Intermodal Logistics Park North Ltd

INTERMODAL LOGISTICS PARK NORTH (ILPN)

Intermodal Logistics Park North (ILPN) Strategic Rail Freight Interchange (SRFI)

Project reference TR510001

Preliminary Environmental Information Report (PEIR)

Appendix 15.3: Ground Investigation Report (Land West of Parkside Road) (Part 02 of 02)

October 2025

Planning Act 2008

The Infrastructure Planning (Environmental Impact Assessment) Regulations 2017

This document forms a part of a Preliminary Environmental Information Report (PEIR) for the Intermodal Logistics Park North (ILPN) project.

A PEIR presents environmental information to assist consultees to form an informed view of the likely significant environmental effects of a proposed development and provide feedback.

This PEIR has been prepared by the project promoter, Intermodal Logistics Park North Ltd. The Proposed Development is described in Chapter 3 of the PEIR and is the subject of a public consultation.

Details of how to respond to the public consultation are provided at the end of Chapter 1 of the PEIR and on the project website:

https://www.tritaxbigbox.co.uk/our-spaces/intermodal-logistics-park-north/

This feedback will be taken into account by Intermodal Logistics Park North Ltd in the preparation of its application for a Development Consent Order for the project.

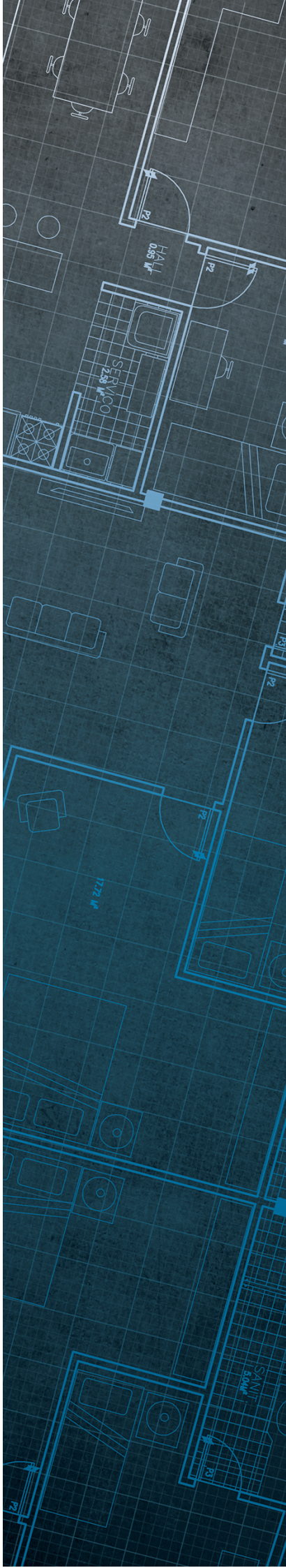
The Coal Authority

Consultants

Coal Mining Report

House Of Glam, The Annexe
Parkside Farm Farmhouse
Parkside Road
Newton Le Willows
Cheshire
WA2 8ST

Date of enquiry:	**31 May 2023**
Date enquiry received:	**31 May 2023**
Issue date:	**31 May 2023**
Our reference:	**51003358259001**
Your reference:	**312066916_1**



Consultants
Coal Mining Report

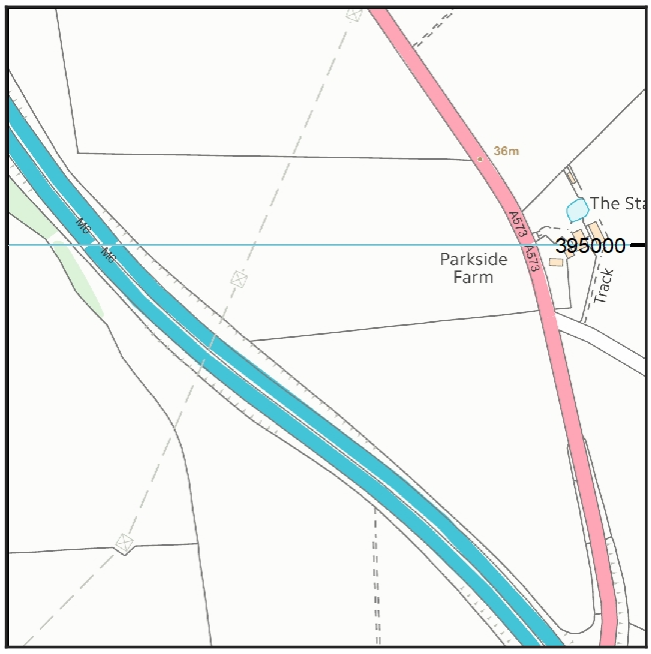
This report is based on and limited to the records held by the Coal Authority at the time the report was produced.

Client name

NLIS Hub

Enquiry address

House Of Glam, The Annexe
Parkside Farm Farmhouse
Parkside Road
Newton Le Willows
Cheshire
WA2 8ST



Approximate position of property

How to contact us

0345 762 6848 (UK)
+44 (0)1623 637 000 (International)

200 Lichfield Lane
Mansfield
Nottinghamshire
NG18 4RG

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/company/the-coal-authority
/thecoalauthority
/thecoalauthority

Section 1 – Mining activity and geology

Past underground mining

Colliery	Seam	Mineral	Coal Authority reference	Depth (m)	Direction to working	Dipping rate of seam worked (degrees)	Dipped direction of seam worked	Extraction thickness (cm)	Year last mined
BICKERSHAW	CROMBOUKE	Coal	A2	442	North-East	13.5	East	130	1966
PARKSIDE	CROMBOUKE	Coal	A1	464	North-East	14.0	East	130	1967
PARKSIDE	CROMBOUKE	Coal	B1	471	South-West	13.0	South-East	140	1965
BICKERSHAW	CROMBOUKE	Coal	F1	479	North-East	14.1	East	130	1964
PARKSIDE	CROMBOUKE	Coal	F6	529	North-East	14.0	East	130	1965
PARKSIDE	LOWER FLORIDA	Coal	L23	572	South-West	12.6	East	170	1973
BICKERSHAW	LOWER FLORIDA	Coal	L41	607	North-East	16.6	East	170	1971
PARKSIDE	LOWER FLORIDA	Coal	L21	636	South-West	12.3	South-East	170	1970
PARKSIDE	LOWER FLORIDA	Coal	L22	649	South-West	12.6	East	170	1970
PARKSIDE	LOWER FLORIDA	Coal	L40	667	East	13.0	East	170	1971
unnamed	WIGAN FOUR FEET	Coal	W24	678	South-West	11.8	South-East	170	1977
PARKSIDE	TRENCHERBONE	Coal	T24	683	South-West	12.0	South-East	160	1980
PARKSIDE	LOWER FLORIDA	Coal	L24	683	South-West	15.2	East	170	1971
unnamed	WIGAN FIVE FEET	Coal	V24	750	South-West	13.4	South-East	160	1986
unnamed	WIGAN FOUR FEET	Coal	W25	762	South-West	11.8	South-East	160	1978
PARKSIDE	TRENCHERBONE	Coal	T25	768	South-West	12.0	South-East	160	1981

Probable unrecorded shallow workings

None.

Spine roadways at shallow depth

No spine roadway recorded at shallow depth.

Mine entries

None recorded within 100 metres of the enquiry boundary.

Abandoned mine plan catalogue numbers

The following abandoned mine plan catalogue numbers intersect with some, or all, of the enquiry boundary:

NW773	NW760	16334
NW659	16368	NW681
NW745	NW1541	

Please contact us on 0345 762 6848 to determine the exact abandoned mine plans you require based on your needs.

Outcrops

No outcrops recorded.

Geological faults, fissures and breaklines

No faults, fissures or breaklines recorded.

Opencast mines

None recorded within 500 metres of the enquiry boundary.

Coal Authority managed tips

None recorded within 500 metres of the enquiry boundary.

Section 2 – Investigative or remedial activity

Please refer to the 'Summary of findings' map (on separate sheet) for details of any activity within the area of the site boundary.

Site investigations

None recorded within 50 metres of the enquiry boundary.

Remediated sites

None recorded within 50 metres of the enquiry boundary.

Coal mining subsidence

The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50 metres of the enquiry boundary, since 31 October 1994.

There is no current Stop Notice delaying the start of remedial works or repairs to the property.

The Coal Authority is not aware of any request having been made to carry out preventive works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.

Mine gas

Distance to gas incident/remediation (m)	Direction
493.8	South-West
445.7	South-West

See Section 4 for further information.

Mine water treatment schemes

None recorded within 500 metres of the enquiry boundary.

Section 3 – Licensing and future mining activity

Future underground mining
None recorded.

Coal mining licensing
None recorded within 200 metres of the enquiry boundary.

Court orders
None recorded.

Section 46 notices
No notices have been given, under section 46 of the Coal Mining Subsidence Act 1991, stating that the land is at risk of subsidence.

Withdrawal of support notices
The property is in an area where a notice to withdraw support was given in 1976.

The property is not in an area where a notice has been given under section 41 of the Coal Industry Act 1994, cancelling the entitlement to withdraw support.

Payments to owners of former copyhold land
The property is not in an area where a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

Section 4 – Further information

The following potential risks have been identified and as part of your risk assessment should be investigated further.

Future development

If development proposals are being considered, technical advice relating to both the investigation of coal and former coal mines and their treatment should be obtained before beginning work on site. All proposals should apply specialist engineering practice required for former mining areas. No development should be undertaken that intersects, disturbs or interferes with any coal or coal mines without first obtaining the permission of the Coal Authority.

MINE GAS: Please note, if there are no recorded instances of mine gas within 500m of the enquiry boundary, this does not mean that mine gas is not present within the vicinity. The Coal Authority Mine Gas data is limited to only those sites where a Mine Gas incident has been recorded. Developers should be aware that the investigation of coal seams, mine workings or mine entries may have the potential to generate and/or displace underground gases. Associated risks both to the development site and any neighbouring land or properties should be fully considered when undertaking any ground works. The need for effective measures to prevent gases migrating onto any land or into any properties, either during investigation or remediation work, or after development must also be assessed and properly addressed. In these instances, the Coal Authority recommends that a more detailed Gas Risk Assessment is undertaken by a competent assessor.

Development advice

The site is within an area of historical coal mining activity. Should you require advice and/or support on understanding the mining legacy, its risks to your development or what next steps you need to take, please contact us.

Mine gas remedial works

The site is within an area of previous interest. It is close to where the Coal Authority has investigated and subsequently remediated the effects of mine or ground gas emissions following specific reported hazards.

The site requires further investigation and may influence your risk assessment. We recommend that you order the **Coal Authority Mine Gas Emission Report**, which will include more information about the hazard.

For further information on specific site or ground investigations in relation to any issues raised in Section 4, please call us on 0345 762 6848 or email us at groundstability@coal.gov.uk.

Section 5 – Data definitions

The datasets used in this report have limitations and assumptions within their results. For more guidance on the data and the results specific to the enquiry boundary, please **call us on 0345 762 6848** or **email us at groundstability@coal.gov.uk.**

Past underground coal mining

Details of all recorded underground mining relative to the enquiry boundary. Only past underground workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination, will be included.

Probable unrecorded shallow workings

Areas where the Coal Authority believes there to be unrecorded coal workings that exist at or close to the surface (less than 30 metres deep).

Spine roadways at shallow depth

Connecting roadways either, working to working, or, surface to working, both in-seam and cross measures that exist at or close to the surface (less than 30 metres deep), either within or within 10 metres of the enquiry boundary.

Mine entries

Details of any shaft or adit either within, or within 100 metres of the enquiry boundary including approximate location, brief treatment details where known, the mineral worked from the mine entry and conveyance details where the mine entry has previously been sold by the Authority or its predecessors British Coal or the National Coal Board.

