21 Soil chemistry

21.1 BGS Estimated Background Soil Chemistry

Records within 50m	5

The estimated values provide the likely background concentration of the potentially harmful elements Arsenic, Cadmium, Chromium, Lead and Nickel in topsoil. The values are estimated primarily from rural topsoil data collected at a sample density of approximately 1 per 2 km^2. In areas where rural soil samples are not available, estimation is based on stream sediment data collected from small streams at a sampling density of 1 per 2.5 km^2; this is the case for most of Scotland, Wales and southern England. The stream sediment data are converted to soil-equivalent concentrations prior to the estimation.

Location	Arsenic	Bioaccessible Arsenic	Lead	Bioaccessible Lead	Cadmium	Chromium	Nickel
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
On site	**15 - 25 mg/kg**	**No data**	**100 mg/kg**	**60 mg/kg**	**1.8 mg/kg**	**60 - 90 mg/kg**	**15 - 30 mg/kg**
46m NE	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg
49m W	15 - 25 mg/kg	No data	100 mg/kg	60 mg/kg	1.8 mg/kg	60 - 90 mg/kg	15 - 30 mg/kg

This data is sourced from the British Geological Survey.

21.2 BGS Estimated Urban Soil Chemistry

Records within 50m	0

Estimated topsoil chemistry of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc and bioaccessible Arsenic and Lead in 23 urban centres across Great Britain. These estimates are derived from interpolation of the measured urban topsoil data referred to above and provide information across each city between the measured sample locations (4 per km^2).

This data is sourced from the British Geological Survey.

