

Nenthead Mine Water Treatment Scheme

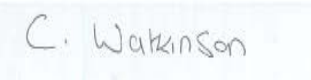
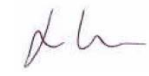


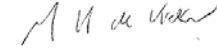
Phase 2 Geo-Environmental and Geotechnical Ground
Investigation Report

Coal Authority

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February 2020

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1. Introduction

1.1 Appointment

AECOM Infrastructure & Environment UK Ltd (“AECOM”) was commissioned by the Coal Authority (“the Client”) to undertake a geo-environmental and geotechnical investigation and assessment for an area identified for a potential mine water treatment site and associated infrastructure at Nenthead, Cumbria.

Following completion of the Phase 1 Geo-Environmental & Geotechnical Desk Based Assessment (“The Desk Study”), the Client instructed AECOM to manage the intrusive investigation and interpret the results. The location and site boundaries of the proposed site are shown on Figure 1.

The scope of works for the Ground Investigation is presented in AECOM's Nenthead Mine Water Treatment Scheme Investigation Tender, dated 8th March 2019, reference: MWTS-AEC-NC-XX-SP-Z-3001.

1.2 Background

The EU Water Framework Directive sets out a legislative framework for analysis planning and management of water bodies that is delivered through UK River Basin Management plans (RBMPs). The Northumbria RBMP states that the River Nent is failing to achieve its ‘Ecological Potential’ primarily due to high levels of zinc, cadmium (‘a priority hazardous substance’) and lead (a ‘hazardous substance’). The high metal levels are primarily due to discharges from former mine workings. A significant source of metals to the River Nent Catchment is the discharge from the former Caplecleugh mine adit (Caplecleugh horse level) and Rampgill Mine adit (Rampgill Mine horse level).

The Department for Environment, Food and Rural Affairs (Defra) and the North East Local Enterprise Partnership (NE LEP) have allocated funding for the Coal Authority (CA) and the Environment Agency (EA) to implement a program of measures to minimise pollution from abandoned metal mines (the Water and Abandoned metal Mines programme (WAMM)). The current scheme forms part of the WAMM programme.

AECOM has been appointed by the Coal Authority to undertake the feasibility and outline design for a mine water treatment scheme (MWTS) at Nenthead with the aim of reducing the metal loading (lead, zinc and cadmium) within the mine water discharge from the point source contributors to the failure of the River Nent, (including Caplecleugh Mine adit portal) by between 70% and 90%. It is intended that this will improve the quality of the River Nent and ensure it meets its required objective of achieving overall ‘Good Status’ by 2027.

The construction of a MWTS is planned for completion by 2022.

To achieve the project objectives the following work was undertaken:

- **Phase 1 Geo-Environmental & Geotechnical Desk Based Assessment (60596575-ACM-RP-EM-00001_A, March 2019)** – A review of accessible information, including historical maps and geo-environmental data on and surrounding the Site. This was used to develop potential developmental constraints / hazards, and these have been targeted during the ground investigation works.
- **EIA Scoping Report (May 2019)** - An EIA was undertaken for an Environmental Statement (ES) to be produced and submitted in support of the Planning Application for the Proposed Development. The EIA assesses the likely significant effects the Proposed Development could have on the site and surrounding area through baseline studies and technical assessments of issues which require detailed assessment. The **EIA Scoping Report (May 2019)** proposes mitigation measures and further monitoring, as required. This information will be used in the design of the current Phase 2 – geo-environmental and geotechnical ground investigation.
- **Reporting** – A Phase 2 - geo-environmental and geotechnical ground investigation report has been prepared.

The Site was split into 4 sections and assessed as part of the current phase 2 geo-environmental and geotechnical ground investigation report and are collectively referred to as 'the Site':

- Section 1 East Bank: Car park and pump shaft
- Section 2 West Bank: Caplecleugh mine adit
- Section 3 Pipeline Route and access to Mine Water Treatment Site (Zone 1 -3)
- Section 4 Mine Water Treatment Site.

A proposed general arrangement for the mine water treatment site (MWTS) is included as Figure 2.

1.3 Project Objectives

The objectives of the geo-environmental and geotechnical investigation and assessment were to:

- Provide characteristic parameters for the various strata encountered for geotechnical design of the proposed elements of the scheme.
- Provide sufficient land contamination test data to advise on risks to human health and controlled waters and characterise the waste properties of the materials encountered to inform the design and to support the submission of an outline planning application for the proposed development.

The information gathered during the investigation will be specifically used to determine the ground conditions at all of 'the Site' locations noted above including:

- Determine the ground conditions at the Nenthead Mine capture structure (Section 2 – western bank of River Nent, Caplecleugh Mine Adit) and define the course of a recorded culvert beneath the visitor car park (Section 1 –eastern bank of River Nent);
- Determine the ground conditions beneath the proposed pumping station and adjacent visitor car park (Section 1, eastern bank of River Nent);
- Investigate the near surface ground conditions beneath the pipeline route (Section 3, Zones 1 – 3);
- Determine the ground conditions at the location of Section 4, MWTS compost-based treatment ponds, wetlands and other infrastructure proposed at the Mine water treatment works site. In particular investigate the stability of the existing slopes and determine the suitability (geochemical and geotechnical suitability) of material to be excavated for the settlement ponds as fill;
- Determine the ground conditions beneath the proposed buildings at the mine water treatment works;
- Determine the groundwater levels and the groundwater chemistry (for both land contamination and geotechnical purposes) at the location of the pumping station;
- Determine the groundwater levels at the location of the proposed lined mine water treatment ponds and a proposed lined wetland area;
- Determine whether there are any issues regarding ground gas in the vicinity of the pumping station, pump sump and proposed buildings at the Mine Water Treatment site;
- Characterise the geo-environmental properties of the materials encountered across the site assessing risks to human health and controlled waters;
- Determine the waste classification of materials encountered to inform the design of the scheme;.
- Validate or revise of the initial Conceptual Model (iCM) based on geo-environmental findings.

2. Background and Setting

This section summarises data primarily from the Desk Study (March 2019) with excerpts from the EIA (May 2019).

2.1 Site Description

The site is located in a remote rural area in the vicinity of the existing Nenthead Mines Visitor Centre. Caplecleugh Adit and the proposed pumping station are located close to / in the visitor car park for the Nenthead Mines Visitor centre. The proposed mine water treatment site is located to the east of the visitor centre, up the valley. The proposed Pipeline route runs eastward from the pumping station to Mill Cottage Bunk House (zone 1), it then runs south of the (of Handsome Mea Reservoir to the proposed mine water treatment pond site.

The Site is centred on National Grid Reference (NGR) 378817, 543168. For the purpose of this report and data gathering process an area of approximately 20 hectares (the site) is defined by the red line boundary shown in Figure 1.

The majority of the site within this red line boundary currently comprises open upland including grassland and post-industrial land with public access. A formal Public Right of Way (PRoW) footpath crosses the site from north to south and a bridleway comes up from the visitor centre and joins the quarry track which continues up to Flinty Fells. Access tracks and car parks are present along the site. The Flinty Fell Quarry access track runs from the A689 to the north along to the south of the site, this is in regular use.

A site reconnaissance/ walkover was carried out at the site on 4th January 2019, details can be found in the Phase 1 Geo-Environmental & Geotechnical Desk Based Assessment (60596575-ACM-RP-EM-00001_A, March 2019).

2.2 Summary and conclusions from the Phase 1 Geo-Environmental & Geotechnical Desk Based Assessment (60596575-ACM-RP-EM-00001_A, March 2019).

A summary of the findings from the Phase 1 Geo-Environmental & Geotechnical Desk Based Assessment (60596575-ACM-RP-EM-00001_A, March 2019) and associated conclusions relating to the current Phase 2 – geo-environmental and geotechnical ground investigation is presented below (Table 2 1). A detailed review of the desk study findings can be found in the Phase 1 Geo-Environmental & Geotechnical Desk Based Assessment (60596575-ACM-RP-EM-00001_A, March 2019).

2.2.1 Anticipated geotechnical ground model used as basis for ground investigation

The following is based on the information available from the desk study and used in the scoping of the ground investigation. The Alston Formation referred to comprises interbedded sandstone, siltstone, mudstone and limestone.

Section 1 – Eastern Bank of River Nent: Proposed Pumping station and Visitor Car Park

- Compacted gravel (Hardcore) surfacing over made ground, in turn overlying superficial deposits comprising alluvium and/or residual soil overlying bedrock of the Alston Formation, thickness of made ground and superficial deposits unproven but anticipated to be relatively thin (<5m).

Section 2 – Western Bank of River Nent: Caplecleugh Mine Adit

- Alluvium overlying bedrock of the Alston Formation, thickness of alluvium not known

Section 3 – The Pipeline Route and Access to Mine Water Treatment Site – This section is split into three zones,

Zone 1 Pumping station at Nenthead Mines Visitor Centre to Mill Cottage Bunkhouse

- Compacted gravel surfacing overlying granular made ground comprising the sub base for the existing vehicle track and embankment fill, overlying an unknown thickness of superficial deposits comprising glacial till and/ or residual soil, overlying bedrock of the Alston Formation.

Zone 2 Along River Nent beyond Mill Cottage Bunkhouse

- Topsoil, locally organic with peat, overlying Superficial deposits, comprising glacial till and/ or residual soil overlying bedrock of the Alston Formation

Zone 3 Access valley to Mine Water Treatment Site (MWTS)

- Topsoil, locally organic with superficial deposits comprising glacial till and/or residual soil overlying bedrock of the Alston Formation.

Section 4 - Mine Water Treatment Site (MWTS)

- Topsoil, locally organic with superficial deposits comprising glacial till and/or residual soil overlying bedrock of the Alston Formation, thickness of superficial deposits not known, but assumed to be up to 10m thick for scoping the ground investigation.

2.2.2 Anticipated geo-environmental conditions used as basis for ground investigation

The main geo-environmental findings, are included in the preliminary iCM table 3.11.

Made ground: Given the historical mining activity (since 1859) on the site there is likely to be made ground present throughout the Site. There are also spoil tips present at the MWTS (section 4), the spoil tips will comprise granular material ranging from sand to cobble size rock fragments with occasional metal ore or gangue material. The mine tips at Nenthead have commonly been subject to secondary working to remove ore left by earlier less effective extraction and only a little metalliferous ore is likely to be found in the spoil tips. The ground investigation will identify the location, depth and geo-environmental and geotechnical characterisation of made ground throughout the site.

Superficial Till deposits (secondary undifferentiated): if present, is are likely to be limited, forming a thin mantle across the majority of the site, comprising mostly residual soil from the weathering of the rocks of the Stainmore Formation. Shallow groundwater is unlikely to be present as limited superficial deposits present. Perched groundwater within Made Ground is considered unlikely to be in hydraulic connectivity with the surface waters. Groundwater Vulnerability Mapping shows that soils overlying Secondary Aquifers have a low leaching potential. Further information can be found in the Phase 1 Geo environmental Report..

3. Initial Land Contamination Conceptual Model

The initial CM and Preliminary Risk Assessment (PRA) is reproduced as Table 3.11. For details of the full assessment please see the Phase 1 Geo-Environmental & Geotechnical Desk Based Assessment (March 2019).