Abandoned mine plan catalogue numbers

Plan numbers extracted from the abandoned mines catalogue containing details of coal and other mineral abandonment plans deposited via the Mines Inspectorate in accordance with the Coal Mines Regulation Act and Metalliferous Mines Regulation Act 1872. A maximum of 9 plan extents that intersect with the enquiry boundary will be included. This does not infer that the workings and/or mine entries shown on the abandonment plan will be relevant to the site/property boundary.

Outcrops

Details of seam outcrops will be included where the enquiry boundary intersects with a conjectured or actual seam outcrop location (derived by either the British Geological Survey or the Coal Authority) or intersects with a defined 50 metres buffer on the coal (dip) side of the outcrop. An indication of whether the Coal Authority believes the seam to be of sufficient thickness and/or quality to have been worked will also be included.

Geological faults, fissures and breaklines

Geological disturbances or fractures in the bedrock. Surface fault lines (British Geological Survey derived data) and fissures and breaklines (Coal Authority derived data) intersecting with the enquiry boundary will be included. In some circumstances faults, fissures or breaklines have been known to contribute to surface subsidence damage as a consequence of underground coal mining.

Opencast mines
Opencast coal sites from which coal has been removed in the past by opencast (surface) methods and where the enquiry boundary is within 500 metres of either the licence area, site boundary, excavation area (high wall) or coaling area.

Coal Authority managed tips
Locations of disused colliery tip sites owned and managed by the Coal Authority, located within 500 metres of the enquiry boundary.

Site investigations
Details of site investigations within 50 metres of the enquiry boundary where the Coal Authority has received information relating to coal mining risk investigation and/or remediation by third parties.

Remediated sites
Sites where the Coal Authority has undertaken remedial works either within or within 50 metres of the enquiry boundary following report of a hazard relating to coal mining under the Coal Authority's Emergency Surface Hazard Call Out procedures.

Coal mining subsidence
Details of alleged coal mining subsidence claims made since 31 October 1994 either within or within 50 metres of the enquiry boundary. Where the claim relates to the enquiry boundary confirmation of whether the claim was accepted, rejected or whether liability is still being determined will be given. Where the claim has been discharged, whether this was by repair, payment of compensation or a combination of both, the value of the claim, where known, will also be given.

Details of any current 'Stop Notice' deferring remedial works or repairs affecting the property/site, and if so the date of the notice.

Details of any request made to execute preventative works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991. If yes, whether any person withheld consent or failed to comply with any request to execute preventative works.

Mine gas
Reports of alleged mine gas emissions received by the Coal Authority, either within or within 500 metres of the enquiry boundary that subsequently required investigation and action by the Coal Authority to mitigate the effects of the mine gas emission. Please note, if there are no recorded instances of mine gas reported, this does not mean that mine gas is not present within the vicinity. The Coal Authority Mine Gas data is limited to only those sites where a Mine Gas incident has been recorded.

Mine water treatment schemes
Locations where the Coal Authority has constructed or operates assets that remove pollutants from mine water prior to the treated mine water being discharged into the receiving water body.

These schemes are part of the UK's strategy to meet the requirements of the Water Framework Directive. Schemes fall into 2 basic categories: Remedial – mitigating the impact of existing pollution or Preventative – preventing a future pollution incident.

Mine water treatment schemes generally consist of one or more primary settlement lagoons and one or more reed beds for secondary treatment. A small number are more specialised process treatment plants.

Future underground mining
Details of all planned underground mining relative to the enquiry boundary. Only those future workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination will be included.

Coal mining licensing
Details of all licenses issued by the Coal Authority either within or within 200 metres of the enquiry boundary in relation to the under taking of surface coal mining, underground coal mining or underground coal gasification.

Court orders
Orders in respect of the working of coal under the Mines (Working Facilities and Support) Acts of 1923 and 1966 or any statutory modification or amendment thereof.

Section 46 notices
Notice of proposals relating to underground coal mining operations that have been given under section 46 of the Coal Mining Subsidence Act 1991.

Withdrawal of support notices
Published notices of entitlement to withdraw support and the date of the notice. Details of any revocation notice withdrawing the entitlement to withdraw support given under Section 41 of the Coal Industry Act 1994.

Payment to owners of former copyhold land
Relevant notices which may affect the property and any subsequent notice of retained interests in coal and coal mines, acceptance or rejection notices and whether any compensation has been paid to a claimant.

The Coal Authority

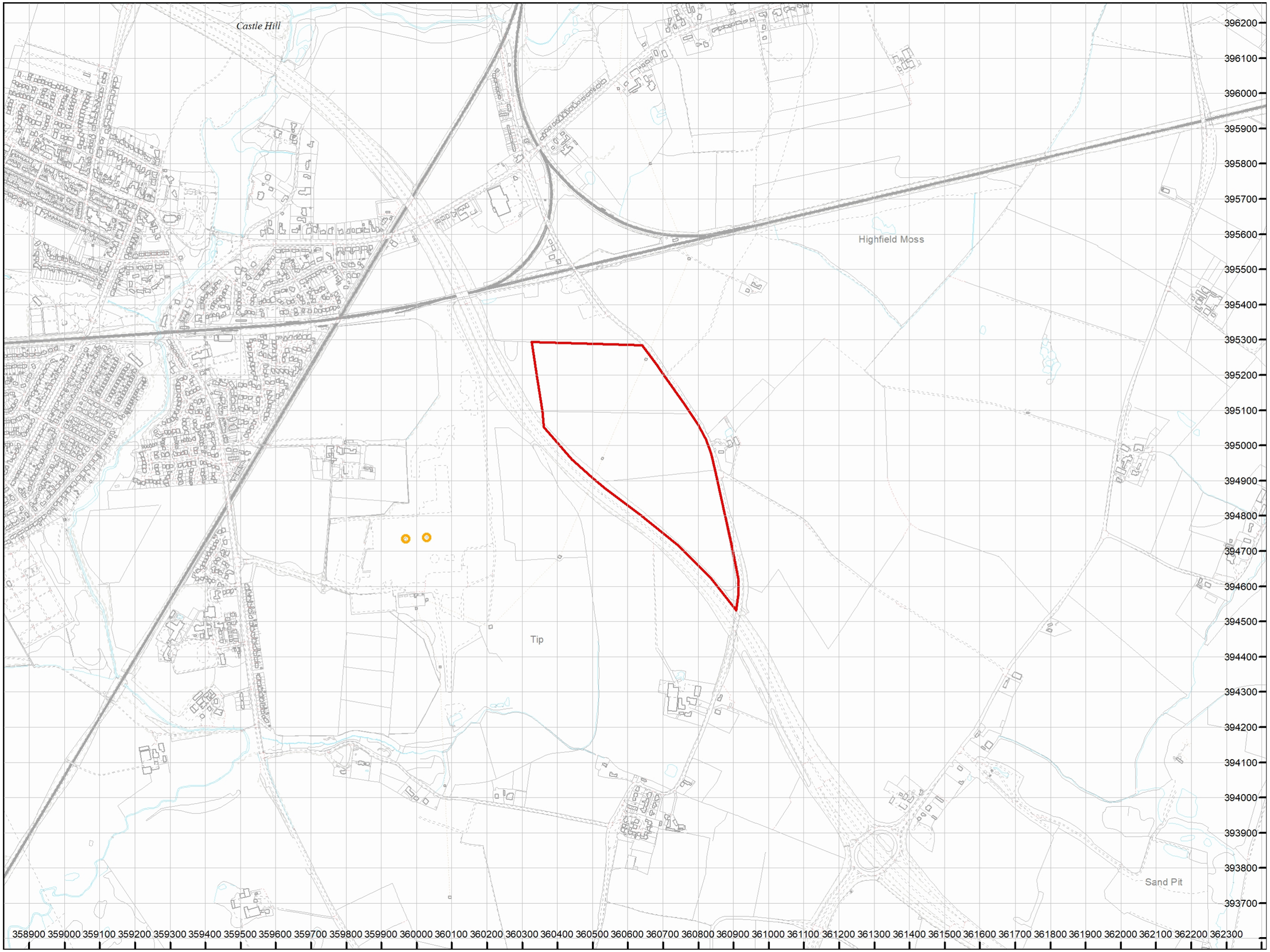
Summary of findings

The map highlights any specific surface or subsurface features within or near to the boundary of the site.

Key

Approximate position of the enquiry boundary shown

Mine gas remedial works



How to contact us
0345 762 6848 (UK)
+44 (0)1623 637 000 (International)
www.groundstability.com

APPENDIX G – BGS RADON REPORT

GeoReports

British Geological Survey

Reece Mcguinness
ROC Consulting
6 Commercial Street
Manchester
M15 4PZ

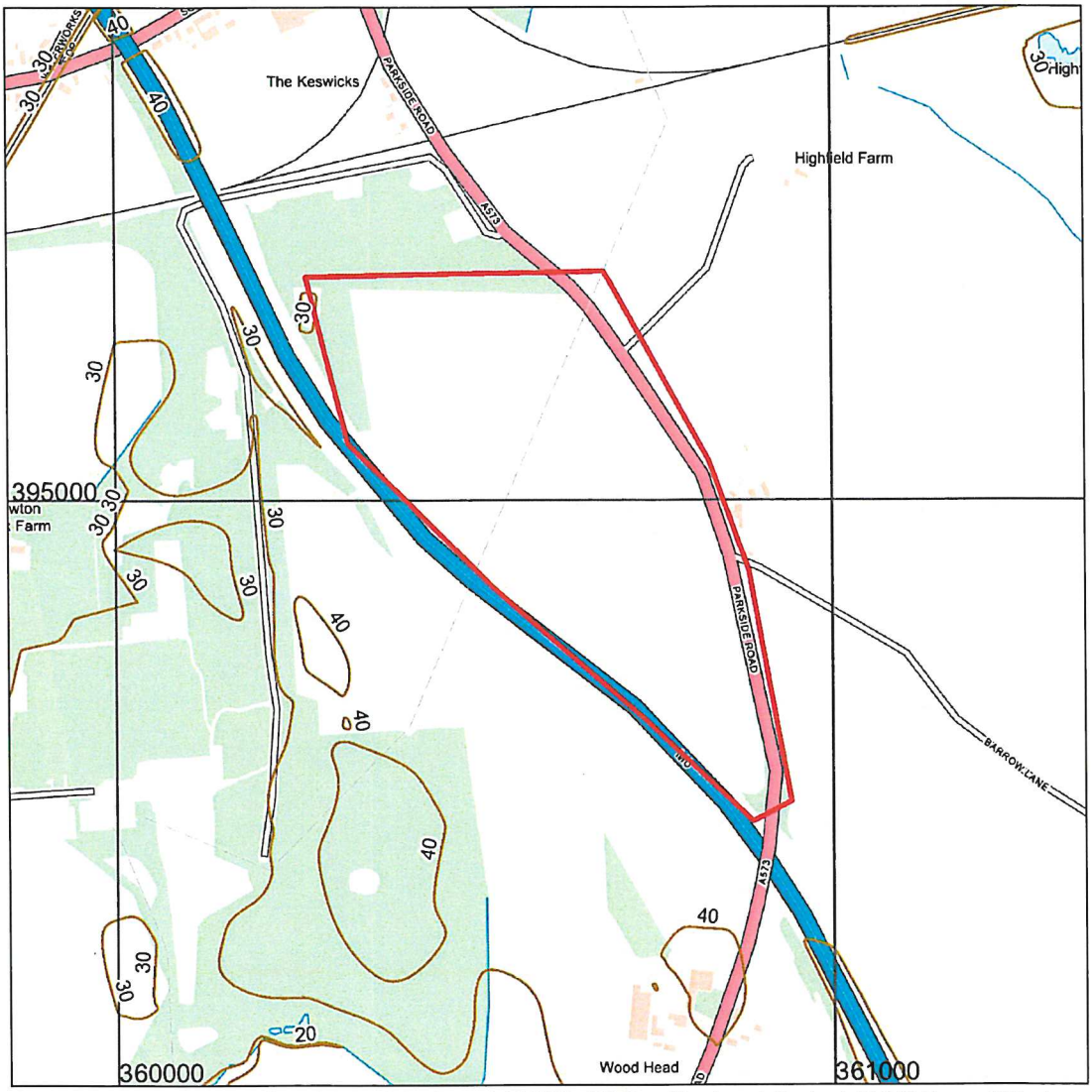
Radon Report

Advisory report on the requirement for radon protective measures in new buildings, conversions and extensions to existing buildings. The report also indicates whether a site is located within a radon Affected Area

Report Id: *BGS_333106/45366*

Client reference: 4597 Parkside East

Search location



Contains OS data © Crown Copyright and database right 2023. OS OpenMap Local: Scale: 1:10 000 (1cm = 100 m)
Search location indicated in red

This report describes a site located at National Grid Reference 360602, 394936. Note that for sites of irregular shape, this point may lie outside the site boundary. Where the client has submitted a site plan the assessment will be based on the area given.

