52 mg/kg	1.245	64.725 mg/kg	0.00647 %			
	030-013-00-7	215-222-5	1314-13-2								

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number								
14	benzene	601-020-00-8	200-753-7	71-43-2		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD	
15	toluene	601-021-00-3	203-625-9	108-88-3		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD	
16	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD	
17	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD	
18	TPH (C6 to C40) petroleum group					<20 mg/kg		<20 mg/kg	<0.002 %		<LOD	
19	acenaphthene		201-469-6	83-32-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
20	acenaphthylene		205-917-1	208-96-8		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
21	anthracene		204-371-1	120-12-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
22	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.09 mg/kg		0.09 mg/kg	0.000009 %			
23	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		0.08 mg/kg		0.08 mg/kg	0.000008 %			
24	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		0.14 mg/kg		0.14 mg/kg	0.000014 %			
25	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
26	benzo[ghi]perylene		205-883-8	191-24-2		0.06 mg/kg		0.06 mg/kg	0.000006 %			
27	chrysene	601-048-00-0	205-923-4	218-01-9		0.09 mg/kg		0.09 mg/kg	0.000009 %			
28	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
29	fluoranthene		205-912-4	206-44-0		0.15 mg/kg		0.15 mg/kg	0.000015 %			
30	fluorene		201-695-5	86-73-7		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
31	indeno[123-cd]pyrene		205-893-2	193-39-5		0.05 mg/kg		0.05 mg/kg	0.000005 %			
32	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
33	phenanthrene		201-581-5	85-01-8		0.07 mg/kg		0.07 mg/kg	0.000007 %			
34	pyrene		204-927-3	129-00-0		0.16 mg/kg		0.16 mg/kg	0.000016 %			
35	asbestos	650-013-00-6	- - - - -	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD	
Total:									0.0217 %			

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 Determinand - 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: THA - 0.25m

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

Sample details

Sample name:	LoW Code:
THA - 0.25m	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.25 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
18%	
(no correction)	

Hazard properties

None identified

Determinands

Moisture content: **18% No Moisture Correction applied (MC)**

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
1	 arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	1	16 mg/kg	1.32	21.125 mg/kg	0.00211 %		
2	 cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6							
3	 chromium in chromium(III) compounds { chromium(III) oxide (worst case) }	215-160-9	1308-38-9		1	17 mg/kg	1.462	24.846 mg/kg	0.00248 %		
4	 chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0							
5	 copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		61 mg/kg	1.126	68.679 mg/kg	0.00687 %		
6	 cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
7	 lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	78 mg/kg	1.56	121.666 mg/kg	0.0078 %		
8	 mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
9	 nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]		18 mg/kg	1.579	28.431 mg/kg	0.00284 %		
10	 pH		PH			7.4 pH		7.4 pH	7.4 pH		
11	 phenol	604-001-00-2	203-632-7	108-95-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
12	 selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %		<LOD
13	 zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		90 mg/kg	1.245	112.024 mg/kg	0.0112 %		

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number							
14	benzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
15	toluene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
16	ethylbenzene				<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
17	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
18	TPH (C6 to C40) petroleum group				300 mg/kg		300 mg/kg	0.03 %		
			TPH							
19	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
20	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8							
21	anthracene				0.07 mg/kg		0.07 mg/kg	0.000007 %		
		204-371-1	120-12-7							
22	benzo[a]anthracene				0.34 mg/kg		0.34 mg/kg	0.000034 %		
	601-033-00-9	200-280-6	56-55-3							
23	benzo[a]pyrene; benzo[def]chrysene				0.36 mg/kg		0.36 mg/kg	0.000036 %		
	601-032-00-3	200-028-5	50-32-8							
24	benzo[b]fluoranthene				0.41 mg/kg		0.41 mg/kg	0.000041 %		
	601-034-00-4	205-911-9	205-99-2							
25	benzo[k]fluoranthene				0.2 mg/kg		0.2 mg/kg	0.00002 %		
	601-036-00-5	205-916-6	207-08-9							
26	benzo[ghi]perylene				0.19 mg/kg		0.19 mg/kg	0.000019 %		
		205-883-8	191-24-2							
27	chrysene				0.34 mg/kg		0.34 mg/kg	0.000034 %		
	601-048-00-0	205-923-4	218-01-9							
28	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
29	fluoranthene				0.64 mg/kg		0.64 mg/kg	0.000064 %		
		205-912-4	206-44-0							
30	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
31	indeno[123-cd]pyrene				0.16 mg/kg		0.16 mg/kg	0.000016 %		
		205-893-2	193-39-5							
32	naphthalene				0.15 mg/kg		0.15 mg/kg	0.000015 %		
	601-052-00-2	202-049-5	91-20-3							
33	phenanthrene				0.36 mg/kg		0.36 mg/kg	0.000036 %		
		201-581-5	85-01-8							
34	pyrene				0.69 mg/kg		0.69 mg/kg	0.000069 %		
		204-927-3	129-00-0							
35	asbestos				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
	650-013-00-6	-----	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5							
Total:								0.0646 %		