3.1 Preliminary Risk Assessment

A qualitative 'source–pathway–receptor' approach was used to assess the potential risks of harm being caused to human, environmental, or controlled water receptors from contamination sources on or in the vicinity of the site, via transport pathways. Risks to receptors have been assessed using the guidelines given in CIRIA document 552 'Contaminated Land Risk Assessment, A Guide to Good Practice,' (CIRIA Report C552) where the probability and consequences of contamination risks being realised are evaluated.

Table 3.11 presents the PRA for the proposed development based on the Phase 1 Desk Study and EIA Scoping Report, where potential risks are considered to be moderate or greater these are considered worthy of further investigation.

Table 3.1 1 Potential Sources, Pathways and Receptors

Source	Pathway	Receptor	Potential Severity	Likelihood of Occurrence	Potential Risk	Linkage Reference	Justification
Made Ground & extraction wastes, including asbestos. Smelting Mill and associated infrastructure including flue and cisterns. Railway and sidings.	Direct ingestion	Human Health: Current and future Site Users	Medium	Low	Moderate / Low Risk	L1	Site workers and members of the public are potentially sensitive receptors. Currently the site is used for recreational purposes only, therefore risk of direct ingestion is low.
		Human Health: Construction workers	Medium	Low	Moderate / Low Risk	L2	During excavation and movement of arisings throughout the construction phase there is the potential for contact. Appropriate dust suppression techniques and PPE should be employed to reduce this likelihood to low.
		Ecosystem: Fauna and Flora	Medium	Low	Moderate / Low Risk	L3	Sensitive Calaminarian Grassland has been identified from the pumping station site, along the River Nent and on land below (to the west of) the Handsome Mea reservoir. Special considerations are advised during the construction and operation phases.
	Direct contact	Buildings and Infrastructure	Medium	Unlikely	Low Risk	L4	Made ground is likely to be present beneath the majority of the site given historical land uses. The appropriate specification of materials should be used for supply pipes, buried services and gas / damp membranes. The appropriate specification of materials should be used for supply pipes, buried services and gas / damp membranes. Any future foundations are likely to consist of shallow foundations.
		Human Health: Adjacent residents	Medium	Low	Moderate / Low Risk	L5	Consumption of produce by residents in adjacent residential properties is considered unlikely considering the soil quality
	Indirect ingestion	Ecosystem: Fauna and Flora	Medium	Low	Moderate / Low Risk	L6	Sensitive Calaminarian Grassland has been identified from the pumping station site, along the River Nent and on land below (to the west of) the Handsome Mea reservoir. Special considerations are advised during the construction and operation phases.
		Indirect Inhalation of soil particulates and vapour	Human Health: Current and future site users	Medium	Unlikely	Low Risk	L7
	Human Health: Construction workers		Medium	Low	Moderate / Low Risk	L8	During the construction phase it is likely that the Made Ground (if present) across the site will be exposed. Any Made Ground found to be

Source	Pathway	Receptor	Potential Severity	Likelihood of Occurrence	Potential Risk	Linkage Reference	Justification
							contaminated with asbestos should be removed / capped prior to any potential development.
	Indirect Migration of hazardous gases/vapours	Human Health: Nearby residents and site workers / users	Medium	Low	Moderate / Low Risk	L9	Once vapours have been mobilised, there is the potential for them to move off site. The surrounding land consists predominantly of open ground limiting the potential for vapours to build up in enclosed spaces. Some buildings at the heritage museum and residential properties. Appropriate dust suppression methods are to be used during excavation of Made Ground. There is the potential for any ground gas to migrate off site through granular Made Ground or shallow fractured geology, however it is anticipated that there are limited enclosed spaces in the immediate surrounding land.
		Flora	Mild	Low	Low Risk	L10	Sensitive Calaminarian grasslands and other ecologically sensitive zones are present across the site. Suitable protective measures should be incorporated into the construction management plan.
		Buildings & Infrastructure	Medium	Low	Moderate / Low Risk	L11	The appropriate specification of materials should be used for supply pipes, buried services and gas / damp membranes. Any future foundations are likely to consist of shallow foundations.
	Direct Spillage/ loss/ run off from surface	Surface water: Including drainage features, leats, adits, River Nent	Medium	Low	Moderate / Low Risk	L12	It is likely that Made Ground would facilitate lateral surface run off. A number of surface water features run across the site and feed into the River Nent further downstream. There are also a number of man-made leats and adits which would facilitate the migration of any contamination to nearby surface water features.
		Shallow Groundwater: Secondary (Undifferentiated) Aquifer	Medium	Low	Moderate / Low Risk	L13	Superficial Till deposits (secondary undifferentiated) are likely to be present beneath the adit, pumping station and western end of the proposed pipeline route. It is also considered likely that peat deposits will be present across all remaining areas of the site. Migration via underground services, leats and adits. Superficial deposits are likely to be limited in thickness.
		Ecosystems (Flora and Fauna)	Medium	Likely	Moderate Risk	L14	Sensitive Calaminarian grasslands and other ecologically sensitive zones are present across the site. Suitable protective measures should be incorporated into the construction management plan.

Source	Pathway	Receptor	Potential Severity	Likelihood of Occurrence	Potential Risk	Linkage Reference	Justification
Lateral migration of impacted shallow groundwater		Deeper Groundwater	Medium	Low	Moderate / Low Risk	L15	It is possible that historical mining features will facilitate migration of spillages at the surface directly to deeper groundwater.
		Surface water	Medium	Low	Moderate / Low Risk	L16	There is the potential for lateral migration via permeable unsaturated strata to leats, reservoir and nearby River Nent. Although Groundwater Vulnerability Mapping shows that soils overlying Secondary Aquifers have a low leaching potential, it is likely that Made Ground would facilitate some lateral migration. Groundwater availability as a resource expected to be marginal. Shallow groundwater is unlikely to be present as limited superficial deposits present. Perched groundwater within Made Ground is considered unlikely to be in hydraulic connectivity with the surface waters. The nearest surface watercourse is a stream 175m to the southeast. There is adequate drainage to capture any surface runoff from the surrounding area before it is intercepted by the surface water receptor however this facilitate migration to other water courses, such as the River Nent. Surface water abstraction points have been identified close to the site in relation to the hydroelectric scheme at Nenthead.
		Shallow Groundwater: Secondary (Undifferentiated) Aquifer	Medium	Low	Moderate / Low Risk	L17	Superficial geology has been identified beneath the western parts of the site and classified as Secondary (undifferentiated) aquifer. Groundwater availability as a resource is therefore not considered a sensitive receptor in the local area.
		Shallow Groundwater: Secondary (Undifferentiated) Aquifer	Medium	Low	Moderate / Low Risk	L18	Superficial geology has been identified beneath the western parts of the site and classified as Secondary (undifferentiated) aquifer. Groundwater availability as a resource is therefore not considered a sensitive receptor in the local area.
Vertical migration of impacted groundwater		Deeper Groundwater	Medium	Low	Moderate / Low Risk	L19	No Superficial geology has been identified at the site. Given that the sites are located within a Secondary (B) Aquifer, groundwater availability as a resource may be limited to the local area. The potential for vertical migration of COPC is minimal due to the presence of significant thicknesses of clay. The top of the Sidmouth Mudstone Formation comprises clay therefore it is considered unlikely that the geology would facilitate the vertical migration of contaminated waters to the deeper aquifer.

<i>Source</i>	<i>Pathway</i>	<i>Receptor</i>	<i>Potential Severity</i>	<i>Likelihood of Occurrence</i>	<i>Potential Risk</i>	<i>Linkage Reference</i>	<i>Justification</i>
	Lateral migration of deeper groundwater off-site.	Surface water: River Nent	Medium	Low	Moderate / Low Risk	L20	Movement of deeper groundwater would be facilitated by the existing adit systems. The majority of these feed directly into the River Nent.
		Deeper Groundwater: Secondary A Aquifer	Medium	Low	Moderate / Low Risk	L21	Historical mining features may facilitate off site migration of contaminated groundwater to nearby areas.
	Migration of hazardous gases/ vapours via permeable strata	Flora	Mild	Low	Low Risk	L22	Very limited above ground infrastructure is proposed so this should allow for suitable venting of potential vapours. The construction plan will mitigate impacts to flora as much as possible. An odour abatement system will manage vapour pathways to a degree.
		Buildings & Infrastructure	Medium	Low	Moderate / Low Risk	L23	The appropriate specification of materials should be used for supply pipes, buried services and gas / damp membranes. Any future foundations are likely to consist of shallow foundations.

4. Proposed Ground Investigation Works

4.1 Introduction

Table 4.1-1 shows the proposed schedule for exploratory holes. The locations of the exploratory holes are shown in the Factual Report, Appendix A.

Table 4.1-1 Proposed Schedule for Exploratory Holes

Exploratory Hole No	Type	Schedule depth (m)	Termination Criteria	Location	Reason	Installations
BH101R	CP/RC	6	6m or RH if shallower	West Bank: Caplecleugh mine adit	Underground chamber	GG/GW Standpipe
BH102R	CP/RC	8	8m or >5m if RH shallower than 8m	East Bank: Car park and pump shaft	Pump Sump	GG/GW Standpipe
BH103	CP	10	10m or RH if shallower	Mine water treatment site	Treatment ponds/wetland and slope stability	GW standpipe
BH104	CP	10	10m or RH if shallower	Mine water treatment site (South pond)	Treatment ponds/wetland and slope stability. Contamination assessment from former cisterns	GW standpipe
BH105R	CP/RC	15	15m or RH if shallower	Mine water treatment site (South pond)	Treatment ponds/wetland and slope stability	GW Standpipe
BH106	CP	10	10m or RH if shallower	Mine water treatment site (South pond)	Treatment ponds/wetland and slope stability	GW standpipe
TP101	TP	3	3m or RH if shallower	West Bank: Caplecleugh mine adit	Discharge chamber	-
TP102	TP	3	3m or RH if shallower	East Bank: Car park and pump shaft	Bridge rebuild and pipe over river	-
TP103	TP	3	3m or RH if shallower	West Bank: Caplecleugh mine adit	Bridge rebuild and pipe over river at pump shaft	-
TP104	TP	3	3m or RH if shallower	East Bank: Car park and pump shaft	Car park at pump shaft (CBR)	-
TP105	TP	3	3m or RH if shallower	Proposed pipeline route	Confirmation of existing services and suitability for pipeline route (CBR)	-
TP106	TP	3	3m or RH if shallower	Proposed pipeline route	As TP105	-
TP107	TP	3	3m or RH if shallower	Proposed pipeline route	As TP105 (CBR)	-
TP108	TP	3	3m or RH if shallower	Proposed pipeline route	As TP105	-
TP109	TP	3	3m or RH if shallower	Proposed pipeline route	As TP105 (CBR)	-
TP110	TP	3	3m or RH if shallower	Proposed pipeline route	As TP105	-