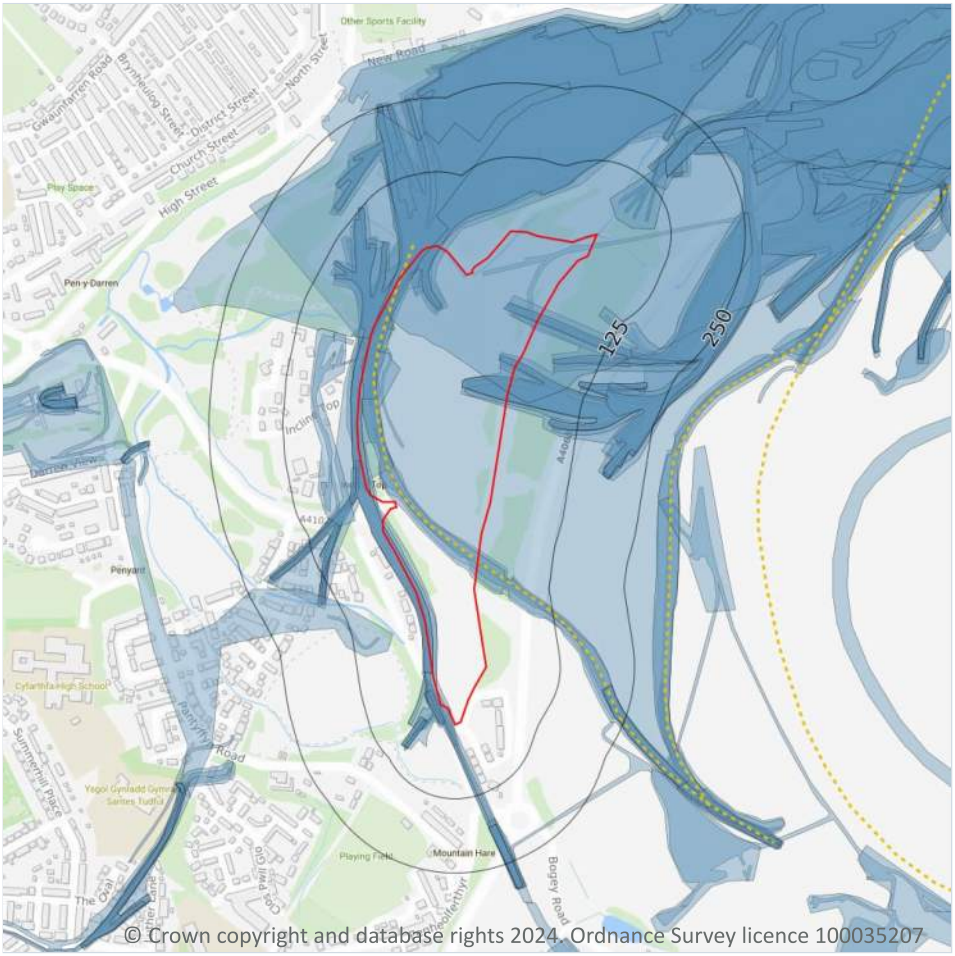
21.3 BGS Measured Urban Soil Chemistry

Records within 50m	0

The locations and measured total concentrations (mg/kg) of Arsenic, Cadmium, Chromium, Copper, Nickel, Lead, Tin and Zinc in urban topsoil samples from 23 urban centres across Great Britain. These are collected at a sample density of 4 per km^2.

This data is sourced from the British Geological Survey.

22 Railway infrastructure and projects



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Site Outline

Search buffers in metres (m)

- Crossrail 1 Stations
- Crossrail 1 Route
- Crossrail 2 Stations
- Crossrail 2 Route
- Crossrail 2 Worksites
- Crossrail 2 Safeguarding
- Crossrail 2 Headhouses
- Railway stations
- Active railways
- Active tunnels
- Abandoned railways
- Historic railways
- Historic tunnels
- Underground stations
- Underground Lines
- Royal Mail tunnels
- HS2 optimised route
- HS2 Stations
- HS2 Depots
- HS2 Surface Safeguarding
- HS2 Subsurface Safeguarding

22.1 Underground railways (London)

Records within 250m	0

Details of all active London Underground lines, including approximate tunnel roof depth and operational hours.

This data is sourced from publicly available information by Groundsure.

22.2 Underground railways (Non-London)

Records within 250m	0

Details of the Merseyrail system, the Tyne and Wear Metro and the Glasgow Subway. Not all parts of all systems are located underground. The data contains location information only and does not include a depth assessment.

This data is sourced from publicly available information by Groundsure.

22.3 Railway tunnels

Records within 250m	0

Railway tunnels taken from contemporary Ordnance Survey mapping.

This data is sourced from the Ordnance Survey.

22.4 Historical railway and tunnel features

Records within 250m	53

Railways and tunnels digitised from historical Ordnance Survey mapping as scales of 1:1,250, 1:2,500, 1:10,000 and 1:10,560.

Features are displayed on the Railway infrastructure and projects map on **page 208 >**

Location	Land Use	Year of mapping	Mapping scale
On site	**Railway Sidings**	**1956**	**1250**
On site	**Railway Sidings**	**1958**	**2500**
On site	**Railway Sidings**	**1963**	**2500**
On site	**Railway Sidings**	**1988**	**2500**
On site	**Tramway Sidings**	**1875**	**2500**
On site	**Railway Sidings**	**1919**	**2500**
On site	**Railway Sidings**	**1875**	**2500**
On site	**Railway Sidings**	**1900**	**2500**
On site	**Railway Sidings**	**1948**	**10560**
On site	**Railway Sidings**	**1903**	**10560**
On site	**Railway Sidings**	**1901**	**10560**
On site	**Railway Sidings**	**1938**	**10560**
On site	**Railway Sidings**	**1915**	**10560**
On site	**Railway Sidings**	**1922**	**10560**
On site	**Railway Sidings**	**1875**	**10560**
On site	**Railway Sidings**	**1965**	**10560**
2m W	Railway Sidings	1915	10560

Location	Land Use	Year of mapping	Mapping scale
5m S	Railway Sidings	1948	10560
8m S	Railway Sidings	1875	2500
10m SW	Railway Sidings	1922	10560
11m S	Railway Sidings	1915	10560
27m NW	Railway Sidings	1875	2500
31m NW	Railway Sidings	1875	10560
36m S	Railway Sidings	1922	10560
37m S	Railway Sidings	1915	10560
45m W	Tramway Sidings	1875	2500
50m SW	Railway Sidings	1875	2500
50m NW	Railway Sidings	1875	2500
57m S	Railway Sidings	1875	10560
61m NE	Railway Sidings	1956	1250
62m NE	Railway Sidings	1958	2500
62m NE	Railway Sidings	1963	2500
67m N	Railway Sidings	1974	1250
80m S	Railway Sidings	1875	2500
81m N	Railway Sidings	1974	1250
83m SW	Railway Sidings	1919	2500
85m NE	Railway Sidings	1901	10560
92m SW	Railway Sidings	1919	2500
95m NE	Railway Sidings	1900	2500
124m N	Tunnel	1875	2500
127m NE	Railway Sidings	1948	10560
152m NE	Railway Sidings	1977	10000
152m NE	Railway Sidings	1982	10000
173m S	Railway Sidings	1901	10560
174m NE	Railway Sidings	1972	1250