Radon Report: UK

When extensions are made to existing buildings in high radon areas, or new buildings are constructed in these areas, the Building Regulations for England, Wales, Scotland and Northern Ireland require that protective measures are taken against radon entering the building.

This report provides information on whether radon protective measures are required. Depending on the probability of buildings having high radon levels, the Regulations may require either:

1. No protective measures
2. Basic protective measures
3. Full protective measures

This is an advisory report on the requirement for radon protective measures in new buildings, conversions and extensions. The report also indicates whether a site is located within a radon Affected Area

Requirement for radon protective measures

The determination below follows advice in *BR211 Radon: Guidance on protective measures for new buildings (2015 edition), which also provides guidance on what to do if the* result *indicates that protective measures are required.*

Is the property in an area where radon protective measures are required for new buildings or extensions to existing ones as described in publication BR211 (2015 edition) Radon: Guidance on protective measures for new buildings?

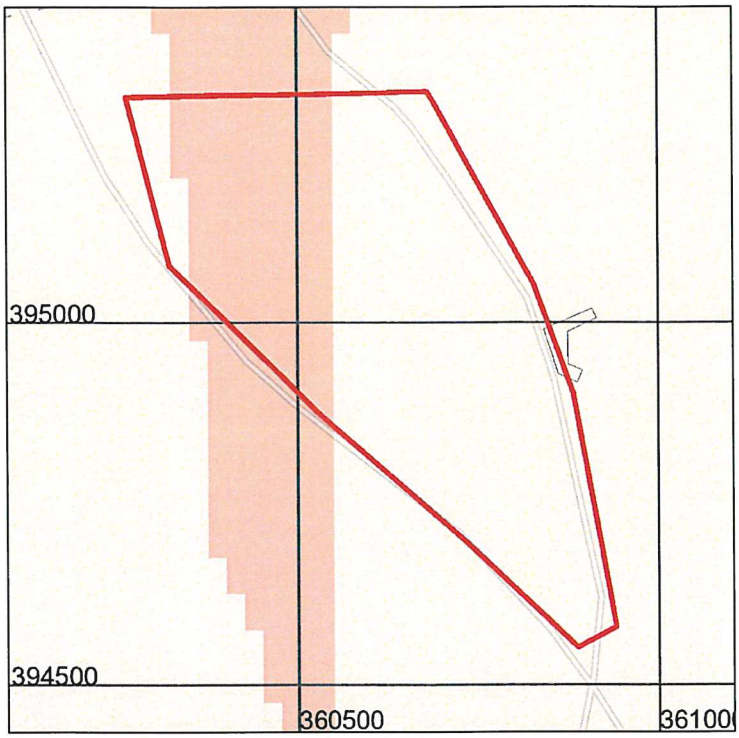
NO RADON PROTECTIVE MEASURES ARE REQUIRED FOR THE REPORT AREA.

More details of the protective measures required are available in *BR211 Radon: Guidance on protective measures for new buildings (2015 Edition)*. Additional information and guidance is available from the Building Research Establishment website (http://www.bre.co.uk/radon/).

Whether or not the radon level in a building is above or below the radon Action Level can only be established by having the building tested. The UKHSA provides a radon testing service which can be accessed at www.ukradon.org or by telephone (01235 822622).

If you require further information or guidance, you should contact your local authority building control officer or approved inspector.

Radon Affected Area



% Homes estimated to be at or above the action level
0-1%
1-3%
3-5%
5-10%
10-30%
30-100%

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Scale: 1:10 000 (1cm = 100 m)
Search area indicated in red

Is the property in a radon Affected Area as defined by the UK Health Security Agency (UKHSA) and if so what percentage of homes are estimated to be at or above the Action Level? YES

Additional Information

THE PROPERTY IS IN A RADON AFFECTED AREAS WHERE 1 TO 3% OF HOMES ARE ESTIMATED TO BE AT OR ABOVE THE ACTION LEVEL.

The UKHSA recommends a radon 'Action Level' of 200 Becquerels per cubic metre of air (Bq m^{-3}) for the annual average of the radon gas concentration in a home. Where 1% or more of homes are estimated to be at or above the Action Level the area should be regarded as a radon Affected Area.

This report informs you whether the property is in a radon Affected Area and the percentage of homes that are estimated to be at or above the radon Action Level at this location. Being in an Affected Area does not necessarily mean there is a high radon level within the property; the only way to determine the radon level is to carry out a radon measurement.

The UKHSA advises that radon gas should be measured in all properties within radon Affected Areas and that homes with radon levels at or above the Action Level (200 Bq m^{-3}) should be remediated. Householders with levels between the Target Level (100 Bq m^{-3}) and Action Level should seriously consider reducing their radon level, especially if they are at greater risk, such as if they are current or ex smokers. Whether or not a home is in fact above or below the Action Level or Target Level can only be established by having the building tested. The UKHSA provides a validated radon testing service which can be accessed at www.ukradon.org.

The information in this report provides an answer to one of the standard legal enquiries on house purchase in England and Wales, known as Law Society CON29 Enquiries of the Local Authority (2016); 3.14 Radon Gas: Do records indicate that the property is in a "Radon Affected Area" as identified by the UKHSA. The data can also be used to advise house buyers and sellers in Scotland and Northern Ireland.

If you are buying a new build property in a Radon Affected Area, you should ask the builder whether radon protective measures were incorporated in the construction of the property.

If you are buying a currently occupied property in a radon Affected Area, you should ask the present owner whether radon levels have been measured in the property. If they have, ask whether the results were at or above the radon Action Level and if so, whether remedial measures were installed, radon levels were re-tested, and if the results of re-testing confirmed the effectiveness of the measures.

Further information on radon is available from the UKHSA at www.ukradon.org.

What is radon?

Radon is a naturally occurring radioactive gas, which is produced by the radioactive decay of radium which, in turn, is derived from the radioactive decay of uranium. Uranium is found in small quantities in all soils and rocks, although the amount varies from place to place. Radon released from rocks and soils is quickly diluted in the atmosphere. Concentrations in the open air are normally very low and do not present a hazard. Radon that enters enclosed spaces such as some buildings (particularly basements), caves, mines, and tunnels may reach high concentrations in some circumstances. The construction method and degree of ventilation will influence radon levels in individual buildings. A person's exposure to radon will also vary according to how particular buildings and spaces are used.
Inhalation of the radioactive decay products of radon gas increases the chance of developing lung cancer. If individuals are exposed to high concentrations for significant periods of time, there may be cause for concern. In order to limit the risk to individuals, the Government has adopted an Action Level for radon in homes of 200 becquerels per cubic metre (Bq m^{-3}). The Government advises householders that, where the radon level is at or above the Action Level, measures should be taken to reduce the concentration.

Radon in workplaces

The Ionising Radiation Regulations 2017 require employers to take action when radon is present above a defined level in the workplace. Advice may be obtained from your local Health and Safety Executive Area Office or the Environmental Health Department of your local authority. The BRE publishes a guide (BR293)**: Radon in the workplace.** BRE publications may be obtained from the BRE Bookshop, Tel: 01923 664262, email: bookshop@bre.co.ukwebsite: www.brebookshop.com

Contact Details

Keyworth Office
British Geological Survey
Environmental Science Centre
Nicker Hill
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Tel: 0115 9363100
Email: enquiries@bgs.ac.uk

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Lyell Centre
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Edinburgh
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Terms and Conditions

General Terms & Conditions

This Report is supplied in accordance with the GeoReports Terms & Conditions available on the BGS website at https://shop.bgs.ac.uk/georeports and also available from the BGS Enquiry Service at the above address.

Important notes about this Report

- The data, information and related records supplied in this Report by BGS can only be indicative and should not be taken as a substitute for specialist interpretations, professional advice and/or detailed site investigations. You must seek professional advice before making technical interpretations on the basis of the materials provided.
- Geological observations and interpretations are made according to the prevailing understanding of the subject at the time. The quality of such observations and interpretations may be affected by the availability of new data, by subsequent advances in knowledge, improved methods of interpretation, and better access to sampling locations.
- Raw data may have been transcribed from analogue to digital format, or may have been acquired by means of automated measuring techniques. Although such processes are subjected to quality control to ensure reliability where possible, some raw data may have been processed without human intervention and may in consequence contain undetected errors.
- Detail, which is clearly defined and accurately depicted on large-scale maps, may be lost when small-scale maps are derived from them.
- Although samples and records are maintained with all reasonable care, there may be some deterioration in the long term.
- The most appropriate techniques for copying original records are used, but there may be some loss of detail and dimensional distortion when such records are copied.
- Data may be compiled from the disparate sources of information at BGS's disposal, including material donated to BGS by third parties, and may not originally have been subject to any verification or other quality control process.
- Data, information and related records, which have been donated to BGS, have been produced for a specific purpose, and that may affect the type and completeness of the data recorded and any interpretation. The nature and purpose of data collection, and the age of the resultant material may render it unsuitable for certain applications/uses. You must verify the suitability of the material for your intended usage.
- If a report or other output is produced for you on the basis of data you have provided to BGS, or your own data input into a BGS system, please do not rely on it as a source of information about other areas or geological features, as the report may omit important details.
- The topography shown on any map extracts is based on the latest OS mapping and is not necessarily the same as that used in the original compilation of the BGS geological map, and to which the geological linework available at that time was fitted.
- Note that for some sites, the latest available records may be historical in nature, and while every effort is made to place the analysis in a modern geological context, it is possible in some cases that the detailed geology at a site may differ from that described.