TP111	TP	3	3m or RH if shallower	Proposed pipeline route	As TP105 (CBR)	-
TP112	TP	3	3m or RH if shallower	Mine water treatment site (Reed bed)	As TP105	-
TP113	TP	3	3m or RH if shallower	Mine water treatment site (Reed bed)	As TP105 (CBR)	-
TP114	TP	4.5	4.5m or RH if shallower	Mine water treatment site (Reed bed)	Earthworks for settlement ponds, visual inspection and large sample for testing and environmental characterisation	-
TP115	TP	3	3m or rock head if shallower	Mine water treatment site (Reed bed)	As TP105	-
TP116	TP	3	3m or rock head if shallower	Mine water treatment site (North Pond)	As TP105	-
TP117	TP	3	3m or rock head if shallower	Mine water treatment site (South Pond)	As TP105	-
TP118	TP	3	3m or rock head if shallower	Mine water treatment site (South Pond)	As TP105	-
TP119	TP	3	3m or rock head if shallower	Mine water treatment site (Centre Pond)	As TP105	-
TP120	TP	3	3m or rock head if shallower	Mine water treatment site (North Pond)	As TP105	-
TP121	TP	4.5	4.5m or RH if shallower	Mine water treatment site (South Pond)	Earthworks for settlement ponds/wetland, visual inspection and large samples for testing and environmental characterisation	-
TP122	TP	4.5	4.5m or RH if shallower	Mine water treatment site (Centre Pond)	As TP121	-
TP123	TP	4.5	4.5m or RH if shallower	Mine water treatment site (North Pond)	See TP121 and contaminations assessment from former cisterns.	-
TP124	TP	3	3m or rock head if shallower	Proposed pipeline route	As TP105	-
TP125	TP	3	3m or rock head if shallower	Proposed pipeline route	As TP105	-
TP126	TP	3	3m or rock head if shallower	Access along River Nent beyond smelt mill	As TP105	-
TP127	TP	3	3m or rock head if shallower	Access along River Nent beyond smelt mill	As TP105	-
TP128	TP	3	3m or rock head if shallower	Access along River Nent beyond smelt mill	As TP105	-

WS101	WS	3	3m or RH if shallower	West Bank: Caplecleugh mine adit	Characterisation of ground to be excavated for pipeline	-
WS102	WS	3	3m or RH if shallower	East Bank: Car park and pump shaft	As WS101 and suitability for access road and pipeline route	-
WS103	WS	5	5m or RH if shallower	Mine water treatment site (Reed bed)	As WS102	GG / GW standpipe
WS104	WS	3	3m or RH if shallower	Mine water treatment site (Reed bed)	As WS102 and slope inspection for slip surfaces	GG / GW standpipe
WS105	WS	3	3m or RH if shallower	Mine water treatment site (North Pond)	As WS104	-
WS106	WS	5	5m or RH if shallower	Mine water treatment site (Centre Pond)	Slope inspection for slip surfaces	-
WS107	WS	5	5m or RH if shallower	Mine water treatment site (Centre Pond)	Slope inspection for slip surfaces	-
WS108	WS	5	5m or RH if shallower	Mine water treatment site (South Pond)	Slope inspection for slip surfaces	-
WS109	WS	5	5m or RH if shallower	Mine water treatment site (South Pond)	Slope inspection for slip surfaces	-

Note: The following abbreviations have been used in Table 4.1.1

BH: Borehole

CP: Cable percussion boring

GG/GW Combined ground gas and groundwater monitoring installation

GW: Groundwater monitoring installation

RC: Rotary coring

RH: Rock head

TP: Machine excavated trial pit

WS: Windowless sampling

The following sampling schedule was planned during the investigation:

Soil samples (Suite E) 129 No.

Ground water samples (Suite F) 28 No.

Leachate samples (Suite M) 65 No.

Ground gas measurements 4 No.

In addition, No.4 return-to-site visits were planned following the ground investigation. Samples to include:

Ground water samples (Suite F) 12 No.

Ground gas measurements 16 No.

Please see the Ground Investigation Specification(March 2019) for further information.

5. Ground Investigation

The intrusive ground investigation was comprised of 43No. locations and was completed between 2nd and 20th September 2019 using cable percussive boreholes selectively extended by rotary drilling techniques together with trial pitting and dynamic sampling. Ground gas monitoring in boreholes BH102R, BH107, WS103, WS104 and WSBH101R and ground water in boreholes BH103, BH104 and BH106 was carried out in four weekly visits post completion of site works.

An exploratory hole location plan is provided in the Factual Report (Appendix A).

5.1 Service Clearance

To allow the positive identification of any utilities or buried features on site prior to the formation of any exploratory hole, a category B PAS128 survey was undertaken at each of the exploratory hole locations. These surveys were undertaken by Zetica Ltd, a specialist contractor. The survey comprised two types of non-intrusive geophysical mapping, Electromagnetic Ground conductivity (EM) and Ground Penetrating Radar (GPR). In addition, a desk top review, liaison with utility providers and site reconnaissance were also undertaken. The geophysical mapping covered a minimum 5m by 5m grid at each exploratory hole location.

A site sketch of each exploratory hole location was produced which indicated the location of any buried services encountered relative to the proposed exploratory hole location. Where buried services were located and found to obstruct the proposed exploratory hole, the position was relocated within the 5m by 5m grid.

Furthermore, in order to reduce the risk of damaging buried services, the location of each exploratory hole was scanned using a cable avoidance tool (CAT). As a further precaution, an inspection pit was hand excavated to a depth of 1.2m at each location, followed by a further scan of the base of each pit with the CAT.

5.2 Cable Percussion Boreholes

A total of five boreholes (BH102R, BH103, BH104, BH105, and BH106) were formed to depths between 3.74m and 6.00m using conventional light cable percussion techniques together with 200mm and 150mm diameter temporary steel casings.

Due to insufficient load capacity on access bridge BH101R was replaced by Dynamic sample borehole WSBH101R.

The boreholes were all formed in order to obtain samples for laboratory testing and to provide geotechnical information for foundation design. Two of the boreholes were used for the installation of gas monitoring wells and three for the installation of piezometers.

In granular materials or where the presence of coarse material prevented the taking of open tube samples, Standard Penetration Tests were carried out using either a split spoon sampler or solid 60° cone. The results of these tests are given as a Standard Penetration 'N' value or as a blow count for a given penetration at the appropriate position on the borehole logs, where the use of either the sampler or cone is also recorded.

Representative disturbed samples of all materials encountered were obtained and these were placed in sealed containers for transport to the laboratory. Environmental samples were obtained for chemical testing.

Samples recovered from the boreholes were described by an Engineering Geologist. A detailed description of all strata encountered, groundwater conditions and the position and type of samples taken are included on the borehole logs presented in the Factual Report.

5.3 Rotary Core Drilling

In order to obtain information on the solid geology beneath the site borehole BH105 was extended using rotary core drilling techniques. The borehole was extended to depth of 14.80m, using PWF core barrel together with protective semi rigid plastic liner and a Polycrystalline Diamond PCD core bit with water flush to produce cores of 92mm nominal diameter.

A void was noted in BH105 between 11.20m and 13.30m and is thought to be historic mine workings. To investigate further an additional borehole BH107 was commissioned, located at WS107, no void was found.

BH107 used rotary open hole techniques to rockhead at 4.50m then extended using rotary core drilling techniques.

5.4 Dynamic Sampling

Sixteen windowless samples WS101 to WS109, WSBH101R, WSTP101 to WSTP103 and WSTP105 to WSTP107 were advanced to a maximum depth of between, 1.50m bgl and 4.10m bgl using conventional equipment, which comprised 1.00m long steel cylinders with an internal plastic liner. The steel cylinders were repeatedly driven into the ground to progressive depths using rods connected to a tracked rig motor driven percussion hammer.

5.5 Trial Pits

Twenty-two trial pits, TP104 and TP108 to TP128 were excavated using a 9T tracked excavator to depths of between 0.50m bgl and 3.00m bgl. The trial pits were not shored and were logged from the surface by an engineering geologist who provided a description of the ground conditions encountered in each pit. Disturbed soil samples were also obtained at regular intervals for geotechnical and environmental sampling.

Due to insufficient load capacity on the bridge giving access to the west bank of the River Nent TP103 and TP101 were replaced by Dynamic sample boreholes WSTP103 and WSTP101, respectively.

To avoid blocking access to the heritage centre TP102, TP105, TP106 and TP107 were replaced by Dynamic Sample boreholes WSTP102, WSTP105, WSTP106 and WSTP107.

5.6 In situ Testing

12No. in situ California Bearing Ratio (CBR) tests were carried out within exploratory holes TP109, TP110, TP112, TP115, TP119, TP124, TP125, TP126, TP127, TP128, WSTP105 and WSTP107. A portable jack and load frame were utilised on site with a JCB type mechanical excavator providing the reaction force. The tests were performed at depths of 0.5mbgl and 0.3mbgl to 0.2mbgl respectively in accordance with BS1377:1990: Part 9, Section 4.3 and are presented in the Factual Report.

5.7 Monitoring Well Installations

A slotted 50mm diameter UPVC tube was installed at 2No. borehole locations BH102R and BH107 and 3No. windowless sampling locations WS103, WS104 and WSBH101R. Casagrande type piezometers were installed in boreholes BH103, BH104 and BH106. A schematic of each installation is shown on the relevant borehole log in the factual report.

All installations are summarised in Table 5.7-1.

Table 5.7 1 Monitoring Well Installations

Location	Site	Date of Installation	Response Zone (m bgl)	Response Zone (m AOD)	Material in response Zone
BH102R	East Bank: Car park and pump shaft	03.09.2019	3.4 – 6.0	434.56 - 431.96	Grey, gravelly, very clayey fine to coarse sand. Locally grey, gravelly, very sandy Clay.
BH103	Mine water treatment site (Reed bed)	04.09.2019	2.20-4.23	489.74 - 487.71	Firm slightly sandy slight gravelly Clay. Below 3.50m Extremely weak grey Mudstone.
BH104	Mine water treatment site (North Pond)	05.09.2019	1.50 – 3.74	501.27 - 499.03	Firm to stiff slightly sandy slightly gravelly Clay. Below 2.50m, extremely weak Siltstone.
BH106	Mine water treatment site (South pond)	09.09.2019	3.50-6.00	500.68 – 498.18	Firm slightly sandy, slightly gravelly Clay. Below 5.50m, extremely weak to weak Limestone.
BH107	Mine water treatment site	16.09.2019	1.00 – 4.00	503.47 – 500.47	Soft to firm brown sandy gravelly Clay. Gravel is angular to subangular fine to coarse of Limestone. *Geology inferred from WS107 due to rotary open hole technique.
WS103	Mine water treatment site (Reed bed)	12.09.2019	1.0 – 2.80	489.58 – 487.78	Made Ground: Dark brown mottled orangish brown, slightly gravelly, sandy clay with high cobble content.
WS104	Mine water treatment site (Reed bed)	12.09.2019	1.0 – 3.20	493.67 – 491.47	Firm grey slightly sandy gravelly Clay with medium cobble and boulder content.
WSBH101R	West Bank: Caplecleugh mine adit	09.09.2019	1.00 – 2.30	436.92 – 435.62	Medium dense clayey angular to subangular fine to coarse Gravel.

5.8 Monitoring Well Survey

Each monitoring well location was surveyed by Soil Engineering to Ordnance Datum (OD) level and National Grid Reference (NGR) coordinates..

5.9 Ground water sampling

Ground water sampling was carried out at locations BH102R, BH104, WS103, WS104 and WSBH101R on 1ST October 2019.