Location	Land Use	Year of mapping	Mapping scale
181m S	Railway Sidings	1922	10560
182m S	Railway Sidings	1900	2500
200m SE	Railway Sidings	1922	10560
201m N	Railway Sidings	1958	2500
201m N	Railway Sidings	1963	2500
201m SE	Railway Sidings	1900	2500
202m N	Railway Sidings	1956	1250
202m SE	Railway Sidings	1919	2500

This data is sourced from Ordnance Survey/Groundsure.

22.5 Royal Mail tunnels

Records within 250m	0

The Post Office Railway, otherwise known as the Mail Rail, is an underground railway running through Central London from Paddington Head District Sorting Office to Whitechapel Eastern Head Sorting Office. The line is 10.5km long. The data includes details of the full extent of the tunnels, the depth of the tunnel, and the depth to track level.

This data is sourced from Groundsure/the Postal Museum.

22.6 Historical railways

Records within 250m	1

Former railway lines, including dismantled lines, abandoned lines, disused lines, historic railways and razed lines.

Features are displayed on the Railway infrastructure and projects map on **page 208 >**

Location	Description
On site	**Dismantled**

This data is sourced from OpenStreetMap.

22.7 Railways

Records within 250m	0

Currently existing railway lines, including standard railways, narrow gauge, funicular, trams and light railways.

This data is sourced from Ordnance Survey and OpenStreetMap.

22.8 Crossrail 1

Records within 500m	0

The Crossrail railway project links 41 stations over 100 kilometres from Reading and Heathrow in the west, through underground sections in central London, to Shenfield and Abbey Wood in the east.

This data is sourced from publicly available information by Groundsure.

22.9 Crossrail 2

Records within 500m	0

Crossrail 2 is a proposed railway linking the national rail networks in Surrey and Hertfordshire via an underground tunnel through London.

This data is sourced from publicly available information by Groundsure.

22.10 HS2

Records within 500m	0

HS2 is a proposed high speed rail network running from London to Manchester and Leeds via Birmingham. Main civils construction on Phase 1 (London to Birmingham) of the project began in 2019, and it is currently anticipated that this phase will be fully operational by 2026. Construction on Phase 2a (Birmingham to Crewe) is anticipated to commence in 2021, with the service fully operational by 2027. Construction on Phase 2b (Crewe to Manchester and Birmingham to Leeds) is scheduled to begin in 2023 and be operational by 2033.

This data is sourced from HS2 ltd.

Data providers

Groundsure works with respected data providers to bring you the most relevant and accurate information. To find out who they are and their areas of expertise see https://www.groundsure.com/sources-reference ↗.

Terms and conditions

Groundsure's Terms and Conditions can be accessed at this link: www.groundsure.com/terms-and-conditions-april-2023/ ↗.

Appendix F

CORRESPONDENCE

Public

Hill, Xan

From: Data Distribution <datadistribution@cyfoethnaturiolcymru.gov.uk>
Sent: 02 September 2024 10:57
To: Hill, Xan
Subject: RE: Environmental Enquiry: Goat Mill Road, Dowlais, Merthyr Tydfil CF48 3TD NRW:06718144

Dear Xan.

Thank you for your data request which has been passed to the correct team. For any future data requests, please use our email.

Please see below for some answers to your questions:

Landfill data – Data catalogue | DataMapWales (gov.wales)
Welsh Permitted Waste Operations | DataMapWales (gov.wales)

Public register if the above shows any sites of interest – Natural Resources Wales / Check for a permit, licence or exemption (Public Register)

Pollution incident data – Environmental Pollution Incidents | DataMapWales (gov.wales)

Abstractions - Licenced Water Abstractions | DataMapWales (gov.wales)

Water quality – UK Water Quality Sampling Harmonised Monitoring Scheme Detailed Data | DataMapWales (gov.wales)
NRW Water Quality Archive | DataMapWales (gov.wales)
Data catalogue | DataMapWales (gov.wales)

For any environmental issues or details of any soil or groundwater remedial works, please check out any sites within your search on our online public register.