Report issued by
BGS Enquiry Service

COMPLEX CHALLENGES ...
MADE SIMPLE

APPENDIX H – EQUIPMENT CALIBRATION

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TEST DATE AND CONDITIONS		
Date	08/07/2022	
Atmospheric Pressure	1015	mB
Ambient Temperature	21.4	°C
Environics Serial No.	5089	

GFM436 Final Inspection & Calibration Check Certificate

GAS DATA LTD

Unit 4, Fairfield Court

Seven Stars Estate

Wheler Rd

Coventry

CV3 4LJ

Tel 02476303311 Fax 02476307711

Customer	ROC Consulting
Certificate Number	123330
Order Number	331480

Serial Number	12229
Software Version	G436-00.0027/0009

Recalibration DUE Date
08/07/23

Instrument Checks					
Keyboard	✓		Display Contrast	✓	
Pump Flow In	500	*Accept > 200 cc/min*	Pump Flow @ -200mB	250	*Accept > 200 cc/min*
Clock Set / Running	✓		Labels Fitted	✓	

Gas Checks						
Sensor	CH_4		CO_2		O_2	
	Instrument Gas Readings %	True Gas Value %	Instrument Gas Readings %	True Gas Value %	Instrument Gas Readings %	True Gas Value %
	59.7	*60*	40.0	*40*	20.9	*20.9*
	Accept ±3.0		*Accept ±3.0*		*Accept ±0.5*	
	4.9	*5*	4.9	*5*	6.0	*6*
	Accept ±0.3		*Accept ±0.3*		*Accept ±0.3*	
Zero Reading 100% N2	0.0	*0*	0.0	*0*	0.0	*0*
	Accept ±0.0		*Accept ±0.0*		*Accept ±0.1*	

Optional Gas Checks						
Applied Gas & Range		Concentration Tested @ (ppm)	Instrument Readings *(ppm)*			
Gas Type	Range *(ppm)*		Zero Reading		Instrument Gas Reading	
H2S	5000	*1500*	0	*Accept ±0.0*	1500	*Accept ±5.0*
CO	2000	*1000*	0	*Accept ±0.0*	995	*Accept ±5.0*
Hexane	*2.0%*	2.0%	0	*Accept ±0.0*	1.99	*Accept ±10.0*

Cross Gas Effects									
Applied Gas *(ppm)*		Instrument Readings *(ppm)*							
Gas Type	Concentration	Toxic 1:	H2S	Toxic 2:	CO	Toxic 3:	HEX		
H2S	*1500*	1500		0		0			
CO	*1000*	50		995		0			
Hexane	*2.0%*	0		0		1.99			

Pressure Checks			
Atmospheric Pressure [AP] *(mB)*			
Current Atmospheric Pressure (mB)		Instrument Atmospheric Pressure Reading (mB)	
AP Open Ports		1015	*Accept ±2.0*
AP Port (Internal)	*+800 mB*	800	*Accept ±5.0*
	+1200mb	1200	*Accept ±5.0*

Flow Checks					
Borehole Flow			Differential Pressure		
Applied Reading *(l/h)*	Instrument Reading *(l/h)*		Applied Pressure *(Pa)*	Instrument Reading *(Pa)*	
-30	-30.4	*Accept ±3.0*	-377	-383	*Accept ±50*
-3	-3.0	*Accept ±1.0*	-17	-17	*Accept ±6.0*
0	0.0	*Accept ±0.0*	0	0	*Accept ±0.5*
3	3.0	*Accept ±0.5*	15	14	*Accept ±3.0*
30	30.0	*Accept ±3.0*	295	294	*Accept ±50*
60	60.0	*Accept ±6.0*	880	876	*Accept ±130*
90	89.8	*Accept ±9.0*	1690	1703	*Accept ±250*

Temperature Checks		
Calibration Temperature Applied Temperature ^{0}C	Instrument Temperature Reading ^{0}C	
-10	-10.0	*Accept ±2.0*
0	0.0	*Accept ±1.0*
30	30.0	*Accept ±1.0*
60	60.0	*Accept ±1.0*
100	100.0	*Accept ±1.0*

Technician:	Date Tested:
Jack Rutland	*08/07/2022*

The instrument identified by the serial number stated above has been tested by Gas Data personnel for calibration accuracy on the date and under the ambient conditions stated. Gas Data Ltd internal BS EN ISO9001:2015, BS EN ISO14001:2015, BS EN ISO45001:2018 compliant workshop procedures were followed to apply known calibration test gases, gas flow rates, pressures and temperatures of the values stated. The results displayed on the instrument at each stage are recorded above.

Gas Data Ltd is certified to BS EN ISO9001:2015, BS EN ISO14001:2015, BS EN ISO45001:2018.

APPENDIX I – WASTE ASSESSMENT

Units 7 & 8, Sandpits Business Park
Mottram Road, Hyde, Cheshire, SK14 3AR

Envirolab Job Number:	23/04902		
Issue Number:	1	Date:	30-May-23

Client:	ROCP LIMITED Commercial Wharf 6 Commercial Street Castlefield Manchester M15 4PZ CV3 4LJ
Project Manager:	Linden Richardson/Reece McGuinness
Project Name:	Parkside East
Project Ref:	4597
Order No:	PO1878
Date Samples Received:	18-May-23
Date Instructions Received:	19-May-23
Date Analysis Completed:	30-May-23

All results are reported as dry weight (<40°C).

For samples with Matrix Codes 1 - 6 natural stones >10mm are removed or excluded from the sample prior to analysis and reported results corrected to a whole sample basis.

For samples with Matrix Code 7 the whole sample is dried and crushed prior to analysis.

Subscript "A" indicates analysis performed on the sample as received. "D" indicates analysis performed on the dried sample, crushed to pass a 2mm sieve, unless asbestos is found to be present in which case all analysis is performed on the sample as received.

All analysis is performed on the dried and crushed sample for samples with Matrix Code 7 and this supercedes any "A" subscripts.

All analysis is performed on the sample as received for soil samples from outside the European Union and this supercedes any "D" subscripts

For complex, multi-compound analysis, quality control results do not always fall within chart limits for every compound and we have criteria for reporting in these situations.

If results are in italic font they are associated with such quality control failures and may be unreliable.

A deviating samples report is appended and will indicate if samples or tests have been found to be deviating. Any test results affected may not be an accurate record of the concentration at the time of sampling and, as a result, may be invalid

1 = SAND, 2 = LOAM, 3 = CLAY, 4 = LOAM/SAND, 5 = SAND/CLAY, 6 = CLAY/LOAM, 7 = OTHER, 8 = Asbestos bulk ID sample

A = contains stones, B = contains construction rubble, C = contains visible hydrocarbons, D = contains glass/metal, E = contains roots/twigs.

IS indicates Insufficient sample for analysis, NDP indicates No Determination Possible and NAD indicates No Asbestos Detected.

Analytical results reflect the quality of the sample at the time of analysis only. Opinions and interpretations expressed are outside the scope of our accreditation.

Please contact us if you need any further information.

EH_CU_1D_AL: Extractable hydrocarbons - i.e. everything extracted by the solvent(s), Clean-up - e.g. by florisil, silica gel, GC - Single coil gas chromatography, Aliphatics only

Approved by:

Richard Wong
Client Manager

Landfill WAC analysis must not be used for hazardous waste classification purposes. This analysis is only applicable for landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Lab Sample ID										
Client Sample Number										
Client Sample ID				TP101						
Depth to Top				0.4						
Depth to Bottom										
Date Sampled				17/05/2023						
Sample Type				Soil						
Sample Matrix Code				4ABE						
pH (pH Units)$_D$	A-T-031							-	>6	-
ANC to pH 4 (mol/kg)$_D$	A-T-ANC							-	to be evaluated	to be evaluated
ANC to pH 6 (mol/kg)$_D$	A-T-ANC							-	to be evaluated	to be evaluated
Loss on Ignition (%)$_D$	A-T-030							-	-	10
Total Organic Carbon (%)$_D$	A-T-032							3	5	6
PAH Sum of 17 (mg/kg) $_A$	A-T-019							100	-	-
Mineral Oil (mg/kg)$_{A\ EH\_CU\_1D\_AL}$	A-T-007							500	-	-
Sum of 7 PCBs (mg/kg)$_A$	A-T-004							1	-	-
Sum of BTEX (mg/kg)$_A$	A-T-022							6	-	-
Arsenic	A-T-025			0.002	0.001	0.004		0.5	2	25
Barium	A-T-025			0.212	0.053	0.458		20	100	300
Cadmium	A-T-025			<0.001	<0.001	<0.002		0.04	1	5
Chromium	A-T-025			0.001	<0.001	0.002		0.5	10	70
Copper	A-T-025			0.043	0.016	0.093		2	50	100
Mercury	A-T-025			<0.0005	<0.0005	<0.001		0.01	0.2	2
Molybdenum	A-T-025			<0.001	<0.001	<0.002		0.5	10	30
Nickel	A-T-025			0.005	0.002	0.011		0.4	10	40
Lead	A-T-025			0.043	0.016	0.093		0.5	10	50
Antimony	A-T-025			0.001	<0.001	0.002		0.06	0.7	5
Selenium	A-T-025			<0.001	<0.001	<0.002		0.1	0.5	7
Zinc	A-T-025			0.028	0.008	0.061		4	50	200
Chloride	A-T-026			29	6	63		800	15000	25000
Fluoride	A-T-026			0.5	0.6	1.1		10	150	500
Sulphate as SO_4	A-T-026			<1.00	16	<2		1000	20000	50000
Total Dissolved Solids	A-T-035			40	<20	86		4000	60000	100000
Phenol Index	A-T-050			<0.01	<0.01	<0.02		1	-	-
Dissolved Organic Carbon	A-T-032			<20.0	<20.0	<40		500	800	1000
pH (pH Units)	A-T-031			6.3	6.4					
Conductivity (µS/cm)	A-T-037			80	25					
Mass Sample (kg)				0.203						
Dry Matter (%)	A-T-044			84.5						
Volume Leachant, L_2 (l)	A-T-046			0.350						
Filtered Eluate Volume, VE_1 (l)	A-T-046			0.200						
Volume Leachant, L_8 (l)	A-T-046			1.400						

Stated acceptance limits are for guidance only and Envirolab cannot be held responsible for any discrepancies with current legislation

Landfill WAC analysis must not be used for hazardous waste classification purposes. This analysis is only applicable for landfill acceptance and does not give any indication as to whether a waste may be hazardous or non-hazardous.

Lab Sample ID										
Client Sample Number										
Client Sample ID				TP115						
Depth to Top				0.2						
Depth to Bottom										
Date Sampled				17/05/2023						
Sample Type				Soil						
Sample Matrix Code				4AE						
pH (pH Units)$_D$	A-T-031							-	>6	-
ANC to pH 4 (mol/kg)$_D$	A-T-ANC							-	to be evaluated	to be evaluated
ANC to pH 6 (mol/kg)$_D$	A-T-ANC							-	to be evaluated	to be evaluated
Loss on Ignition (%)$_D$	A-T-030							-	-	10
Total Organic Carbon (%)$_D$	A-T-032							3	5	6
PAH Sum of 17 (mg/kg) $_A$	A-T-019							100	-	-
Mineral Oil (mg/kg)$_{A\ EH\_CU\_1D\_AL}$	A-T-007							500	-	-
Sum of 7 PCBs (mg/kg)$_A$	A-T-004							1	-	-
Sum of BTEX (mg/kg)$_A$	A-T-022							6	-	-
Arsenic	A-T-025			0.004	0.003	0.009		0.5	2	25
Barium	A-T-025			0.038	0.023	0.081		20	100	300
Cadmium	A-T-025			<0.001	<0.001	<0.002		0.04	1	5
Chromium	A-T-025			<0.001	<0.001	<0.002		0.5	10	70
Copper	A-T-025			0.020	0.010	0.043		2	50	100
Mercury	A-T-025			<0.0005	<0.0005	<0.001		0.01	0.2	2
Molybdenum	A-T-025			0.001	<0.001	0.002		0.5	10	30
Nickel	A-T-025			0.003	<0.002	0.006		0.4	10	40
Lead	A-T-025			0.018	0.012	0.038		0.5	10	50
Antimony	A-T-025			0.001	<0.001	0.002		0.06	0.7	5
Selenium	A-T-025			<0.001	<0.001	<0.002		0.1	0.5	7
Zinc	A-T-025			0.010	0.008	0.021		4	50	200
Chloride	A-T-026			6	3	13		800	15000	25000
Fluoride	A-T-026			0.5	0.6	1.1		10	150	500
Sulphate as SO_4	A-T-026			<1.00	6	<2		1000	20000	50000
Total Dissolved Solids	A-T-035			31	<20	66		4000	60000	100000
Phenol Index	A-T-050			<0.01	<0.01	<0.02		1	-	-
Dissolved Organic Carbon	A-T-032			<20.0	<20.0	<40		500	800	1000
pH (pH Units)	A-T-031			6.5	6.4					
Conductivity (µS/cm)	A-T-037			63	24					
Mass Sample (kg)				0.198						
Dry Matter (%)	A-T-044			88.3						
Volume Leachant, L_2 (l)	A-T-046			0.350						
Filtered Eluate Volume, VE_1 (l)	A-T-046			0.200						
Volume Leachant, L_8 (l)	A-T-046			1.400						