5.10 Ground Gas Monitoring

Monitoring of gas in boreholes BH102R, BH107, WS103, WS104 and WSBH101R was carried out at weekly intervals for 2No. weeks after completion of the Site works. Monitoring for methane, carbon dioxide and oxygen was carried out using a Geotechnical Instruments GA5000 gas analyser.

5.11 Environmental Laboratory Analysis

A programme of environmental testing was scheduled by AECOM. Testing was carried out Derwentside Environmental Testing Services Limited (DETS), a UKAS and MCERTS accredited testing laboratory No. 2139. The analytical schedule for the environmental soil samples is summarised in Table 5.11-1.

Table 5.11 1 Environmental Analytical Schedule

Analytical Suite	Number of Samples taken/ number of samples planned	Date sampled
Suite E (Soil samples)	57/ 60	September 2019
Suite M (Leachability test)	19/ 19	September 2019
Suite F (Water samples)	10/ 10	October 2019

The full list of analysis associated with each suite can be found in the Ground Investigation Tender Document.

The interpretation of the test results are presented in sections 8 and 10.

5.12 Geotechnical Laboratory Analysis

Selected samples obtained from the exploratory holes were subjected to the following tests to obtain geotechnical parameters:

- Moisture Content
- Liquid and Plastic Limit
- Particle Size Distribution by wet sieving
- Particle distribution of fines by sedimentation by pipette
- Undrained shear strength of single 100mm diameter specimen in triaxial compression with multi-stage loading and without measurement of pore pressure
- Drained direct shear box tests using the 60mm shear box apparatus to determine peak and residual drained shear strength parameters
- Dry density / moisture content relationship using 2.5 kg rammer
- Moisture condition value at natural moisture content
- Moisture condition value/ moisture content relationship
- BRE SD1 Suite B (Greenfield site – pyrite present)
- BRE SD1 Suite D (Brownfield site – pyrite present)

These tests were carried out in accordance with geotechnical standards (BS1377). The testing was carried out at the Leeds laboratory of Soil Engineering, a UKAS accredited testing laboratory no. 1265.

In addition, chemical (sulphate and pH) testing was undertaken by DETS. Testing was undertaken in order to assess concrete requirements from BRE special digest No. 1. Samples were prepared in general accordance with BS1377, although final analysis of total sulphate was performed using ICP and aqueous extract using Ion Chromatography.

6. Ground Conditions

To provide consistent ground condition data fitting to the size and type of works being carried out at each location the Site has been divided into four sections.

- Section 1 East Bank: Car park and pump shaft
- Section 2 West Bank: Caplecleugh mine adit
- Section 3 Pipeline Route and access to Mine Water Treatment Site (Zone 1 -3)
- Section 4 Mine Water Treatment Site.

These sections are in line with the areas outlined in the Desk Study (March 2019).

Please see Section C in the contractor's factual report for locations of exploratory holes.

The following is a summary of the ground conditions within each area. For more detailed information relating to the type and depth of strata encountered at each location, please refer to the factual Ground Investigation Report for the project presented in Appendix A.

6.1 Section 1 – Eastern Bank of River Nent proposed pumping station and visitor car park

Ground investigation: 1No. cable percussion borehole (BH102R) to a total depth of 5.01m. 2No. Windowless sample holes (WS02 and WSTP102) to a maximum depth of 2.95m (WSTP102). 1No. Trial pit (TP104) with a maximum depth of 0.50m

Section 1 is the Eastern bank of River Nent: with carpark and pump shaft. The intrusive investigation was intended to provide information to inform the geotechnical design of the pump shaft, in addition to characterising the various strata encountered.

The ground conditions in this section consist of Made Ground, hardcore gravel (BH102R and WS102) overlying clayey, gravelly SAND, underlying the Made Ground is Alluvium, bedrock of the Alston Formation. A summary of the ground conditions is provided in table 6.1-1 (terminal strata depth is unproven). BH102R indicates cohesive Made Ground consisting of gravelly, very sandy clay with high cobble content between 2.50mbgl and 4.00mbgl.

Table 6.1 1 Summary of Ground Conditions in Section 1

Stratum	Description	Thickness (m) min-max (mean)	Depth to base of stratum m bgl (m AOD)
*Made Ground Hardcore	Compacted Gravel HARDCORE.	0.13	0.13 (437.69)
Granular Made Ground	Slightly clayey/ very clayey, gravelly SAND with occasional cobbles.	0.9-4.6 (2.12)	1.0- 4.6 (436.87-433.37)
*Cohesive Made Ground	Gravelly, very sandy CLAY with high cobble content	2.10	4.60 (433.37)
Alluvial clay	Soft/firm gravelly sandy CLAY, locally with high cobble and boulder content.	1.45 (1.45)	2.45- 2.50 (435.42-435.42)
Alluvial sand and gravel	Dense slightly clayey to clayey fine to coarse SAND and angular to subrounded fine to coarse GRAVEL of Limestone, Mudstone, Siltstone and Sandstone.	0.5-1.6(1.05)	2.95-4.1 (434.92-433.69)
Bedrock	Extremely weak to weak grey SILTSTONE	0.41 penetrated	5.01 penetrated

*Cohesive made ground located in borehole BH102R alone. No Alluvium located in borehole BH102R.

*Hardcore Made Ground located only at BH102R and WS102.

6.1.1 Made Ground

Granular Made Ground

Made ground consisted of engineered fill described as compacted stone hardcore overlying grey, slightly clayey to very clayey, slightly gravelly to very gravelly SAND with high cobble and high boulder content of sandstone and siltstone. Gravel is angular to subangular fine to coarse of sandstone and siltstone.

In situ tests

Laboratory testing

Particle size distribution (PSD)

Three particle size distribution tests were carried out on samples of granular Made Ground at TP104, WS102 and WSTP105. The results indicate that the Granular Made Ground ranged from slightly silty clayey very sandy GRAVEL to silty sandy GRAVEL and COBBLES. It should be noted that PSD at TP104 indicate no cobble content, however engineer's description indicates high cobble content. Due to the difficulty in taking representative samples in soils with cobble content, it is considered that the engineer's description will be correct.

Moisture Content

One moisture content test was carried out at BH102R. The moisture content was 14.8%

No other testing was carried out on this stratum.

Cohesive Made Ground

Cohesive Made Ground was only encountered in BH102R.

In situ tests

Photo Ionisation (PID) Results (reported where >1 ppm)

Location	Depth (m)	Made ground/ soil type	Max PID (ppm)	Section/ zone
WS102	0.5	Made Ground: Dark Grey slightly clayey fine to coarse sand sized fragments. Gravel of limestone.	4.1	1 - East bank
TP104	1	Made ground: grey and brown, very gravelly fine to coarse sand sized fragments. Gravel of fine to coarse of wood sandstone and siltstone.	9.6	1 - East bank
WSTP102	0.5	Made Ground: Grey clayey gravelly fine to coarse sand sized fragments Gravel includes sandstone, mudstone, siltstone ash and clinker	21.8	1 - East bank
WSTP103	1	Made Ground: Dark Brown slightly gravelly sandy clay. Gravel of limestone and siltstone.	2.1	2 - West bank
WSBH101R	1m	Made Ground: Dark brown very sandy fine to coarse gravel sized fragments of sandstone and siltstone.	6.6	2 - West bank

Location	Depth (m)	Made ground/ soil type	Max PID (ppm)	Section/ zone
WSTP101	0.5	Natural: Brown clayey fine to coarse sand. Gravel of sandstone mudstone and siltstone.	11	2 - West bank
TP114	1.9	Natural: Stiff black mottled blue slightly gravelly sandy Clay. Sand is fine to coarse Gravel of siltstone and sandstone.	2	MWTS
TP115	1.2	Natural: Stiff dark blue mottled black slightly gravelly sandy Clay with low cobble content.	2	MWTS
TP118	1	Natural: Blue mottled orange and black slightly gravelly sandy clay.	3.8	MWTS
TP119	0.8	Natural: Black mottled orange slightly gravelly sandy clay.	4.3	MWTS
WS107	1	Natural: soft to firm dark grey mottled orange slightly gravelly sandy Clay.	5.4	MWTS
TP117	1	Natural: Soft to firm dark grey mottled orange and blue slightly gravelly sandy clay. Gravel of sandstone siltstone and limestone.	5.4	MWTS
WS106	1	Natural: soft to firm dark grey mottled orange slightly gravelly sandy Clay.	5.7	MWTS
WS105	1	Made ground: Dark brown slightly gravelly sandy clay. Gravel of limestone.	6.9	MWTS
TP121	0.8	Natural: Dark blue mottled orange slightly gravelly sandy clay.	7.6	MWTS
WS108	1	Natural: loose dark brown very clayey very gravelly fine to coarse sand. Sand of limestone.	7.9	MWTS
WS104	1	Made ground: Dark grey mottled orange brown slightly gravelly sandy clay.	10.2	MWTS
WS109	0.2	Natural: soft dark grey mottled orange brown slightly gravelly sandy Clay. Gravel of sandstone and limestone.	17.4	MWTS
WSTP106	1	Made ground: dark brown very gravelly fine to coarse sand sized fragments with high cobble content. Gravel of siltstone, sandstone and limestone.	2.2	Proposed pipeline route - zone 1
WSTP108	0.5	Made ground: brown mottled light orange slightly sandy gravelly clay. Gravel of sandstone and siltstone.	5.2	Proposed pipeline route - zone 1

Location	Depth (m)	Made ground/ soil type	Max PID (ppm)	Section/ zone
WSTP105	0.5	Made ground: dark brown very gravelly slightly clayey fine to coarse sand sized fragments with medium cobble content. Gravel of sandstone and siltstone.	5.7	Proposed pipeline route - zone 1

**No visual or olfactory evidence relating to VOCs*

Laboratory testing

Particle size distribution (PSD)

One particle size distribution test was carried out on a sample of cohesive Made Ground at 2.50m in BH102R. the results indicate that the Cohesive Made Ground consists of silty sandy gravelly COBBLES, however the engineering description describes this unit as gravelly very sandy clay with high cobble content. Therefore, it is thought that the sample in question is unrepresentative of the stratum.

Moisture Content

Two moisture content tests were carried out at BH102R. The average moisture content is 14.9% with a range of 12.5% to 17.3%.

Plasticity Index tests

Two determination of plastic and liquid limit and moisture content was carried out on a sample of cohesive Made Ground. The results are shown in table 6.1-2 together with the liquidity index.

Table 6.1 2 East Bank- Plasticity Index test on made ground.

Moisture Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Liquidity Index
12.5	40	25	15	-0.833
17.3	33	20	13	-0.207

These results indicate that the cohesive Made Ground comprises clay of low to intermediate plasticity.

No other testing was carried out in this stratum.

6.1.2 Alluvial Clay

Below the Made Ground, material described as soft to firm slightly gravelly sandy CLAY locally with high cobble and boulder content.

In situ tests

SPT

Four SPTs were carried in the Alluvial Clay. The SPT 'N' values, corrected for depth and hammer efficiency, and assuming a correlation of $C_u = 5N$ from CIRIA report 143 (The Standard Penetration test: methods and use 1995) were 12, 13, 14, and 26 indicating that the material was of medium to high strength, typically indicative of firm to stiff consistency.