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 Determinand - 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): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Low level, below threshold.

Hazard Statements hit:

Flam. Liq. 3; H226 "Flammable liquid and vapour."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.03%)

Classification of sample: THB - 0.25m

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

Sample details

Sample name:	LoW Code:
THB - 0.25m	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.25 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
18%	
(no correction)	

Hazard properties

None identified

Determinands

Moisture content: 18% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number								
1	 arsenic { arsenic trioxide }				30 mg/kg	1.32	39.61 mg/kg	0.00396 %			
	033-003-00-0	215-481-4	1327-53-3								
2	 cadmium { cadmium sulfide }			1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %			<LOD
	048-010-00-4	215-147-8	1306-23-6								
3	 chromium in chromium(III) compounds { chromium(III) oxide (worst case) }				16 mg/kg	1.462	23.385 mg/kg	0.00234 %			
		215-160-9	1308-38-9								
4	 chromium in chromium(VI) compounds { chromium(VI) oxide }				<1.8 mg/kg	1.923	<3.462 mg/kg	<0.000346 %			<LOD
	024-001-00-0	215-607-8	1333-82-0								
5	 copper { dicopper oxide; copper (I) oxide }				45 mg/kg	1.126	50.665 mg/kg	0.00507 %			
	029-002-00-X	215-270-7	1317-39-1								
6	 cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
	006-007-00-5										
7	 lead { lead chromate }			1	85 mg/kg	1.56	132.584 mg/kg	0.0085 %			
	082-004-00-2	231-846-0	7758-97-6								
8	 mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
	080-010-00-X	231-299-8	7487-94-7								
9	 nickel { nickel dihydroxide }				18 mg/kg	1.579	28.431 mg/kg	0.00284 %			
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
10	 pH				5.9 pH		5.9 pH	5.9 pH			
11	 phenol				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	604-001-00-2	203-632-7	108-95-2								
12	 selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				<1 mg/kg	1.405	<1.405 mg/kg	<0.000141 %			<LOD
	034-002-00-8										
13	 zinc { zinc oxide }				100 mg/kg	1.245	124.471 mg/kg	0.0124 %			
	030-013-00-7	215-222-5	1314-13-2								

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number							
14		benzene 601-020-00-8	200-753-7	71-43-2		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
15		toluene 601-021-00-3	203-625-9	108-88-3		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
16	■	ethylbenzene 601-023-00-4	202-849-4	100-41-4		<0.005 mg/kg		<0.005 mg/kg	<0.0000005 %		<LOD
17		xylene 601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
18	■	TPH (C6 to C40) petroleum group				<20 mg/kg		<20 mg/kg	<0.002 %		<LOD
				TPH							
19	■	acenaphthene				0.07 mg/kg		0.07 mg/kg	0.000007 %		
			201-469-6	83-32-9							
20	■	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
			205-917-1	208-96-8							
21	■	anthracene				0.07 mg/kg		0.07 mg/kg	0.000007 %		
			204-371-1	120-12-7							
22		benzo[a]anthracene				0.36 mg/kg		0.36 mg/kg	0.000036 %		
		601-033-00-9	200-280-6	56-55-3							
23		benzo[a]pyrene; benzo[def]chrysene				0.34 mg/kg		0.34 mg/kg	0.000034 %		
		601-032-00-3	200-028-5	50-32-8							
24		benzo[b]fluoranthene				0.35 mg/kg		0.35 mg/kg	0.000035 %		
		601-034-00-4	205-911-9	205-99-2							
25		benzo[k]fluoranthene				0.25 mg/kg		0.25 mg/kg	0.000025 %		
		601-036-00-5	205-916-6	207-08-9							
26	■	benzo[ghi]perylene				0.24 mg/kg		0.24 mg/kg	0.000024 %		
			205-883-8	191-24-2							
27		chrysene				0.37 mg/kg		0.37 mg/kg	0.000037 %		
		601-048-00-0	205-923-4	218-01-9							
28		dibenz[a,h]anthracene				0.05 mg/kg		0.05 mg/kg	0.000005 %		
		601-041-00-2	200-181-8	53-70-3							
29	■	fluoranthene				0.68 mg/kg		0.68 mg/kg	0.000068 %		
			205-912-4	206-44-0							
30	■	fluorene				0.05 mg/kg		0.05 mg/kg	0.000005 %		
			201-695-5	86-73-7							
31	■	indeno[123-cd]pyrene				0.19 mg/kg		0.19 mg/kg	0.000019 %		
			205-893-2	193-39-5							
32		naphthalene				0.05 mg/kg		0.05 mg/kg	0.000005 %		
		601-052-00-2	202-049-5	91-20-3							
33	■	phenanthrene				0.45 mg/kg		0.45 mg/kg	0.000045 %		
			201-581-5	85-01-8							
34	■	pyrene				0.66 mg/kg		0.66 mg/kg	0.000066 %		
			204-927-3	129-00-0							
35		asbestos 650-013-00-6				<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		<LOD
			-----	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5							
Total:									0.0384 %		