Stated acceptance limits are for guidance only and Envirolab cannot be held responsible for any discrepancies with current legislation

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Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name										
TP/WS/BH		TP101	TP101	TP102	TP104	TP106	TP110	TP111	TP113	TP115
Depth (m)		0.40	1.00	0.50	0.20	0.30	0.30	0.20	0.20	0.20
Envirolab reference										
% Moisture	%	2.8	0.6	1.4	3.1	2.0	2.6	2.1	3.0	2.4
pH (soil)		6.08	6.44	6.36	6.93	6.48	6.29	6.15	6.35	5.92
pH (leachate)										
Arsenic	mg/kg	9	5	1	9	8	9	6	10	7
Cadmium	mg/kg	0.8	0.7	0.5	0.8	0.7	0.5	0.5	0.6	0.5
Copper	mg/kg	31	16	4	40	28	26	23	27	21
CrVI or Chromium	mg/kg	1	1	1	1	1	1	1	1	1
Lead	mg/kg	53	10	6	49	45	77	42	49	38
Mercury	mg/kg	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.4
Nickel	mg/kg	16	26	4	16	17	16	12	13	12
Selenium	mg/kg	1	1	1	1	1	1	1	1	1
Zinc	mg/kg	74	40	9	75	78	58	51	58	46
Barium	mg/kg	68	52	25	76	62	59	52	52	41
Beryllium	mg/kg	0.7	0.8	0.5	0.8	0.7	0.6	0.5	0.6	0.5
Vanadium	mg/kg	27	37	9	32	28	25	20	22	17
Cobalt	mg/kg									
Manganese	mg/kg									
Molybdenum	mg/kg	1	1	1	1	1	1	1	1	1
Antimony	mg/kg	5	5	5	5	5	5	5	5	5
Aluminium	mg/kg									
Bismuth	mg/kg									
CrIII	mg/kg	25	39	8	30	27	24	18	17	15
Iron	mg/kg									
Strontium	mg/kg									
Tellurium	mg/kg									
Thallium	mg/kg									
Titanium	mg/kg									
Tungsten	mg/kg									
Ammoniacal N	mg/kg									
ws Boron	mg/kg	1	1	1	1.3	1	1	1	1	1
PAH (Input Total PAH **OR** individual PAH results)										
Acenaphthene	mg/kg	0.02	0.01	0.01	0.01	0.01	0.07	0.01	0.05	0.03
Acenaphthylene	mg/kg	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Anthracene	mg/kg	0.06	0.02	0.02	0.05	0.05	0.19	0.08	0.11	0.1
Benzo(a)anthracene	mg/kg	0.2	0.04	0.04	0.1	0.12	0.26	0.15	0.27	0.2
Benzo(a)pyrene	mg/kg	0.22	0.04	0.04	0.14	0.14	0.21	0.15	0.26	0.2
Benzo(b)fluoranthene	mg/kg	0.3	0.05	0.06	0.15	0.14	0.23	0.19	0.29	0.25
Benzo(ghi)perylene	mg/kg	0.17	0.05	0.05	0.09	0.1	0.09	0.1	0.16	0.14
Benzo(k)fluoranthene	mg/kg	0.18	0.07	0.07	0.12	0.13	0.14	0.11	0.2	0.14
Chrysene	mg/kg	0.26	0.06	0.06	0.18	0.16	0.27	0.22	0.38	0.29
Dibenzo(ah)anthracene	mg/kg	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Fluoranthene	mg/kg	0.46	0.08	0.08	0.24	0.24	0.7	0.34	0.64	0.5
Fluorene	mg/kg	0.01	0.01	0.01	0.01	0.01	0.11	0.01	0.03	0.02
Indeno(123cd)pyrene	mg/kg	0.2	0.03	0.03	0.09	0.12	0.12	0.13	0.18	0.15
Naphthalene	mg/kg	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Phenanthrene	mg/kg	0.2	0.03	0.03	0.12	0.12	0.72	0.22	0.4	0.27
Pyrene	mg/kg	0.44	0.07	0.07	0.23	0.23	0.64	0.33	0.59	0.46
Coronene	mg/kg									
Total PAHs (16 or 17)	mg/kg	2.71	0.08	0.13	1.51	1.55	3.75	2.04	3.56	2.75
TPH										
Petrol	mg/kg									
Diesel	mg/kg									
Lube Oil	mg/kg									
Crude Oil										
White Spirit / Kerosene	mg/kg									
Creosote	mg/kg									
Unknown TPH with ID	mg/kg									
Unknown TPHCWG	mg/kg									
Total Sulphide	mg/kg									
Complex Cyanide	mg/kg	1	1	1	1	1	1	1	1	1
Free (or Total) Cyanide	mg/kg									
Thiocyanate	mg/kg									
Elemental/Free Sulphur	mg/kg									
Phenols Input Total Phenols HPLC **OR** individual Phenol results.										
Phenol	mg/kg									
Cresols	mg/kg									
Xylenols	mg/kg									
Resourcinol	mg/kg									
Phenols Total by HPLC	mg/kg									
BTEX Input Total BTEX **OR** individual BTEX results.										
Benzene	mg/kg									
Toluene	mg/kg									
Ethylbenzene	mg/kg									
Xylenes	mg/kg									
Total BTEX	mg/kg									
PCBs (POPs)										
PCBs Total (eg EC7/WHO12)	mg/kg									
PBBs (POPs)										
Hexabromobiphenyl (Total or PBB153; 2,2',4,4',5,5'- if only available)	mg/kg									

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Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name									
TP/WS/BH		TP101	TP101	TP102	TP104	TP106	TP110	TP111	TP113	TP115
Depth (m)		0.40	1.00	0.50	0.20	0.30	0.30	0.20	0.20	0.20
Envirolab reference										
POPs Dioxins and Furans Input Total Dioxins and Furans **OR** individual Dioxin and Furan results.										
2,3,7,8-TeCDD	mg/kg									
1,2,3,7,8-PeCDD	mg/kg									
1,2,3,4,7,8-HxCDD	mg/kg									
1,2,3,6,7,8-HxCDD	mg/kg									
1,2,3,7,8,9-HxCDD	mg/kg									
1,2,3,4,6,7,8-HpCDD	mg/kg									
OCDD	mg/kg									
2,3,7,8-TeCDF	mg/kg									
1,2,3,7,8-PeCDF	mg/kg									
2,3,4,7,8-PeCDF	mg/kg									
1,2,3,4,7,8-HxCDF	mg/kg									
1,2,3,6,7,8-HxCDF	mg/kg									
2,3,4,6,7,8-HxCDF	mg/kg									
1,2,3,7,8,9-HxCDF	mg/kg									
1,2,3,4,6,7,8-HpCDF	mg/kg									
1,2,3,4,7,8,9-HpCDF	mg/kg									
OCDF	mg/kg									
Total Dioxins and Furans	mg/kg									
Some Pesticides (POPs unless otherwise stated)										
Aldrin	mg/kg									
α Hexachlorocyclohexane (alpha-HCH) *(leave empty if total HCH results used)*	mg/kg									
β Hexachlorocyclohexane (beta-HCH) *(leave empty if total HCH results used)*	mg/kg									
α Cis-Chlordane (alpha) ***OR*** *Total Chlordane*	mg/kg									
δ Hexachlorocyclohexane (delta-HCH) *(leave empty if total HCH results used)*	mg/kg									
Dieldrin	mg/kg									
Endrin	mg/kg									
χ Hexachlorocyclohexane (gamma-HCH) (lindane) ***OR*** *Total HCH*	mg/kg									
Heptachlor	mg/kg									
Hexachlorobenzene	mg/kg									
o,p'-DDT *(leave empty if total DDT results used)*	mg/kg									
p,p'-DDT ***OR*** *Total DDT*	mg/kg									
χ Trans-Chlordane (gamma) *(leave empty if total Chlordane results used)*	mg/kg									
Chlordecone (kepone)	mg/kg									
Pentachlorobenzene	mg/kg									
Mirex	mg/kg									
Toxaphene (camphechlor)	mg/kg									
Tin										
Tin *(leave empty if Organotin and Tin excl Organotin results used)*	mg/kg									
Organotin										
Dibutyltin; DiBT	mg/kg									
Tributyltin; TriBT	mg/kg									
Triphenyltin; TriPT	mg/kg									
Tetrabutyltin; TeBT	mg/kg									
Tin excluding Organotin										
Tin excl Organotin	mg/kg									

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Please enter available data in the rows associated with the test (grey) cells. Calculation cells initially display either "0.0000" or "#DIV/0!".
If any calculation cells below state "0.00000", testing has NOT been undertaken that contributes to that Hazardous Property.

Haswaste, developed by Dr. Iain Haslock.

Site Code and Name									
TP/WS/BH		TP101	TP101	TP102	TP104	TP106	TP110	TP111	TP113	TP115
Depth (m)		0.40	1.00	0.50	0.20	0.30	0.30	0.20	0.20	0.20
Envirolab reference										
Asbestos in Soil	Thresholds									
Asbestos detected in Soil (enter Y or N)	Y									
		If Asbestos in Soil above is "Y", the soil is Hazardous Waste HP5 and HP7								
Asbestos % Composition in Soil (Matrix Loose Fibres or Microscopic Identifiable Pieces only)	see "Carc HP7 % Asbestos in Soil (Fibres)" below	%								
Carcinogenic HP7 % Asbestos in Soil (fibres or micro pieces) *Please be advised, if the calculation cell is "0.00000" DOES NOT MEAN asbestos testing has been undertaken and the result is zero.*	≥0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
		If Asbestos in Soil above is "Y", but Asbestos % above is "<0.1%", the soil is Non Hazardous Waste. You can only use Asbestos % results where loose fibres or micro pieces are only present. You cannot use Asbestos % results when visual identifiable pieces are present.								
Asbestos Identifiable Pieces visible with the naked eye detected in the Soil (enter Y or N)	Y									

If visual identifiable pieces of asbestos are present, you cannot use Asbestos % results and the whole soil sample is Hazardous Waste HP5 and HP7 Construction material containing Asbestos 17 06 05.
Therefore, if Asbestos in Soil above is "Y", the Asbestos % above is "<0.1%", but the Asbestos Identifiable Pieces visible with the naked eye is "Y", the soil is Hazardous Waste.

Identifiable Pieces are Cement, Fragments, Board, Rope etc. ie anything ACM that is not Loose Fibres.
All visual asbestos pieces need to be removed leaving only fibres (or micro pieces) with an Asbestos % Composition in Soil result of <0.1% for the soil to become non-hazardous waste.