Laboratory testing

Moisture Content

Two moisture content tests were carried out 15.4% and 20.6%. The average moisture content is 18%.

Plasticity Index tests

Two determination of plastic and liquid limit and moisture content was carried out on a sample of Alluvial Clay. The results are shown in table 6.1-3 together with the liquidity index.

Table 6.1 3 East Bank - Plasticity Index test on Alluvial Clay

Moisture Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Liquidity Index
15.4	36	21	15	-0.374
20.6	24	17	7	0.514

These results indicate that the Alluvial Clay comprises clay of low to intermediate plasticity.

6.1.3 Alluvial Sand and Gravel

Below the Alluvial Clay, material described as dense slightly clayey to clayey fine to coarse SAND and angular to sub-rounded fine to coarse GRAVEL of Limestone, Mudstone, Siltstone and Sandstone.

In situ tests

SPT

One SPT was carried out in WSTP102 at 2.70m bgl. The SPT refused with 50 blows required for 15mm penetration. This indicates that the SPT encountered an obstruction (i.e. a cobble or boulder)

Laboratory testing

Particle size distribution (PSD)

One particle size distribution test was carried out on a sample of Alluvial Sand and Gravel at WS102. Indicating silty, very sandy GRAVEL.

6.1.4 Bedrock

Bedrock was encountered at a depth of 4.6m bgl. Bedrock was described as extremely weak to weak grey SILTSTONE.

In situ tests

SPT

One SPT was carried out at 4.80m bgl to confirm depth to bedrock. The SPT refused with 50 blows required for 140mm penetration.

No laboratory testing was carried out on the Siltstone bedrock .

6.1.5 Hydrogeology

One ground water monitoring installation was formed in borehole BH102R, with a response zone between 1.00 and 5.01m bgl. The geology of the response zone consisted of Granular Made Ground over Cohesive Made Ground over Siltstone Bedrock.

Ground water levels were monitored on four occasions between 20th September and 25th October 2019. The recorded levels ranged from 2.52m bgl to 2.m bgl (435.44m AOD to 435.21m AOD)

6.2 Section 2 - West Bank: Caplecleugh mine adit

Ground investigation: 4No. Windowless sample holes to a maximum depth of 2.35m.

Section 2 Western Bank is adjacent to Caplecleugh mine adit., the investigation intended to provide further information on the underground discharge chamber and characterisation of ground to be excavated for pipeline and bridge rebuild.

The ground conditions in this section consist of Topsoil overlying Made Ground. Underlying this is Alluvium. A summary of the ground conditions is provided in table 6.2-1.

Table 6.2 1 Summary of Ground Conditions in Section 2 – West Bank

Stratum	Description	Thickness min - max (average) (m)	Min – Max depths of base m bgl (mAOD)
Topsoil	Topsoil	0.05 – 0.10 (0.06)	0.05 – 0.10 (437.87 – 437.64)
*Granular Made Ground	Very sandy fine to coarse GRAVEL of sandstone and siltstone with a high cobble content. Below 0.35 clayey.	0.45	0.50 (437.42)
*Cohesive Made Ground	Slightly gravelly slightly sandy CLAY with a medium cobble content	1.30	1.80 (436.04)
*Alluvial Upper Sand and Gravel	Gravelly slightly clayey fine to coarse SAND. To Clayey fine to coarse Sand and subangular to subrounded fine to coarse Gravel.	0.50 - 0.80 (0.65)	0.50 - 0.85 (437.19 - 436.97)
Alluvial Clay	Firm slightly sandy gravelly CLAY	0.20- 1.15 (0.59)	0.80 – 2.00 (437.12 – 435.82)
Alluvial Lower Sand and Gravel	Loose to medium dense clayey fine to coarse SAND and angular to subangular fine to coarse GRAVEL of sandstone, siltstone, mudstone and limestone.	1.15 – 1.50 (1.33)	2.30 – 2.35 (435.62 – 435.34)

*Granular Made Ground only encountered in WSBH101R.

*Cohesive Made Ground only encountered in WSTP103.

*Alluvial Upper Sand and Gravel only encountered in WS101 and WSTP101.

6.2.1 Topsoil

Topsoil is present at all locations. Topsoil has an average thickness of 0.06m.

6.2.2 Made Ground

Granular Made Ground

Granular Made Ground underlies Topsoil at WSBH101R alone and comprises of very sandy fine to coarse GRAVEL of sandstone and siltstone with a high cobble content with a thickness of 0.45m. Below 0.35 clayey. This layer contains angular to subangular cobbles of sandstone and siltstone.

Cohesive Made Ground

The Cohesive Made Ground underlies topsoil at WSTP103. This deposit consists of slightly gravelly slightly sandy CLAY with a medium cobble content, with a thickness of 1.30m. The remains of a wall were noted between 0.40mbgl and 0.50mbgl.

In Situ tests

SPT

One SPT was carried out on the Cohesive Made Ground. The 'N' values, corrected for depth, groundwater level and hammer efficiency. The results indicate 'N' value of 36, suggesting that either this deposit of very high strength, or that the results have been affected by the presence of cobbles.

Laboratory testing

Moisture Content

One moisture content test was carried out the moisture content was 13.6%.

Plasticity Index tests

One determination of plastic and liquid limit and moisture content was carried out on a sample of cohesive Made Ground. The results are shown in table 6.2-4 together with the liquidity index.

Table 6.2 4 West Bank - Plasticity Index test on made ground

Moisture Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Liquidity Index
13.6	35	26	9	-1.378

These results indicate that the Alluvial Clay comprises silt of low to intermediate plasticity.

No other testing was carried out on this stratum.

6.2.3 Alluvial Upper Sand and Gravel

The Alluvial Upper Sand and Gravel underlies topsoil at WS101 and WSTP101. This deposit consists gravely slightly clayey fine to coarse SAND, to Clayey fine to coarse SAND and subangular to subrounded fine to coarse GRAVEL, with an average thickness of 0.65m.

Alluvial Upper Sand and Gravel is present only in WS101 and WSTP101.

Laboratory testing

Particle size distribution (PSD)

One particle size distribution test was carried out on a sample of Alluvial Sand and Gravel at WSTP101 0.20mbgl. The results indicate the Alluvial Upper Sand and Gravel consists of Silty very sandy Gravel with a medium cobble content.

No other testing was carried out in this stratum.

6.2.4 Alluvial Clay

The Alluvial Clay is present throughout this section. Alluvial Clay underlies Made Ground in WSTP103 and WSBH101R, whereas in WS101 and WSTP101 Alluvial Clay underlies Alluvial Upper Sand and Gravel. This deposit consists of firm slightly sandy gravely CLAY with a range of thickness of 0.20m - 1.15m, average 0.59m.

In Situ tests

SPT

Three SPTs were carried out on the Alluvial Clay at depths of 1.20mbgl, 1.75mbgl and 1.80mbgl. The 'N' values, corrected for depth, groundwater level and hammer efficiency are presented in table 6.2.6.

Table 6.2 6 West Bank - Summary of SPT tests on Alluvial Clay

Location ID	Depth (mbgl)	Corrected SPT 'N' Value	Classification
WSTP101	1.20	28	Stiff
WSTP101	1.75	Refused with 50 blows required for 165mm penetration	Refusal
WSTP103	1.80	Refused with 50 blows required for 160mm penetration	Refusal

The results indicate the deposit is either this deposit is stiff, or that the results have been affected by the presence of cobbles.

6.2.5 Alluvial Lower Sand and Gravel

The Alluvial Lower Sand and Gravel is present in WS101 and WSBH101R. Alluvial Lower Sand and Gravel underlies Alluvial Clay. This deposit consists loose to medium dense clayey fine to coarse SAND and angular to subangular fine to coarse GRAVEL of sandstone, siltstone, mudstone and limestone, with a range of thickness of 1.15m - 1.50m, average 1.33m.

In Situ tests

SPT

Four SPT were carried out in this stratum. At 1.20mbgl and 2.00mbgl in both exploratory holes. The 'N' values, corrected for depth, groundwater level and hammer efficiency

The results are presented in Table 6.2-7

Table 6.2-7 West Bank - Summary of SPT tests on Alluvial lower sand and gravel

Location ID	Depth (mbgl)	Corrected SPT 'N' Value	Classification
WS101	1.20	14	Medium density
WS101	2.00	Refused with 50 blows required for 210mm penetration	Refusal
WSBH101	1.20	53	Dense
WSBH101	2.00	74	Dense

The results indicate the deposit is either this deposit is Medium dense to very dense, or more likely that the results have been affected by the presence of gravel.

Laboratory testing

Particle size distribution (PSD)

One particle size distribution test was carried out on a sample of Alluvial Lower Sand and Gravel at WSBH101R 2.00mbgl. The results indicate the Alluvial Lower Sand and Gravel consists of Silty sandy GRAVEL.

No other testing was carried out in this stratum.

6.2.6 Hydrogeology

One combined ground water and ground gas monitoring standpipe was installed in borehole WSBH101R, with a response zone between 1.00mbgl and 2.30mbgl. The geology of the response zone consisted of medium dense clayey angular to subangular fine to coarse GRAVEL of sandstone, siltstone, limestone and mudstone.

Ground water levels were monitored on four occasions between 20th September and 17th October 2019. The recorded levels ranged from 1.69m bgl to 1.85m bgl (436.23m AOD to 436.07m AOD)

One water strike was recorded during boring of WS101, at a depth of 1.50m bgl (436.19m AOD) the water level rose to 1.30m bgl (436.39m AOD) in 20 minutes.

6.3 Section 3 - The Pipeline Route and access to Mine Water Treatment Site

The intrusive investigation was intended to look for a deeper level below the proposed pipeline route, in addition to characterising the various strata encountered. The pipeline route extends from Section 2: West Bank to Section 4: Mine Water Treatment Site and includes three zones with significantly different ground conditions due to the change in the nature of the superficial deposits.

Pipeline route zone 1: Between Nenthead Mines Heritage Centre and access to Mill Cottage Bunkhouse the pipeline route follows direction of the road.

Pipeline route zone 2: Along the River Nent beyond Mill Cottage Bunkhouse.

Pipeline route zone 3: Access valley to Mine Water Treatment Site.

These three zones of the pipeline route are considered separately.

Pipeline route zone 1– Pumping station at Nenthead Mines visitor centre to Mill Cottage Bunkhouse *Investigations: 2No windowless sample holes WS106 and WSTP107 maximum depth of 2.65mbgl.*

The ground conditions in this section consist of Made Ground, road construction materials, overlying Granular Made Ground. Granular Made Ground is underlain by Cohesive Made Ground. A summary of the ground conditions is provided in table 6.3-1.

Table 6.3 1 Summary of Ground Conditions in Section 3.1 – Pipeline route zone 1.

Stratum	Description	Thickness min - max (average) (m)	Min – Max depths of base m bgl (mAOD)
Made Ground Road Base	Unbound compacted limestone HARDCORE.	0.10	0.10 (445.44 - 442.90)
Granular Made Ground	Very gravelly fine to coarse SAND, with high cobble content of siltstone, sandstone and limestone.	1.40	1.50 (444.04)
*Cohesive Made Ground	Slightly gravelly sandy CLAY with a high cobble and boulder content of siltstone, sandstone and limestone.	Not Proven	Not Proven

*Cohesive Made Ground found in WSTP107 alone.