British Geological Survey dataset hub - Datasets - British Geological Survey (bgs.ac.uk)

For any groundwater quality/levels not available on the above dataset, please fill in the information below and return to us:

1. Data Type – Water quality
2. Location -
3. Date From -
4. Date To -
5. Parameters of interest –
6. Site ID – only if known. Water Framework Directive monitoring sites can be found on Water Watch Wales (naturalresourceswales.gov.uk). Select Cycle 3 (2021) Rivers and Waterbodies Map and tick the Surface Water Monitoring Layer to show monitoring sites. Water quality sites are shown in red.

Please also accept this as an acknowledgement that your request has been received.

It can take up to 20 working days to supply data that is not available online, therefore if you have any queries on your data request, please contact us.

For further information on what you can expect from us, please visit our website:

Natural Resources Wales / Contact us or call the Customer Hub on 0300 065 3000 (open 9am-5pm, Monday to Friday).

We look forward to hearing form you in due course.

Yn gywir/ Yours sincerely
Enw / **Name Michelle Lewis**
Teitl swydd / Job title Data Licensing Officer
Adran / Department Customer, Communications and Commercial
Rhif ffôn / Phone number 07917243096
Dyddiau gweithio (os yn berthnasol) / Working days Mon-Fri
Yn Ardystiedig o ran Llythrennedd Carbon/Certified Carbon Literate

Croesewir gohebiaeth yn Gymraeg a byddwn yn ymateb yn Gymraeg, heb i hynny arwain at oedi.
Correspondence in Welsh is welcomed, and we will respond in Welsh without it leading to a delay.



---------- Original Message ----------
From: Hill, Xan <xan.hill@wsp.com>;
Received: Wed Aug 28 2024 15:55:54 GMT+0100 (British Summer Time)
To: Enquiries Queue <enquiries@cyfoethnaturiolcymru.gov.uk>;
Cc: Alex.Mann@wsp.com; neil.greenwood@wsp.com;
Subject: Environmental Enquiry: Goat Mill Road, Dowlais, Merthyr Tydfil CF48 3TD