Hazardous Property	Thresholds	Cut Off Value	If cells below turn yellow and the text turns red, the samples should be classified as Hazardous Waste.								
Corrosive HP8	≥5%	<1%	0.00795	0.00601	0.00278	0.00870	0.00730	0.00709	0.00605	0.00651	0.00509
Irritant HP4	≥10%	<1%	0.00924	0.00900	0.00216	0.01105	0.00902	0.00836	0.00681	0.00804	0.00617
Irritant HP4	≥20%	<1%	0.00734	0.00755	0.00164	0.00820	0.00712	0.00695	0.00555	0.00638	0.00540
Specifc Target Organ Toxicity HP5	≥1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥20%		0.00467	0.00654	0.00158	0.00552	0.00488	0.00434	0.00349	0.00380	0.00295
Specifc Target Organ Toxicity HP5	≥1%		0.00467	0.00654	0.00158	0.00552	0.00488	0.00434	0.00349	0.00380	0.00295
Specifc Target Organ Toxicity HP5	≥10%		0.00515	0.00099	0.00059	0.00475	0.00441	0.00750	0.00411	0.00475	0.00371
Aspiration Toxicity HP5	≥10%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Oral)	≥0.1%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Oral)	≥0.25%	<0.1%	0.00117	0.00067	0.00015	0.00117	0.00105	0.00117	0.00079	0.00130	0.00094
Acute Toxicity HP6 (Oral)	≥5%	<0.1%	0.00725	0.00586	0.00302	0.00804	0.00672	0.00634	0.00564	0.00563	0.00455
Acute Toxicity HP6 (Oral)	≥25%	<1%	0.01756	0.01543	0.00427	0.01882	0.01680	0.01918	0.01360	0.01534	0.01251
Acute Toxicity HP6 (Dermal)	≥0.25%	<0.1%	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00004
Acute Toxicity HP6 (Dermal)	≥2.5%	<0.1%	0.00019	0.00019	0.00019	0.00019	0.00019	0.00019	0.00019	0.00019	0.00019
Acute Toxicity HP6 (Dermal)	≥15%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Dermal)	≥55%	<1%	0.00085	0.00086	0.00083	0.00085	0.00085	0.00082	0.00083	0.00083	0.00082
Acute Toxicity HP6 (Inhal)	≥0.1%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Inhal)	≥0.5%	<0.1%	0.00059	0.00064	0.00048	0.00063	0.00059	0.00052	0.00048	0.00053	0.00050
Acute Toxicity HP6 (Inhal)	≥3.5%	<0.1%	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014	0.00014
Acute Toxicity HP6 (Inhal)	≥22.5%	<1%	0.02299	0.01972	0.00588	0.02515	0.02184	0.02360	0.01761	0.01910	0.01534
Carcinogenic HP7	≥0.1%		0.00515	0.00522	0.00080	0.00475	0.00441	0.00750	0.00411	0.00475	0.00371
Carcinogenic HP7	≥0.1%		0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000
Carcinogenic HP7	≥1%		0.00467	0.00654	0.00158	0.00552	0.00488	0.00434	0.00349	0.00380	0.00295
Carcinogenic HP7 Unknown TPH with ID	≥1,000mg/kg		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Carcinogenic HP7 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
pH Corrosive HP8 pH (soil or leachate)	H8 ≥11.5		6.08	6.44	6.36	6.93	6.48	6.29	6.15	6.35	5.92
pH Corrosive HP8 pH (soil or leachate)	H8 ≤2		6.08	6.44	6.36	6.93	6.48	6.29	6.15	6.35	5.92
Toxic for Reproduction HP10	≥0.3%		0.00515	0.00522	0.00080	0.00475	0.00441	0.00750	0.00411	0.00475	0.00371
Toxic for Reproduction HP10	≥3%		0.00467	0.00654	0.00158	0.00552	0.00488	0.00434	0.00349	0.00380	0.00295
Mutagenic HP11	≥0.1%		0.00026	0.00019	0.00019	0.00019	0.00019	0.00037	0.00020	0.00035	0.00027
Mutagenic HP11 Unknown TPH with ID	≥1,000mg/kg		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mutagenic HP11 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Mutagenic HP11	≥1%		0.00467	0.00654	0.00158	0.00552	0.00488	0.00434	0.00349	0.00380	0.00295
Produces Toxic Gases HP12 Sulphide	≥1,400mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Produces Toxic Gases HP12 Cyanide	≥1,200mg/kg		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Produces Toxic Gases HP12 Thiocyanate	≥2,600mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HP13 Sensitising	≥10%		0.00314	0.00522	0.00080	0.00313	0.00337	0.00315	0.00237	0.00255	0.00237

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Haswaste, developed by Dr. Iain Haslock.

Site Code and Name										
TP/WS/BH			TP101	TP101	TP102	TP104	TP106	TP110	TP111	TP113	TP115
Depth (m)			0.40	1.00	0.50	0.20	0.30	0.30	0.20	0.20	0.20
Envirolab reference											
Ecotoxic HP14 amended v6	≥25%	<0.1%	0.02279	0.01412	0.00354	0.02321	0.02218	0.02285	0.01683	0.01965	0.01584
Ecotoxic HP14 amended v6	≥25%	<0.1% / 1.0%	0.02796	0.02122	0.00554	0.02928	0.02757	0.02765	0.02073	0.02390	0.01921
Ecotoxic HP14 amended v6	≥25%	<0.1% / 1.0%	2.32869	1.48099	0.37226	2.38014	2.27000	2.33168	1.72061	2.00585	1.61635
Persistent Organic Pollutant (PCB, PBB or POP Pesticides)	>0.005%		0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
Persistent Organic Pollutant (Total Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000
Persistent Organic Pollutant (Individual Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000

If other contaminants need adding to Haswaste, please contact Envirolab.

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Haswaste, developed by Dr. Iain Haslock.

Site Code and Name										
TP/WS/BH		TP107	TP114	TP103	RBH101	TP105	RBH102	TP116	TP112	TP109
Depth (m)		0.30	0.20	0.50	0.25	0.60	0.70	0.20	0.40	0.60
Envirolab reference										
% Moisture	%	2.7	2.6	0.5	4.3	0.3	0.3	3.4	3.1	1.0
pH (soil)		6.74	6.41	7.05	6.26	6.64	7.12	6.26	6.94	7.05
pH (leachate)										
Arsenic	mg/kg	5	5	3	6	1	1	9	9	6
Cadmium	mg/kg	0.7	0.5	0.7	0.7	0.5	0.5	0.7	0.9	1
Copper	mg/kg	25	22	15	36	6	5	27	33	16
CrVI or Chromium	mg/kg	1	1	1	1	1	1	1	1	1
Lead	mg/kg	44	43	8	51	5	5	49	50	13
Mercury	mg/kg	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
Nickel	mg/kg	13	10	21	15	10	7	13	17	29
Selenium	mg/kg	1	1	1	1	1	1	1	1	1
Zinc	mg/kg	62	48	32	90	18	15	75	75	51
Barium	mg/kg	67	44	35	66	26	19	70	61	53
Beryllium	mg/kg	0.6	0.5	0.6	0.6	0.5	0.5	0.8	0.8	0.9
Vanadium	mg/kg	25	18	27	24	16	12	24	28	41
Cobalt	mg/kg									
Manganese	mg/kg									
Molybdenum	mg/kg	1	1	1	1	1	1	1	1	1
Antimony	mg/kg	5	5	5	5	5	5	5	5	5
Aluminium	mg/kg									
Bismuth	mg/kg									
CrIII	mg/kg	20	13	28	21	15	11	18	23	43
Iron	mg/kg									
Strontium	mg/kg									
Tellurium	mg/kg									
Thallium	mg/kg									
Titanium	mg/kg									
Tungsten	mg/kg									
Ammoniacal N	mg/kg									
ws Boron	mg/kg	1	1	1	1	1	1	1	1	1
PAH (Input Total PAH **OR** individual PAH results)										
Acenaphthene	mg/kg	0.02	0.02	0.01	0.1	0.01	0.01	0.02	0.01	0.01
Acenaphthylene	mg/kg	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
Anthracene	mg/kg	0.1	0.1	0.02	0.2	0.02	0.02	0.09	0.07	0.02
Benzo(a)anthracene	mg/kg	0.14	0.09	0.04	0.17	0.04	0.04	0.06	0.13	0.04
Benzo(a)pyrene	mg/kg	0.23	0.17	0.04	0.29	0.04	0.04	0.15	0.16	0.04
Benzo(b)fluoranthene	mg/kg	0.14	0.1	0.05	0.23	0.05	0.05	0.15	0.09	0.05
Benzo(ghi)perylene	mg/kg	0.11	0.1	0.05	0.14	0.05	0.05	0.08	0.05	0.05
Benzo(k)fluoranthene	mg/kg	0.2	0.17	0.07	0.19	0.07	0.07	0.12	0.13	0.07
Chrysene	mg/kg	0.29	0.28	0.06	0.4	0.06	0.06	0.21	0.21	0.06
Dibenzo(ah)anthracene	mg/kg	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Fluoranthene	mg/kg	0.4	0.44	0.08	0.78	0.08	0.08	0.33	0.3	0.08
Fluorene	mg/kg	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01
Indeno(123cd)pyrene	mg/kg	0.09	0.06	0.03	0.12	0.03	0.03	0.05	0.04	0.03
Naphthalene	mg/kg	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03	0.03
Phenanthrene	mg/kg	0.17	0.21	0.03	0.48	0.03	0.03	0.16	0.13	0.03
Pyrene	mg/kg	0.38	0.43	0.07	0.71	0.07	0.07	0.33	0.3	0.07
Coronene	mg/kg									
Total PAHs (16 or 17)	mg/kg	2.27	2.17	0.08	3.83	0.08	0.08	1.75	1.57	0.08
TPH										
Petrol	mg/kg									
Diesel	mg/kg									
Lube Oil	mg/kg									
Crude Oil										
White Spirit / Kerosene	mg/kg									
Creosote	mg/kg									
Unknown TPH with ID	mg/kg									
Unknown TPHCWG	mg/kg									
Total Sulphide	mg/kg									
Complex Cyanide	mg/kg	1	1	1	1	1	1	1	1	1
Free (or Total) Cyanide	mg/kg									
Thiocyanate	mg/kg									
Elemental/Free Sulphur	mg/kg									
Phenols Input Total Phenols HPLC **OR** individual Phenol results.										
Phenol	mg/kg									
Cresols	mg/kg									
Xylenols	mg/kg									
Resourcinol	mg/kg									
Phenols Total by HPLC	mg/kg									
BTEX Input Total BTEX **OR** individual BTEX results.										
Benzene	mg/kg									
Toluene	mg/kg									
Ethylbenzene	mg/kg									
Xylenes	mg/kg									
Total BTEX	mg/kg									
PCBs (POPs)										
PCBs Total (eg EC7/WHO12)	mg/kg									
PBBs (POPs)										
Hexabromobiphenyl (Total or PBB153; 2,2',4,4',5,5'- if only available)	mg/kg									

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Haswaste, developed by Dr. Iain Haslock.

Site Code and Name									
TP/WS/BH		TP107	TP114	TP103	RBH101	TP105	RBH102	TP116	TP112	TP109
Depth (m)		0.30	0.20	0.50	0.25	0.60	0.70	0.20	0.40	0.60
Envirolab reference										
POPs Dioxins and Furans Input Total Dioxins and Furans **OR** individual Dioxin and Furan results.										
2,3,7,8-TeCDD	mg/kg									
1,2,3,7,8-PeCDD	mg/kg									
1,2,3,4,7,8-HxCDD	mg/kg									
1,2,3,6,7,8-HxCDD	mg/kg									
1,2,3,7,8,9-HxCDD	mg/kg									
1,2,3,4,6,7,8-HpCDD	mg/kg									
OCDD	mg/kg									
2,3,7,8-TeCDF	mg/kg									
1,2,3,7,8-PeCDF	mg/kg									
2,3,4,7,8-PeCDF	mg/kg									
1,2,3,4,7,8-HxCDF	mg/kg									
1,2,3,6,7,8-HxCDF	mg/kg									
2,3,4,6,7,8-HxCDF	mg/kg									
1,2,3,7,8,9-HxCDF	mg/kg									
1,2,3,4,6,7,8-HpCDF	mg/kg									
1,2,3,4,7,8,9-HpCDF	mg/kg									
OCDF	mg/kg									
Total Dioxins and Furans	mg/kg									
Some Pesticides (POPs unless otherwise stated)										
Aldrin	mg/kg									
α Hexachlorocyclohexane (alpha-HCH) *(leave empty if total HCH results used)*	mg/kg									
β Hexachlorocyclohexane (beta-HCH) *(leave empty if total HCH results used)*	mg/kg									
α Cis-Chlordane (alpha) ***OR*** *Total Chlordane*	mg/kg									
δ Hexachlorocyclohexane (delta-HCH) *(leave empty if total HCH results used)*	mg/kg									
Dieldrin	mg/kg									
Endrin	mg/kg									
χ Hexachlorocyclohexane (gamma-HCH) (lindane) ***OR*** *Total HCH*	mg/kg									
Heptachlor	mg/kg									
Hexachlorobenzene	mg/kg									
o,p'-DDT *(leave empty if total DDT results used)*	mg/kg									
p,p'-DDT ***OR*** *Total DDT*	mg/kg									
χ Trans-Chlordane (gamma) *(leave empty if total Chlordane results used)*	mg/kg									
Chlordecone (kepone)	mg/kg									
Pentachlorobenzene	mg/kg									
Mirex	mg/kg									
Toxaphene (camphechlor)	mg/kg									
Tin										
Tin *(leave empty if Organotin and Tin excl Organotin results used)*	mg/kg									
Organotin										
Dibutyltin; DiBT	mg/kg									
Tributyltin; TriBT	mg/kg									
Triphenyltin; TriPT	mg/kg									
Tetrabutyltin; TeBT	mg/kg									
Tin excluding Organotin										
Tin excl Organotin	mg/kg									

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Haswaste, developed by Dr. Iain Haslock.