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 Determinand - 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 GB MCL determinands

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

Description/Comments: Data from C&L Inventory Database

Data source: <https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/33806>

Data source date: 17 Jul 2015

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

■ **salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex**

GB MCL index number: 006-007-00-5

Description/Comments: Conversion factor based on a worst case compound: sodium cyanide

Additional Hazard Statement(s): EUH032 >= 0.2 %

Reason for additional Hazards Statement(s):

20 Nov 2021 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

■ **pH** (CAS Number: PH)

Description/Comments: Appendix C4

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

Hazard Statements: None.

■ **ethylbenzene** (EC Number: 202-849-4, CAS Number: 100-41-4)

GB MCL index number: 601-023-00-4

Description/Comments:

Additional Hazard Statement(s): Carc. 2; H351

Reason for additional Hazards Statement(s):

20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2B (77) 2000

■ **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 May 2015

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

■ **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 Jul 2015

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

■ **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 Jul 2015

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

■ **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 Jul 2015

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

■ **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 Jul 2015

Hazard Statements: 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 Aug 2015

Hazard Statements: Acute Tox. 4; H302 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

▪ **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 Aug 2015
Hazard Statements: 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 Aug 2015
Hazard Statements: Carc. 2; H351

▪ **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 Aug 2015
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

▪ **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 Aug 2015
Hazard Statements: Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

Appendix B: Rationale for selection of metal species

arsenic {arsenic trioxide}

Worst case species based on hazard statements

cadmium {cadmium sulfide}

Worst case species based on hazard statements

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

Worst case species based on hazard statements

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

Worst case species based on hazard statements

copper {dicopper oxide; copper (I) oxide}

Most likely common species

cyanides {salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex}

Worst case species

lead {lead chromate}

Worst case species based on hazard statements

mercury {mercury dichloride}

Worst case species based on hazard statements

nickel {nickel dihydroxide}

Worst case species based on hazard statements

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

Worst case species based on hazard statements

zinc {zinc oxide}

Suspected

Appendix C: Version

HazWasteOnline Classification Engine: **WM3 1st Edition v1.2.GB - Oct 2021**
HazWasteOnline Classification Engine Version: 2023.111.5569.10274 (22 Apr 2023)
HazWasteOnline Database: 2023.111.5569.10274 (22 Apr 2023)

This classification utilises the following guidance and legislation:

WM3 v1.2.GB - Waste Classification - 1st Edition v1.2.GB - Oct 2021

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 Waste 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

10th ATP - Regulation (EU) 2017/776 of 4 May 2017

HP14 amendment - Regulation (EU) 2017/997 of 8 June 2017

13th ATP - Regulation (EU) 2018/1480 of 4 October 2018

14th ATP - Regulation (EU) 2020/217 of 4 October 2019

15th ATP - Regulation (EU) 2020/1182 of 19 May 2020

The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit)

Regulations 2020 - UK: 2020 No. 1567 of 16th December 2020

The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020 - UK:

2020 No. 1540 of 16th December 2020

GB MCL List - version 1.1 of 09 June 2021