6.3.1 Made Ground - road base

Made Ground Hardcore is present beneath both WSTP107 and WSTP108. Consisting of compacted Limestone GRAVEL 0.10m thick. No in-situ or laboratory testing was carried out on the made ground - road base.

6.3.2 Granular Made Ground

Along the pipeline route between Nenthead Mines Heritage Centre and access to Mill Cottage Bunkhouse granular made ground underlies the road construction materials. Typically, very gravelly fine to coarse SAND, with high cobble content of siltstone, sandstone and limestone. Typically, 1.40m thick across this zone.

In situ testing

SPT

Two SPTs were carried out on the granular made ground at depths of 1.20mbgl, in each exploratory hole. The 'N' values, corrected for depth, groundwater level and hammer efficiency are presented in table

The results are presented in Table 6.3-2

Table 6.3-2 Pipeline route zone 1 - Summary of SPT tests on Granular Made Ground

Location ID	Depth (mbgl)	Corrected SPT 'N' Value	Classification
WSTP106	1.20	Refused with 50 blows required for 165mm penetration	Refusal
WSTP107	1.2	81	Dense

The results indicate the deposit is either this deposit is very dense, or that the results have been affected by the presence of cobbles.

6.3.3 Cohesive Made Ground

Cohesive Made Ground was only encountered in WSTP107 at 1.50mbgl (444.04). Composed of slightly gravelly sandy CLAY with high cobble and boulder content of limestone, sandstone and siltstone.

In situ testing

SPT

Two SPTs were carried out on the granular made ground at depths of 2.00mbgl and 2.60mbgl. The 'N' values, corrected for depth, groundwater level and hammer efficiency are presented in Table 6-3-3

Table 6.3-3 Pipeline route zone 1 - Summary of SPT tests on Granular Made Ground

Location ID	Depth (mbgl)	Corrected SPT 'N' Value	Classification
WSTP107	2.00	70	Very stiff
WSTP107	2.60	Refused with 50 blows required for 165mm penetration	Refusal

The results indicate the deposit is either this deposit is very stiff, or that the results have been affected by the presence of cobbles.

6.3.4 Hydrogeology

No groundwater strikes or seepages were recorded in any of the windowless sample holes. However, given that the pipeline route runs along the base of a long slope, it should not be assumed that groundwater will not be encountered anywhere between Nenthead Mines Heritage Centre and access to Mill Cottage Bunkhouse.

Pipeline Route Zone 2- Along River Nent beyond Mill Cottage Bunkhouse.

Investigations: Five trial pits TP108, TP109, TP126, TP127 and TP128 were taken to a maximum depth of 2.25mbgl to investigate the ground conditions beneath the pipeline route beyond Mill Cottage Bunkhouse. The trial pits along this section of the route were made in the verge.

The ground conditions in this section consist of Topsoil which overlies Made Ground. Made Ground is underlain by Alluvium. A summary of the ground conditions is provided in table 6.3-4.

Table 6.3-4 Summary of Ground Conditions in Section 3 – Along River Nent beyond Mill Cottage Bunkhouse

STRATUM	DESCRIPTION	THICKNESS (m) Min Max and (Average)	Min – Max depths to base m bgl (mAOD)
Topsoil	TOPSOIL	0.10	0.10 (462.01 – 496.59)
Granular Made Ground	Very gravelly clayey fine to coarse SAND with high cobble and medium boulder content.	0.45 – 1.80 (0.86)	0.45 – 1.90 (496.14- 461.61)
*Alluvial Sand	Very gravelly fine to coarse SAND with high cobble and low boulder content.	1.40 penetrated	1.85 penetrated (476.35)
*Alluvial Organic Clay	Soft to firm sandy gravelly organic CLAY with low to medium cobble and boulder content. Below 1.20mbgl firm to stiff.	1.70 penetrated	2.25 penetrated (494.44)
*Alluvial Clay	Soft to firm slightly sandy gravelly CLAY with high cobble content.	0.95 penetrated	2.25 penetrated (485.46)

*Alluvial Sand only encountered in TP126.

*Alluvial Organic Clay only encountered in TP128.

*Alluvial Clay only encountered in TP127.

6.3.5 Topsoil

Topsoil is present at all locations. Topsoil has an average thickness of 0.10m.

6.3.6 Made Ground

Along the River Nent beyond Mill Cottage Bunkhouse Made Ground is encountered in TP108, TP109, TP126, TP127 and TP128. Engineers descriptions of this unit are variable due to the nature of material, TP126 and TP128 are typically described as, very gravelly fine to coarse SAND, with high cobble and medium boulder content of siltstone, sandstone and limestone. Whereas TP108, TP109 and TP127 are described as slightly

gravelly sandy CLAY with a high cobble and boulder content thus classifying the stratum found as cohesive, however particle size distribution tests suggest stratum found is granular. Test results are discussed in more detail below.

It should be noted that TP108 was terminated at 0.50mbgl (461.61AOD) due to a stone structure.

Particle size distribution (PSD)

Two particle size distribution tests were carried out on samples of Made Ground along River Nent beyond Mill Cottage Bunkhouse at TP108 0.45mbgl and TP109 1.50mbgl. These indicate that the Made Ground which was previously described as cohesive is comprised of material ranging from clayey silty very gravelly SAND and clayey very silty SAND and GRAVEL with a medium cobble content.

Plasticity Index tests

One plasticity index test was carried out on a sample of Made Ground, TP109 1.00mbgl. The results are shown in table 6.3.5

Table 6.3-5 Pipeline route zone 2 - Plasticity Index test on Made Ground

Moisture Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Liquidity Index
27.9	33	23	10	0.49

The results indicate the fine fraction of Made Ground comprises of Silt with low plasticity.

California Bearing Ratio

Three laboratory CBR test were carried out on samples 0.50mbgl from TP109, TP127 and TP128 in Made Ground. This indicated that the CBR value between TP109 and TP127 range from 0.32% to 0.38% average 0.35%. Whereas TP128 CBR value was 0.62%.

6.3.7 Alluvial Sand

TP126 encountered Alluvial Sand beneath Made Ground, comprising brown mottled orange very gravelly clayey fine to coarse Sand with high cobble and low boulder content. TP126 was terminated at 1.85m due to probable boulder obstruction.

Laboratory testing

Particle size distribution (PSD)

One particle size distribution test was carried out on a sample of Alluvial Sand at 1.50m. Indicating clayey very silty very gravelly Sand.

California Bearing Ratio

One laboratory CBR test were carried out on a sample at 0.50mbgl from TP126. This indicated that the CBR value of 1.1%.

6.3.8 Alluvial Organic Clay

TP128 encountered Alluvial Organic Clay beneath Made Ground, comprising Soft to firm sandy gravelly organic CLAY with low to medium cobble and boulder content. Below 1.20mbgl firm to stiff. content. TP126 was terminated at 2.25m due to probable boulder obstruction.

Laboratory testing

Moisture content and Plasticity Index tests

One determination of plastic and liquid limit and moisture content was carried out on a sample of Alluvial Organic Clay at 0.60mbgl. The results are shown in table 6.3-6 together with the liquidity index.

Table 6.3-6 Pipeline route zone 2 - Plasticity Index test on completely weathered mudstone

Moisture Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Liquidity Index
497	692	366	326	0.402

Unable to obtain repeatable plastic limit test results. Value recorded is outside the BS test limits. The unnaturally high moisture content and Atterberg limits would suggest that this deposit is a localised pocket of amorphous peat.

6.3.9 Alluvial Clay

TP127 encountered Alluvial Clay beneath Made Ground, comprising Soft to firm slightly gravelly sandy CLAY with high cobble content. Gravel is angular to subangular fine to coarse of sandstone. A seepage was noted from 1.85mbgl to 1.80mbgl. TP127 was terminated at 2.25mbgl (485.46AOD) due to probable boulder obstruction. No in-situ or laboratory tests were carried out on this stratum.

6.3.10 Hydrogeology

A seepage was noted from 1.85mbgl to 1.80mbgl, no groundwater strikes were recorded in any of the windowless sample holes. However, given that the pipeline route runs along the base of a long slope, it should not be assumed that groundwater will not be encountered anywhere along River Nent beyond Mill Cottage Bunkhouse.

Pipeline Route Zone 3- Access valley to Mine Water Treatment Site.

Investigations: Three trial pits TP124, TP125 and TP111 were taken to a maximum depth of 2.55mbgl to investigate the ground conditions beneath the pipeline route along the access track to MWTS.

The ground conditions in this section consist of topsoil which overlies sand. Sand is underlain by clay. A summary of the ground conditions is provided in table 6.3-7.

Table 6.3-7 Summary of Ground Conditions in Section 3 – Access valley to mine water treatment site

STRATUM	DESCRIPTION	THICKNESS (m) Min Max and (Average)	Min – Max depths to base m bgl (mAOD)
Topsoil	TOPSOIL	0.10	0.10 (486.29 – 479.27)
*Sand	Very gravelly clayey fine to coarse SAND with high cobble and medium boulder content.	0.10	2.40 (475.17)
Clay	Firm to stiff slightly sandy gravelly CLAY with medium to high cobble content, locally high boulder content	2.15-2.45(2.27) penetrated	2.25-2.55 (484.14-476.82) penetrated

*Encountered in TP125.

6.3.11 Topsoil

Topsoil is present at all locations. Topsoil has an average thickness of 0.10m.

6.3.12 Sand

Sand is encountered at TP125, with a thickness of 0.10m. Consisting of dark brownish grey very clayey very gravelly SAND with medium cobble content. Gravel is subangular to subrounded fine to coarse of limestone and siltstone. Cobbles are angular to subrounded of siltstone.

No in-situ or laboratory tests were performed on this stratum.

6.3.13 Glacial Till

Clay is encountered in all trial pits in this section. Consisting of firm to stiff slightly sandy gravelly CLAY with medium to high cobble content, locally high boulder content. It should be noted that all trial pits were terminated due to boulder obstructions.

In-situ testing

Shear vane tests

Shear vane tests were carried out on block specimens of excavated Clay taken from the trial pits (TP111, TP124 and TP125) to determine the peak and residual undrained shear strength of the samples at depths of between 0.7m and 1.0m bgl. The results are summarised in table 6.3-8.

Table 6.3-8 Pipeline route zone 3 - Undrained shear strength from in situ shear vane tests on Glacial Till

Location	Depth Mbgl	Undrained shear strength – peak (kN/m ²) minimum maximum and (average)	Undrained shear strength – residual (kN/m ²) minimum maximum and (average)
TP111	1.00	>140 (>140)	10 – 112 (63.3)
TP124	1.00	44- 52 (48)	18 – 30 (22.7)
TP125	0.70	40 – 54 (47.3)	16 - 26 (22.7)

The results from TP111 are anomalous, thought to be influenced by the presence of cobbles and/or boulders, they have been removed from analysis. The results indicate that the clay is of medium strength.

Laboratory testing

Plasticity and Moisture Content

Two moisture content determinations and two liquid and plastic limit tests were carried out on the Glacial Till in trial pits 1.00mbgl (TP124 and TP125) The results are presented in Table 6.3-9.