Site Code and Name										
TP/WS/BH		TP107	TP114	TP103	RBH101	TP105	RBH102	TP116	TP112	TP109
Depth (m)		0.30	0.20	0.50	0.25	0.60	0.70	0.20	0.40	0.60
Envirolab reference										
Asbestos in Soil	Thresholds									
Asbestos detected in Soil (enter Y or N)	Y	N	N	N	N	N	N	N	N	N
		If Asbestos in Soil above is "Y", the soil is Hazardous Waste HP5 and HP7								
Asbestos % Composition in Soil (Matrix Loose Fibres or Microscopic Identifiable Pieces only)	see "Carc HP7 % Asbestos in Soil (Fibres)" below	%								
Carcinogenic HP7 % Asbestos in Soil (fibres or micro pieces) *Please be advised, if the calculation cell is "0.00000" DOES NOT MEAN asbestos testing has been undertaken and the result is zero.*	≥0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
		If Asbestos in Soil above is "Y", but Asbestos % above is "<0.1%", the soil is Non Hazardous Waste. You can only use Asbestos % results where loose fibres or micro pieces are only present. You cannot use Asbestos % results when visual identifiable pieces are present.								
Asbestos Identifiable Pieces visible with the naked eye detected in the Soil (enter Y or N)	Y									
		If visual identifiable pieces of asbestos are present, you cannot use Asbestos % results and the whole soil sample is Hazardous Waste HP5 and HP7 Construction material containing Asbestos 17 06 05. Therefore, if Asbestos in Soil above is "Y", the Asbestos % above is "<0.1%", but the Asbestos Identifiable Pieces visible with the naked eye is "Y", the soil is Hazardous Waste.								
		Identifiable Pieces are Cement, Fragments, Board, Rope etc. ie anything ACM that is not Loose Fibres.								
		All visual asbestos pieces need to be removed leaving only fibres (or micro pieces) with an Asbestos % Composition in Soil result of <0.1% for the soil to become non-hazardous waste.								

Hazardous Property	Thresholds	Cut Off Value	If cells below turn yellow and the text turns red, the samples should be classified as Hazardous Waste.								
Corrosive HP8	≥5%	<1%	0.00735	0.00512	0.00407	0.00726	0.00291	0.00222	0.00809	0.00725	0.00622
Irritant HP4	≥10%	<1%	0.00772	0.00618	0.00686	0.00874	0.00365	0.00282	0.00822	0.00959	0.00980
Irritant HP4	≥20%	<1%	0.00600	0.00504	0.00635	0.00771	0.00309	0.00237	0.00621	0.00764	0.00817
Specifc Target Organ Toxicity HP5	≥1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥20%		0.00433	0.00312	0.00478	0.00409	0.00284	0.00213	0.00413	0.00483	0.00723
Specifc Target Organ Toxicity HP5	≥1%		0.00433	0.00312	0.00478	0.00409	0.00284	0.00213	0.00413	0.00483	0.00723
Specifc Target Organ Toxicity HP5	≥10%		0.00428	0.00419	0.00080	0.00488	0.00050	0.00050	0.00473	0.00484	0.00129
Aspiration Toxicity HP5	≥10%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Oral)	≥0.1%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Oral)	≥0.25%	<0.1%	0.00066	0.00066	0.00041	0.00077	0.00015	0.00015	0.00116	0.00117	0.00080
Acute Toxicity HP6 (Oral)	≥5%	<0.1%	0.00711	0.00483	0.00409	0.00690	0.00315	0.00245	0.00743	0.00659	0.00598
Acute Toxicity HP6 (Oral)	≥25%	<1%	0.01504	0.01280	0.01237	0.01708	0.00689	0.00546	0.01540	0.01767	0.01701
Acute Toxicity HP6 (Dermal)	≥0.25%	<0.1%	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002	0.00002
Acute Toxicity HP6 (Dermal)	≥2.5%	<0.1%	0.00019	0.00019	0.00019	0.00018	0.00019	0.00019	0.00019	0.00019	0.00019
Acute Toxicity HP6 (Dermal)	≥15%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Dermal)	≥55%	<1%	0.00084	0.00082	0.00086	0.00083	0.00084	0.00084	0.00084	0.00086	0.00089
Acute Toxicity HP6 (Inhal)	≥0.1%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Inhal)	≥0.5%	<0.1%	0.00054	0.00047	0.00055	0.00053	0.00049	0.00049	0.00062	0.00064	0.00071
Acute Toxicity HP6 (Inhal)	≥3.5%	<0.1%	0.00014	0.00014	0.00014	0.00013	0.00014	0.00014	0.00014	0.00014	0.00014
Acute Toxicity HP6 (Inhal)	≥22.5%	<1%	0.02043	0.01598	0.01497	0.02208	0.00862	0.00649	0.02110	0.02253	0.02135
Carcinogenic HP7	≥0.1%		0.00428	0.00419	0.00422	0.00488	0.00201	0.00141	0.00473	0.00484	0.00580
Carcinogenic HP7	≥0.1%		0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000
Carcinogenic HP7	≥1%		0.00433	0.00312	0.00478	0.00409	0.00284	0.00213	0.00413	0.00483	0.00723
Carcinogenic HP7 Unknown TPH with ID	≥1,000mg/kg		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Carcinogenic HP7 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
pH Corrosive HP8 pH (soil or leachate)	H8 ≥11.5		6.74	6.41	7.05	6.26	6.64	7.12	6.26	6.94	7.05
pH Corrosive HP8 pH (soil or leachate)	H8 ≤2		6.74	6.41	7.05	6.26	6.64	7.12	6.26	6.94	7.05
Toxic for Reproduction HP10	≥0.3%		0.00428	0.00419	0.00422	0.00488	0.00201	0.00141	0.00473	0.00484	0.00580
Toxic for Reproduction HP10	≥3%		0.00433	0.00312	0.00478	0.00409	0.00284	0.00213	0.00413	0.00483	0.00723
Mutagenic HP11	≥0.1%		0.00022	0.00021	0.00019	0.00037	0.00019	0.00019	0.00019	0.00019	0.00019
Mutagenic HP11 Unknown TPH with ID	≥1,000mg/kg		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mutagenic HP11 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Mutagenic HP11	≥1%		0.00433	0.00312	0.00478	0.00409	0.00284	0.00213	0.00413	0.00483	0.00723
Produces Toxic Gases HP12 Sulphide	≥1,400mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Produces Toxic Gases HP12 Cyanide	≥1,200mg/kg		1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0	1.0
Produces Toxic Gases HP12 Thiocyanate	≥2,600mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HP13 Sensitising	≥10%		0.00255	0.00197	0.00422	0.00290	0.00201	0.00141	0.00254	0.00333	0.00580

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Haswaste, developed by Dr. Iain Haslock.

Site Code and Name										
TP/WS/BH			TP107	TP114	TP103	RBH101	TP105	RBH102	TP116	TP112	TP109
Depth (m)			0.30	0.20	0.50	0.25	0.60	0.70	0.20	0.40	0.60
Envirolab reference											
Ecotoxic HP14 amended v6	≥25%	<0.1%	0.01862	0.01588	0.01156	0.02433	0.00603	0.00494	0.02116	0.02276	0.01649
Ecotoxic HP14 amended v6	≥25%	<0.1% / 1.0%	0.02340	0.01941	0.01681	0.02887	0.00929	0.00749	0.02583	0.02813	0.02431
Ecotoxic HP14 amended v6	≥25%	<0.1% / 1.0%	1.90775	1.62138	1.20682	2.47710	0.63356	0.51744	2.16108	2.32802	1.72526
Persistent Organic Pollutant (PCB, PBB or POP Pesticides)	>0.005%		0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
Persistent Organic Pollutant (Total Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000
Persistent Organic Pollutant (Individual Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000

If other contaminants need adding to Haswaste, please contact Envirolab.

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Haswaste, developed by Dr. Iain Haslock.

Site Code and Name										
TP/WS/BH		TP108	RBH105	RBH106	RBH104	RBH107				
Depth (m)		0.20	1.00	1.00	0.20	0.30				
Envirolab reference										
% Moisture	%	3.0	0.4	0.7	2.9	2.6				
pH (soil)		7.22	6.44	6.59	6.5	6.3				
pH (leachate)										
Arsenic	mg/kg	7	1	1	7	6				
Cadmium	mg/kg	0.6	0.5	0.5	0.7	0.5				
Copper	mg/kg	32	6	3	26	25				
CrVI or Chromium	mg/kg	1	1	1	1	1				
Lead	mg/kg	49	5	6	51	44				
Mercury	mg/kg	0.17	0.17	0.17	0.17	0.17				
Nickel	mg/kg	15	9	6	12	11				
Selenium	mg/kg	1	1	1	1	1				
Zinc	mg/kg	113	16	10	58	56				
Barium	mg/kg	62	27	13	67	50				
Beryllium	mg/kg	0.7	0.5	0.5	0.6	0.6				
Vanadium	mg/kg	26	15	10	25	21				
Cobalt	mg/kg									
Manganese	mg/kg									
Molybdenum	mg/kg	1	1	1	1	1				
Antimony	mg/kg	5	5	5	5	5				
Aluminium	mg/kg									
Bismuth	mg/kg									
CrIII	mg/kg	23	13	8	22	14				
Iron	mg/kg									
Strontium	mg/kg									
Tellurium	mg/kg									
Thallium	mg/kg									
Titanium	mg/kg									
Tungsten	mg/kg									
Ammoniacal N	mg/kg									
ws Boron	mg/kg	1	1	1	1	1				
PAH (Input Total PAH **OR** individual PAH results)										
Acenaphthene	mg/kg	0.01	0.01	0.01	0.04	0.05				
Acenaphthylene	mg/kg	0.01	0.01	0.01	0.01	0.01				
Anthracene	mg/kg	0.07	0.02	0.02	0.16	0.16				
Benzo(a)anthracene	mg/kg	0.07	0.04	0.04	0.19	0.21				
Benzo(a)pyrene	mg/kg	0.11	0.04	0.04	0.3	0.29				
Benzo(b)fluoranthene	mg/kg	0.09	0.05	0.05	0.14	0.21				
Benzo(ghi)perylene	mg/kg	0.07	0.05	0.05	0.15	0.16				
Benzo(k)fluoranthene	mg/kg	0.12	0.07	0.07	0.23	0.24				
Chrysene	mg/kg	0.18	0.06	0.06	0.46	0.44				
Dibenzo(ah)anthracene	mg/kg	0.04	0.04	0.04	0.04	0.04				
Fluoranthene	mg/kg	0.28	0.08	0.08	0.76	0.69				
Fluorene	mg/kg	0.01	0.01	0.01	0.01	0.01				
Indeno(123cd)pyrene	mg/kg	0.06	0.03	0.03	0.11	0.08				
Naphthalene	mg/kg	0.03	0.03	0.03	0.03	0.03				
Phenanthrene	mg/kg	0.11	0.03	0.03	0.34	0.39				
Pyrene	mg/kg	0.27	0.07	0.07	0.7	0.67				
Coronene	mg/kg									
Total PAHs (16 or 17)	mg/kg	1.43	0.08	0.08	3.58	3.59				
TPH										
Petrol	mg/kg									
Diesel	mg/kg									
Lube Oil	mg/kg									
Crude Oil										
White Spirit / Kerosene	mg/kg									
Creosote	mg/kg									
Unknown TPH with ID	mg/kg									
Unknown TPHCWG	mg/kg									
Total Sulphide	mg/kg									
Complex Cyanide	mg/kg	1	1	1	1	1				
Free (or Total) Cyanide	mg/kg									
Thiocyanate	mg/kg									
Elemental/Free Sulphur	mg/kg									
Phenols Input Total Phenols HPLC **OR** individual Phenol results.										
Phenol	mg/kg									
Cresols	mg/kg									
Xylenols	mg/kg									
Resourcinol	mg/kg									
Phenols Total by HPLC	mg/kg									
BTEX Input Total BTEX **OR** individual BTEX results.										
Benzene	mg/kg									
Toluene	mg/kg									
Ethylbenzene	mg/kg									
Xylenes	mg/kg									
Total BTEX	mg/kg									
PCBs (POPs)										
PCBs Total (eg EC7/WHO12)	mg/kg									
PBBs (POPs)										
Hexabromobiphenyl (Total or PBB153; 2,2',4,4',5,5'- if only available)	mg/kg									

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Haswaste, developed by Dr. Iain Haslock.