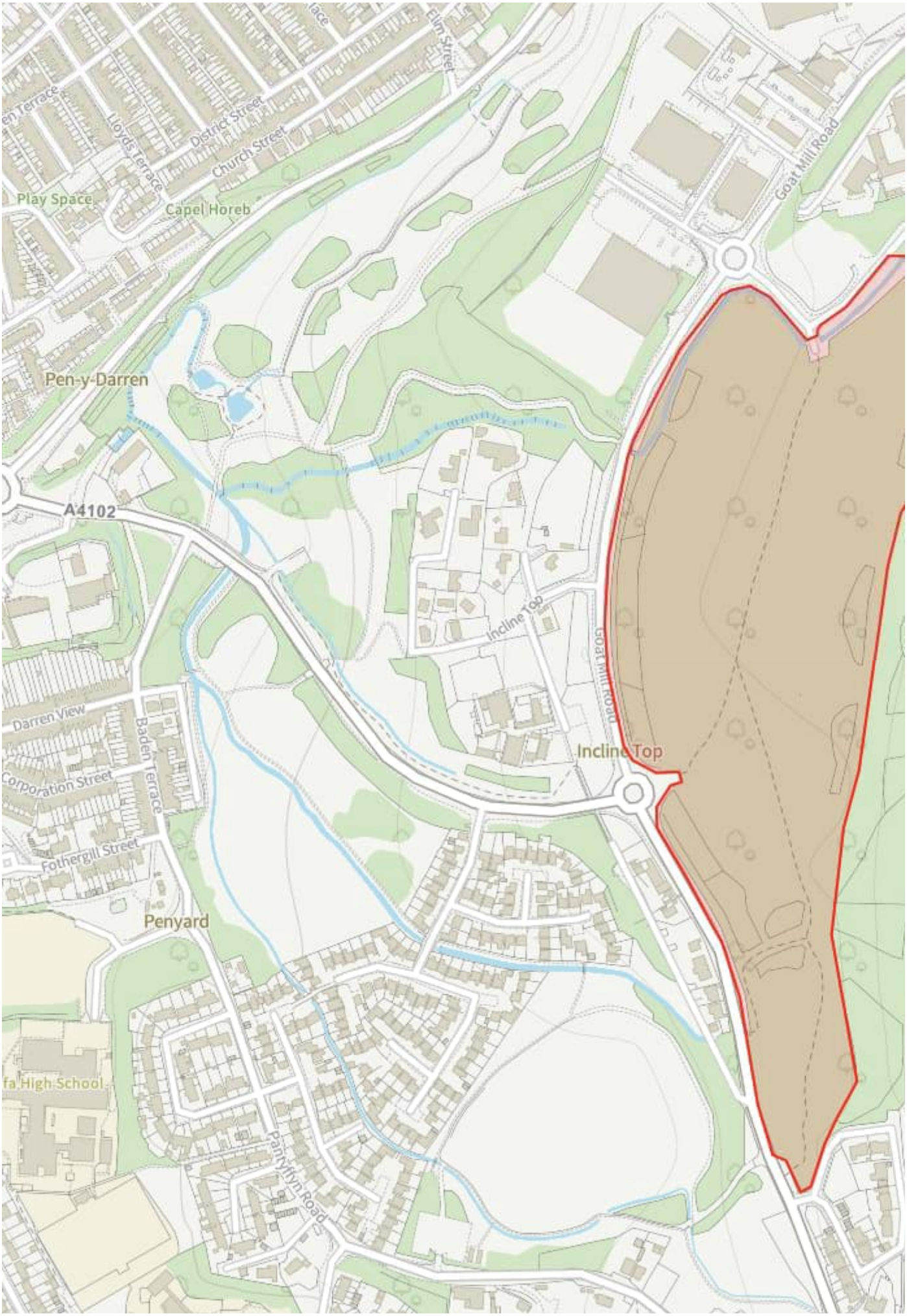
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Caution: This email originated from outside of the organisation. Do not click links, open attachments or scan QR Codes unless you recognise the sender and know the content is safe.

Good afternoon,

Environmental Enquiry: Goat Mill Road, Dowlais, Merthyr Tydfil CF48 3TD


Play Space
Capel Horeb
Church Street
District Street
Lloyds Terrace
Elm Street
Goat Mill Road
Pen-y-Darren
A4102
Incline Top
Darren View
Baden Terrace
Corporation Street
Fothergill Street
Penyard
Pantyffynn Road

WSP are currently undertaking a Preliminary Risk Assessment on the above site and I would be grateful if you could supply me with any information you may have with regards to any environmental issues associated with the above named site.

We would like to obtain any relevant information that Natural Resources Wales may hold with regard to water resources and potential for, or actual contaminated land, on the site or in the vicinity, specifically:

1. Landfill sites within 500m of the subject site, including:
   - licence holder
   - location of landfill/grid reference
   - nature of fill material
   - dates of operation
   - details of any leachate/landfill gas problems and gas monitoring results if available

2. Pollution incidents to controlled waters/known areas of contaminated land within 500m of the subject site, including:
   - location/grid reference
   - previous uses
   - nature/source of pollution
   - any further details

3. Private water supplies within 500m of the subject site, including:
   - location/grid reference
   - details of source and abstraction purpose

4. Records of Water Quality within 500m of the above site, including:
   - Groundwater quality of aquifer beneath the site;
   - Groundwater depth within superficial/drift strata and the underlying bedrock;
   - Any environmental issues associated with the site. Anything that could have led to contamination of soil or groundwater either beneath the site or within a 500m radius; and

5. Details of any soil or groundwater remedial works carried out at the site or within 500m of the site; and

6. Records of any subsidence/instability in the area.

Please do not hesitate to contact me if you require any further information, my contact details are listed below. I understand that there may be a charge for this information and would be grateful if you could contact me advising me of any costs.

Kind Regards,

Xan

Xan Hill
Assistant Geo-Environmental Consultant
Geology and Physical Geography (Hons)

M+ (0) 7768306934

WSP in the UK
Unit 9, The Chase
John Tate Road

Hertford
SG13 7NN

wsp.com

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1 Capital Quarter
Tyndall Street
Cardiff
CF10 4BZ

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