Table 6.3-9 Pipeline route zone 3 - Plasticity Index test on Glacial Till

Location	Moisture Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Liquidity Index
TP124	36	45	24	21	0.571
TP125	23.5	45	25	20	-0.075

The results show that the Glacial Till is of intermediate plasticity, with an average moisture content of 29.8%. Correlation with CIRIA 504 (Figure 5.1) indicates that the peak angle of shearing resistance is likely to be 31 degrees.

California Bearing Ratio

Two laboratory CBR test were carried out on a sample of Glacial Till from trial pits (TP124 at 0.5mbgl and TP125 at 0.30mbgl). This indicated that the CBR value between of 1.3% and 2.3%.

6.3.14 Hydrogeology

No groundwater strikes or seepages were recorded in any of the windowless sample holes. However, given that the pipeline route runs along the base of a long slope, it should not be assumed that groundwater will not be encountered anywhere along the access to Mine Water Treatment Site.

6.4 Section 4 – Mine Water Treatment Site

Site 4 is the proposed mine water treatment site. The site comprises a reed bed area in the west of the site and three settlement ponds to the east of section 4. The intrusive investigation was intended to look for a deeper level below the proposed Mine Water Treatment Site, in addition to characterising the various strata encountered. Mine Water Treatment Site includes two zones with significantly different ground conditions due to the change in the nature of the superficial deposits.

Mine Water Treatment Site: Reed Bed and North Pond

Mine Water Treatment Site: Central and Southern Pond

These two zones are considered separately.

Mine Water Treatment Site – Reed Bed and Northern Settlement Pond

Investigations: 8No. Trial Pits (TP110, TP112, TP113, TP114, TP115, TP116, TP120 and TP123) to a maximum depth of 3.0m, 2No. Windowless Samples (WS103, WS104 and WS105) to a maximum depth of 3.4m, and 2 No Cable Percussion boreholes (BH103 and BH104) to a maximum depth of 4.23m.

The ground conditions in this section consist of Topsoil overlying Made Ground. Underlying this is Glacial Till overlying bedrock of Alston formation. A summary of the ground conditions is provided in table 6.4-1.

Table 6.4-1 Summary of Ground Conditions in MWTS Reed Bed and Northern Settlement Pond

Stratum	Description	Thickness min - max (average) (m)	Min – Max depths of base m bgl (mAOD)
Topsoil	Topsoil	0.10 – 0.15 (0.11)	0.10 – 0.15 (496.27 – 486.29)
*Made Ground	Slightly gravelly sandy CLAY with medium to high cobble content.	0.90 – 2.65 (1.41)	1.00 – 3.10 (493.67 – 487.48)
Glacial Till	Soft to Firm grey mottled orange slightly gravelly sandy CLAY with medium cobble content.	0.85 – 3.15 (1.38)	0.95 – 1.15 (490.38 – 502.82) WS104 & WS105 penetrated 3.25 - 3.40 (491.42 – 500.92)
	Stiff black mottled bluish grey slightly sandy gravelly CLAY with medium cobble content	0.1 – 1.0 (0.39) TP110 and TP114 penetrated 2.05	1.10 – 1.45 (492.38- 494.92) TP110 and TP114 penetrated 3.00
*Mudstone/siltstone	BH103 Extremely weak grey MUDSTONE. Recovered as grey subangular to subrounded fine to coarse gravel. BH104 Extremely weak thinly laminated SILTSTONE, recovered as sandy slightly gravelly clay	0.60 -1.24 (0.92)	3.74 - 4.10 (499.03 - 487.85)
*Limestone	Weak to very hard yellow LIMESTONE	0.15-0.30(0.23) penetrated	3.1-4.25 (487.85- 487.18) penetrated

*Mudstone encountered in BH103 alone.

*Limestone encountered in BH103 and WS103.

*Made Ground encountered in WS103 and WS104.

6.4.1 Topsoil

Topsoil is present throughout the site. Topsoil has an average thickness of 0.11m.

6.4.2 Made Ground

Made Ground is present in WS103, WS104, WS105 and BH104. Typically consisting of slightly gravelly sandy CLAY with medium to high cobble content. The thickness of this unit is variable ranging from 0.90 – 2.65m.

In situ testing

SPT

Three SPTs were carried out on the Made Ground. The 'N' values, corrected for depth, groundwater level and hammer efficiency are plotted in figure 3 and presented in table 6.4-2.

Table 6.4-2 MWTS Reed bed and North pond - Summary of SPT tests on Made Ground

Location ID	Depth (mbgl)	Corrected SPT 'N' Value	Classification
WS103	1.20	18	Firm
WS103	2.00	26	Stiff
WS103	2.80	Refused with 50 blows required for 150mm penetration	Rockhead

Three SPTs were carried out in the Made Ground. The N values ranged from 18 to 26 with an average of 22. This indicates that the made ground is firm to stiff, but the presence of cobbles is likely to increase the N values by obstructing the SPT shoe during driving. The SPT N values indicate that the unit becomes stiffer with depth shown in figure 3. SPT at 2.80mbgl refused with 50 blows for 150mm penetration, this confirms depth of rockhead.

Laboratory testing

PSD

Two particle size distribution tests were performed on Made Ground at BH104 0.50mbgl and WS105 0.20mbgl. The results indicate this layer consists of clayey gravelly very silty SAND to clayey silty very sandy GRAVEL with a low cobble content.

Plasticity and Moisture Content

Two moisture content determination and two liquid and plastic limit tests were carried out on the Made Ground in WS103 at 1.20mbgl and BH104 0.50mbgl. The results are presented in Table 6.4-3.

Table 6.4 3 MWTS Reed bed and North pond - Plasticity Index test on Made Ground

Location	Moisture Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Liquidity Index
WS103	15.4	38	17	21	-0.076
BH104	21.7	42	25	17	-0.194

The results show that the Made Ground comprises of Clay with intermediate plasticity.

6.4.3 Glacial Till

Underlying topsoil and/or made ground at most locations within the proposed reed bed is soft to firm grey mottled orange slightly gravelly sandy CLAY with medium cobble content, probably weathered Glacial Till. This layer is encountered at 0.10m (TP110, TP114, TP115, TP116, TP120, TP123, WS104, WS105 and BH104). In some areas this layer is encountered at the surface (BH103 and TP112).

Underlying the mottled Clay, stiff black mottled bluish grey slightly sandy gravelly CLAY with medium cobble content, lower Glacial Till and is present at most locations except locally WS103, WS104, WS105, BH103 and BH104.

In-situ testing

SPT

Nine SPTs were carried out on the upper weathered Clay. The 'N' values, corrected for depth, groundwater level and hammer efficiency are presented in table

The results are presented in figure 3 and summarised Table 6.4-4

Table 6.4-4 MWTS Reed bed and North pond - Summary of SPT tests on Glacial Till

Location ID	Depth (mbgl)	Corrected SPT 'N' Value	Classification
BH103	2.50	22	Stiff
BH103	3.50	19	Firm
WS104	1.20	36	Stiff
WS104	1.70	25	Stiff
WS104	2.40	29	Stiff
WS104	3.20	Refused 50 blows for 10mm penetration	Refused
WS105	1.20	8	Soft
WS105	2.0	18	Firm

Location ID	Depth (mbgl)	Corrected SPT 'N' Value	Classification
WS105	3.0	Refused 50 blows for 275mm penetration	Refused

WS105 1.20mbgl is anomalous and likely due to a local pocket of sand influencing the material. Both WS104 and WS105 SPT refuse below 3.0mbgl, this indicates an increase in cobble content at 3.00mbgl. The results indicate that the weathered Glacial Till is firm to stiff, predominantly stiff, but the presence of cobbles is likely to increase the N values by obstructing the SPT shoe during driving. Figure (3) shows that the Glacial Till generally softens with depth to around 3.0mbgl likely due to decreasing cobble content. No SPT tests were undertaken on the lower clay.

Shear Vane

Shear vane tests were carried out on block specimens of excavated weathered Glacial Till taken from the TP115 to determine the peak and residual undrained shear strength of the samples at 1.00mbgl. The results are included table 6.4-5.

Table 6.4-5 MWTS Reed bed and North pond - Undrained shear strength from in situ shear vane tests on glacial till

Location	Depth Mbgl	Undrained shear strength – peak (kN/m ²) minimum maximum and (average)	Undrained shear strength – residual (kN/m ²) minimum maximum and (average)
TP115	1.00	16 – 48 (32)	14-28 (20.7)

The results indicate that the clay is of very low to medium strength, the average value indicates low strength.

Laboratory testing

California Bearing Ratio

One laboratory CBR test were carried out on a sample of lower Glacial Till 0.50mbgl. This indicated that the CBR value of 0.41%.

Particle size distribution (PSD)

Two particle size distribution tests were carried out on a sample of weathered Glacial Till. Indicating clayey very silty very gravelly locally gravelly Sand.

Plasticity and Moisture Content

Ten moisture content determination and six liquid and plastic limit tests were carried out on the weathered Glacial Till from a range of depths 0.50mbgl to 3.25 mbgl. Seven moisture content determination and six liquid and plastic limit tests were carried out on the lower Glacial Till. The results are presented in figure 3 and summarised in Table 6.4-6.

Table 6.4 6 MWTS Reed bed and North Pond -Summary of moisture content and Plasticity Index test on Glacial Till

Location (depth mbgl)	Moisture Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Liquidity Index
Weathered Glacial Till	16.5-46.4 (22.38)	31-62 (39)	16-29(20)	14-33(19)	-107-0.527 (0.079)

Location (depth mbgl)	Moisture Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Liquidity Index
Lower Glacial Till	15.2-36(19.8)	34-44(39)	17-21(19)	15-23(20)	-0.133-0.542(-0.05)

The results indicate weathered Glacial Till consist of clay with low to intermediate plasticity, typically intermediate. TP115 indicates high plasticity in the weathered clay and is considered anomalous and has been disregarded from analysis. On average this layer has 22.38% moisture content.

The lower Glacial Till consists of Clay with intermediate plasticity. With an average moisture content of 19.8%.

Correlation with CIRIA 504 (Figure 5.1) indicates that the peak angle of shearing resistance is likely to be between 28 degrees, and 33.5 degrees for the weathered Glacial Till and 31 degrees and 33 degrees for the lower Glacial Till.

Drained direct shear box tests

One direct shear box test was carried out on a sample of weathered Glacial Till from the material to be excavated for the settlement ponds (peak values only). Tests were carried out on remoulded material. The results indicate drained cohesion peak value of 21kPa and angle of friction 25.5 degrees.

Compaction tests

One compaction test in the weathered Glacial Till and two compaction tests in the lower Glacial Till were carried out using the 2.5kg rammer method, the results are presented in Table 6.4-7.

Table 6.4 1 MWTS Reed bed and North Pond - Compaction Tests on Glacial Till.

Stratum	Natural Moisture Content (%) range and (average)	Compacted Dry Density at natural moisture content (kN/m ³)	Optimum Moisture Content (%) range and (average)	Maximum Dry Density (kN/m ³) range and (average)
Weathered Glacial Till	18.6	1.75	13	1.91
Lower Glacial Till	18.6 – 24.3 (21.5)	1.57 - 1.78 (1.68)	15	1.76 - 1.82 (1.79)

The weathered clay results indicate that the ground at its natural moisture content is 5.6 % above the optimum, and that the material achieves a density of 92% maximum dry density at natural moisture content. This indicates that the material will require some drying out to be suitable for re-use as engineered fill.