Site Code and Name									
TP/WS/BH		TP108	RBH105	RBH106	RBH104	RBH107				
Depth (m)		0.20	1.00	1.00	0.20	0.30				
Envirolab reference										
POPs Dioxins and Furans Input Total Dioxins and Furans **OR** individual Dioxin and Furan results.										
2,3,7,8-TeCDD	mg/kg									
1,2,3,7,8-PeCDD	mg/kg									
1,2,3,4,7,8-HxCDD	mg/kg									
1,2,3,6,7,8-HxCDD	mg/kg									
1,2,3,7,8,9-HxCDD	mg/kg									
1,2,3,4,6,7,8-HpCDD	mg/kg									
OCDD	mg/kg									
2,3,7,8-TeCDF	mg/kg									
1,2,3,7,8-PeCDF	mg/kg									
2,3,4,7,8-PeCDF	mg/kg									
1,2,3,4,7,8-HxCDF	mg/kg									
1,2,3,6,7,8-HxCDF	mg/kg									
2,3,4,6,7,8-HxCDF	mg/kg									
1,2,3,7,8,9-HxCDF	mg/kg									
1,2,3,4,6,7,8-HpCDF	mg/kg									
1,2,3,4,7,8,9-HpCDF	mg/kg									
OCDF	mg/kg									
Total Dioxins and Furans	mg/kg									
Some Pesticides (POPs unless otherwise stated)										
Aldrin	mg/kg									
α Hexachlorocyclohexane (alpha-HCH) *(leave empty if total HCH results used)*	mg/kg									
β Hexachlorocyclohexane (beta-HCH) *(leave empty if total HCH results used)*	mg/kg									
α Cis-Chlordane (alpha) ***OR*** *Total Chlordane*	mg/kg									
δ Hexachlorocyclohexane (delta-HCH) *(leave empty if total HCH results used)*	mg/kg									
Dieldrin	mg/kg									
Endrin	mg/kg									
χ Hexachlorocyclohexane (gamma-HCH) (lindane) ***OR*** *Total HCH*	mg/kg									
Heptachlor	mg/kg									
Hexachlorobenzene	mg/kg									
o,p'-DDT *(leave empty if total DDT results used)*	mg/kg									
p,p'-DDT ***OR*** *Total DDT*	mg/kg									
χ Trans-Chlordane (gamma) *(leave empty if total Chlordane results used)*	mg/kg									
Chlordecone (kepone)	mg/kg									
Pentachlorobenzene	mg/kg									
Mirex	mg/kg									
Toxaphene (camphechlor)	mg/kg									
Tin										
Tin *(leave empty if Organotin and Tin excl Organotin results used)*	mg/kg									
Organotin										
Dibutyltin; DiBT	mg/kg									
Tributyltin; TriBT	mg/kg									
Triphenyltin; TriPT	mg/kg									
Tetrabutyltin; TeBT	mg/kg									
Tin excluding Organotin										
Tin excl Organotin	mg/kg									

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Haswaste, developed by Dr. Iain Haslock.

Site Code and Name									
TP/WS/BH		TP108	RBH105	RBH106	RBH104	RBH107			
Depth (m)		0.20	1.00	1.00	0.20	0.30			
Envirolab reference									
Asbestos in Soil	Thresholds								
Asbestos detected in Soil (enter Y or N)	Y	N	N	N	N	N			
		If Asbestos in Soil above is "Y", the soil is Hazardous Waste HP5 and HP7							
Asbestos % Composition in Soil (Matrix Loose Fibres or Microscopic Identifiable Pieces only)	see "Carc HP7 % Asbestos in Soil (Fibres)" below								
%									
Carcinogenic HP7 % Asbestos in Soil (fibres or micro pieces) *Please be advised, if the calculation cell is "0.00000" DOES NOT MEAN asbestos testing has been undertaken and the result is zero.*	≥0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
		If Asbestos in Soil above is "Y", but Asbestos % above is "<0.1%", the soil is Non Hazardous Waste. You can only use Asbestos % results where loose fibres or micro pieces are only present. You cannot use Asbestos % results when visual identifiable pieces are present.							
Asbestos Identifiable Pieces visible with the naked eye detected in the Soil (enter Y or N)	Y								

If visual identifiable pieces of asbestos are present, you cannot use Asbestos % results and the whole soil sample is Hazardous Waste HP5 and HP7 Construction material containing Asbestos 17 06 05.
Therefore, if Asbestos in Soil above is "Y", the Asbestos % above is "<0.1%", but the Asbestos Identifiable Pieces visible with the naked eye is "Y", the soil is Hazardous Waste.

Identifiable Pieces are Cement, Fragments, Board, Rope etc. ie anything ACM that is not Loose Fibres.
All visual asbestos pieces need to be removed leaving only fibres (or micro pieces) with an Asbestos % Composition in Soil result of <0.1% for the soil to become non-hazardous waste.

Hazardous Property	Thresholds	Cut Off Value	If cells below turn yellow and the text turns red, the samples should be classified as Hazardous Waste.								
Corrosive HP8	≥5%	<1%	0.00710	0.00301	0.00161	0.00759	0.00583	0.00000	0.00000	0.00000	0.00000
Irritant HP4	≥10%	<1%	0.00889	0.00347	0.00224	0.00807	0.00716	0.00000	0.00000	0.00000	0.00000
Irritant HP4	≥20%	<1%	0.00709	0.00289	0.00194	0.00608	0.00580	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥1%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥20%		0.00449	0.00266	0.00177	0.00432	0.00364	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥1%		0.00449	0.00266	0.00177	0.00432	0.00364	0.00000	0.00000	0.00000	0.00000
Specifc Target Organ Toxicity HP5	≥10%		0.00475	0.00050	0.00060	0.00495	0.00428	0.00000	0.00000	0.00000	0.00000
Aspiration Toxicity HP5	≥10%		0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Oral)	≥0.1%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Oral)	≥0.25%	<0.1%	0.00091	0.00015	0.00015	0.00091	0.00079	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Oral)	≥5%	<0.1%	0.00665	0.00325	0.00185	0.00709	0.00546	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Oral)	≥25%	<1%	0.01670	0.00651	0.00477	0.01577	0.01412	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Dermal)	≥0.25%	<0.1%	0.00002	0.00002	0.00002	0.00002	0.00002	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Dermal)	≥2.5%	<0.1%	0.00019	0.00019	0.00019	0.00019	0.00019	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Dermal)	≥15%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Dermal)	≥55%	<1%	0.00083	0.00084	0.00084	0.00084	0.00082	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Inhal)	≥0.1%	<0.1%	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Inhal)	≥0.5%	<0.1%	0.00057	0.00049	0.00048	0.00054	0.00052	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Inhal)	≥3.5%	<0.1%	0.00014	0.00014	0.00014	0.00014	0.00014	0.00000	0.00000	0.00000	0.00000
Acute Toxicity HP6 (Inhal)	≥22.5%	<1%	0.02171	0.00833	0.00520	0.02097	0.01771	0.00000	0.00000	0.00000	0.00000
Carcinogenic HP7	≥0.1%		0.00475	0.00181	0.00120	0.00495	0.00428	0.00000	0.00000	0.00000	0.00000
Carcinogenic HP7	≥0.1%		0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000	0.000000000
Carcinogenic HP7	≥1%		0.00449	0.00266	0.00177	0.00432	0.00364	0.00000	0.00000	0.00000	0.00000
Carcinogenic HP7 Unknown TPH with ID	≥1,000mg/kg		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Carcinogenic HP7 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
pH Corrosive HP8 pH (soil or leachate)	H8 ≥11.5		7.22	6.44	6.59	6.50	6.30	0.00	0.00	0.00	0.00
pH Corrosive HP8 pH (soil or leachate)	H8 ≤2		7.22	6.44	6.59	6.50	6.30	0.00	0.00	0.00	0.00
Toxic for Reproduction HP10	≥0.3%		0.00475	0.00181	0.00120	0.00495	0.00428	0.00000	0.00000	0.00000	0.00000
Toxic for Reproduction HP10	≥3%		0.00449	0.00266	0.00177	0.00432	0.00364	0.00000	0.00000	0.00000	0.00000
Mutagenic HP11	≥0.1%		0.00019	0.00019	0.00019	0.00035	0.00035	0.00000	0.00000	0.00000	0.00000
Mutagenic HP11 Unknown TPH with ID	≥1,000mg/kg		0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Mutagenic HP11 b(a)p marker test (Unknown TPH with ID only) Cell only applicable if TPH >1,000mg/kg	≥0.01%		#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!
Mutagenic HP11	≥1%		0.00449	0.00266	0.00177	0.00432	0.00364	0.00000	0.00000	0.00000	0.00000
Produces Toxic Gases HP12 Sulphide	≥1,400mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Produces Toxic Gases HP12 Cyanide	≥1,200mg/kg		1.0	1.0	1.0	1.0	1.0	0.0	0.0	0.0	0.0
Produces Toxic Gases HP12 Thiocyanate	≥2,600mg/kg		0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
HP13 Sensitising	≥10%		0.00294	0.00181	0.00120	0.00235	0.00216	0.00000	0.00000	0.00000	0.00000

Table 3 of the CLP, CL Inventory, ATPs, IARC, Concawe, MSDSs, REACH + Pesticide Properties databases. Worst case REACH + MSDS's used for "*" STOT + Acute Toxicity.

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Haswaste, developed by Dr. Iain Haslock.

Site Code and Name										
TP/WS/BH			TP108	RBH105	RBH106	RBH104	RBH107				
Depth (m)			0.20	1.00	1.00	0.20	0.30				
Envirolab reference											
Ecotoxic HP14 amended v6	≥25%	<0.1%	0.02648	0.00557	0.00397	0.01919	0.01787	0.00000	0.00000	0.00000	0.00000
Ecotoxic HP14 amended v6	≥25%	<0.1% / 1.0%	0.03147	0.00866	0.00616	0.02396	0.02197	0.00000	0.00000	0.00000	0.00000
Ecotoxic HP14 amended v6	≥25%	<0.1% / 1.0%	2.69617	0.58654	0.41762	1.96465	1.82652	0.00000	0.00000	0.00000	0.00000
Persistent Organic Pollutant (PCB, PBB or POP Pesticides)	>0.005%		0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000	0.00000000
Persistent Organic Pollutant (Total Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000
Persistent Organic Pollutant (Individual Dioxins+Furans)	>0.0000015%		0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000	0.0000000000

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RoC CONSULTING

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