The lower clay results indicate that the ground at its natural moisture content is generally 6.5 % above the optimum, and that the material achieves a density of 94% maximum dry density at natural moisture content. This indicates that the material will require some drying out to be suitable for re-use as engineered fill.

Moisture Condition Value

Three MCV tests were carried out on weathered Glacial Till at natural moisture content in areas to be excavated for the proposed settlement ponds together with one MCV calibration test.

One MCV test was carried out on the lower Glacial Till at natural moisture content in areas to be excavated for the proposed settlement ponds.

MCV tests at natural moisture content are summarised in table 6.4-8.

Table 6.4-8 MWTS Reed bed and North Pond – Summary of MCV tests on Glacial Till

Stratum	Natural Moisture Content (%) range and (average)	MCV range and (average)
Weathered Glacial Till	19-24 (21.5)	2.3-6.3 (4.3)
Un-weathered Glacial Till	16	8.2

MCV test on weathered Glacial Till at WS105 2.00mbgl is anomalous and has been removed from analysis. MCV value of 0.0 indicates where a change of penetration of 5mm or less has occurred after four blows.

In comparison with optimum moisture contents derived from compaction tests the results indicate that the weather Glacial Till at its natural moisture content is averagely 8.5% above optimum and the lower Glacial Till at its natural moisture content is 1% above optimum. Therefore, this stratum will require drying in order to make suitable for compaction plant to operate on.

The results of MCV calibration are presented in table 6.4-9.

Table 6.4-9 MWTS Reed bed and North Pond – Summary of MCV calibration tests on Glacial Till

Stratum	Moisture Content (%) range and (average)	MCV range and (average)
Weathered Glacial Till	20-26 (23)	2.8-7.7 (5.1)

The results indicate that both weathered and lower Glacial Till have MCV values which are below normally considered appropriate for suitable fill for earthworks.

MCV calibration test at TP123 (0.50mbgl) indicate MCV of 7.7 at 20% moisture content, therefore the moisture content must be less than 20% for the weathered Glacial Till to be re-useable.

6.4.4 Mudstone/siltstone

Underlying Glacial Till at BH103 is extremely weak grey MUDSTONE, recovered as grey subangular to subrounded fine to coarse gravel. This layer is encountered 3.50mbgl to 4.10mbgl. Underlying glacial till at BH104 is extremely weak thinly laminated grey mottled light brownish SILTSTONE. This layer is encountered at 2.50mbgl – 3.74mbgl.

In-situ testing

SPT

One standard penetration test was undertaken in Mudstone at BH103 3.50mbgl. The 'N' values, corrected for depth, groundwater level and hammer efficiency. Results give an N value of 17. This indicates that within the range of the SPT test the mudstone bedrock has been weathered to a residual clay with lithorelicts of mudstone.

Three standard penetration tests were undertaken in the Siltstone at BH104 at 2.50, 3.20 and 3.50 mbgl. SPT at 2.50mbgl gave an N value of 44. 3.20mbgl refused with 50 blows for 130mm penetration and 3.50mbgl refused with 50 blows for 145mm penetration.

6.4.5 Limestone

Underlying Made Ground at WS103 is weak LIMESTONE, white with slight green tint. Underlying mudstone at BH103 is very hard yellow LIMESTONE. This layer is encountered 2.80mbgl to 4.10mbgl (487.18AOD – 487.85AOD).

In-situ testing

SPT

Three standard penetration tests were undertaken in Limestone. The 'N' values, corrected for depth, groundwater level and hammer efficiency. Results are presented in table 6.4-10.

Table 6.4-10 MWTS Reed bed and North Pond - Summary of SPT tests on Limestone

Location ID	Depth (mbgl)	Corrected SPT 'N' Value	Classification
BH103	4.10	Refused with 50 blows for 20mm penetration	Refusal
BH103	4.20	Refused with 50 blows for 20mm penetration	Refusal
WS103	2.80	Refused with 50 blows for 150mm penetration	Refusal

All three SPT result in refusal, confirming the depth of rockhead. No further in-situ or laboratory tests were undertaken on Limestone.

6.4.6 Hydrogeology

Ground water installations were installed at BH103, BH104, WS103 and WS104 and ground water levels were measured at weekly intervals from 20th October 2019 to 25th November 2019.

The results of the groundwater monitoring are summarised in Table 6.4-11.

Table 6.4-11 MWTS Reed bed and North Pond - Ground Water Monitoring Results

Location	Depths to Water range m bgl and (level mAOD)	Location	Ground water strata
BH103	1.40 – 2.32	Reed Bed	Slightly sandy slightly gravelly CLAY overlying extremely weak grey MUDSTONE.
BH104	1.00 – 1.20	North Pond	Slightly sandy slightly gravelly CLAY overlying extremely weak thinly laminated SILTSTONE
WS103	0.65 – 1.47	Reed Bed	MADE GROUND: slightly sandy gravelly clay with high cobble content.
WS104	0.23 – 0.45	North Pond	Firm slightly sandy gravelly CLAY

Mine Water Treatment Site – Central and Southern Settlement Pond

Investigations: 5No. Trial Pits (TP117, TP118, TP119, TP121 and TP122) to a maximum depth of 1.55m, 4No. Windowless Samples (WS106 to WS109) to a maximum depth of 3.4m, and 2 No Cable Percussion boreholes with rotary core follow-on (BH105 and BH106) to a maximum depth of 14.80m. Due to finding a void within BH105 an additional borehole was commissioned (BH107), this exploratory hole used open hole technique to advance to bedrock (4.50mbgl) then coring to 10.0m.

The ground conditions in this section consist of Topsoil overlying residual soils. Underlying this is Limestone bedrock of Alston formation. A summary of the ground conditions is provided in table 6.4-12.

Table 6.4-12 Summary of Ground Conditions in MWTS Central and Southern Settlement Pond

Stratum	Description	Thickness min - max (average) (m)	Min – Max depths of base m bgl (mAOD)
Topsoil	TOPSOIL	0.10 – 0.45 (0.14)	0.10 – 0.45 (504.81 – 502.94)
*Made Ground (BH105 only)	Slightly gravelly very sandy CLAY.	1.95	1.95 (503.53)
Upper residual soil	Soft slightly gravelly sandy CLAY with low cobble content.	0.65	0.75 (503.20)
	Loose dark brown very clayey locally very gravelly fine to coarse SAND	0.55 – 0.65 (0.60)	1.70 – 2.50 (502.98 – 502.25)
Cohesive Residual soil	Soft becoming firm to stiff slightly gravelly sandy CLAY, with medium to high cobble content.	0.45 – 5.5 (1.75)	0.85 – 5.50 (502.61 – 498.68)
*Granular Residual Soil (WS109 only)	Medium dense very gravelly very clayey fine to coarse SAND.	1.00	3.30 (499.22)
Limestone	Extremely weak to weak yellowish-brown LIMESTONE.	0.64	3.94 (501.54)
Interbedded Mudstone and Siltstone with occasional Sandstone (BH105 only)	Interbedded extremely weak to very weak thinly laminated black MUDSTONE and	10.86 penetrated	14.80 penetrated
	Very weak to strong, typically medium strong to strong thinly laminated light grey SILTSTONE Occasional Extremely weak to very weak grey brown SANDSTONE with very thin laminations of black mudstone.		

6.4.7 Topsoil

Topsoil is throughout the site, typically 0.10m thick, TP121 encounters 0.45m thick layer of topsoil.

6.4.8 Made Ground

Made Ground is encountered in BH105 from ground level to 1.95mbgl, comprising slightly gravelly very sandy CLAY.

BH107 encountered Made Ground to a depth of 7.88mbgl consisting of interbedded grey gravelly fine to coarse SAND and dark grey slightly sandy slightly gravelly CLAY.

Laboratory tests

Plasticity and Moisture Content

One moisture content determination was carried out on the Made Ground from a sample at ground level. The result indicates a moisture content of 8.2%, liquid and plastic limit tests were attempted, but the material was found to be non-plastic..

Consolidated undrained triaxial compression test

One multistage consolidated undrained triaxial compression test was carried out on a sample of Made Ground. The results indicate values of undrained effective cohesion (C') 2kPa and effective friction angle (ϕ') 38.0.

Moisture Condition Value tests

One MCV tests were carried out at natural moisture content on a sample of the made ground in areas to be excavated for the proposed settlement ponds. A natural moisture content of 8.2% was recorded, however MCV result of 0.0 indicates where a penetration of 5mm or less has occurred after 4 blows.

6.4.9 Upper residual soil

The upper residual soil consists of cohesive material overlying granular material, formed as products of limestone weathering. The cohesive material is only found in WS108, underlying topsoil, consists of soft dark brown mottled orangish brown slightly gravelly sandy CLAY with low cobble content. This layer is encountered at 0.1mbgl (503.85).

The granular upper residual soil is encountered in WS108 underlying cohesive upper residual soil, and in BH105 underlying made ground. Consisting of brown very clayey fine to coarse SAND. This layer is encountered at 0.75-1.95 mbgl (503.53AOD - 503.20AOD).

In-situ testing

SPT

One standard penetration test was performed on granular upper residual soil. 'N' values are corrected for depth, groundwater level and hammer efficiency. 'N' value of 12 indicates the upper cohesive residual soil is firm. Results are presented in figure 5.

No tests were carried out on the upper cohesive layer.

Laboratory testing

Particle size distribution

One particle size distribution test was performed on upper granular layer, by wet sieving and sedimentation testing of the fines to determine the classification of the layer. The results indicate that the upper cohesive layer comprises slightly clayey sandy very gravelly SAND with low cobble content. No tests were carried out on the upper granular layer.

No further tests were performed on the upper residual soils.

6.4.10 Cohesive residual soil

The cohesive residual soil is encountered across this section, consisting of soft becoming firm to stiff slightly gravelly sandy CLAY, with medium to high cobble content. This layer is typically encountered at ground level to 0.10mbgl (504.18AOD - 504.33AOD). BH105 encountered this layer significantly deeper at 2.50mbgl (502.98).

In-situ testing

SPT

Fourteen standard penetration tests were undertaken in cohesive residual soil. The 'N' values, corrected for depth, groundwater level and hammer efficiency. Results are presented in figure 5 and summarised table 6.4-13.

Table 6.4-13 MWTS Central and Southern ponds - Summary of SPT tests on cohesive residual soil

Location ID	Depth (mbgl)	Corrected SPT 'N' Value	Classification
BH105	2.50	16	Firm
WS106	1.2	36	Stiff
WS106	1.7	29	Stiff
WS106	2.7	Refusal 50 blows for 200mm penetration	Refusal
WS107	1.26	20	Stiff
WS107	2.0	46	Very stiff
WS107	3.0	Refusal 58 blows required for 290mm penetration	Refusal
WS108	1.20	12	Firm
WS108	2.00	39	Stiff
WS108	2.70	Refusal 50 blows required for 265mm penetration	refusal
BH106	2.50	17	Firm
BH106	4.50	14	Firm
WS109	1.20	12	Firm
WS109	2.00	30	Stiff

WS108 (2.80mbgl) and WS107 (3.0mbgl) both resulted in refusal, it is likely this is due to increase of cobble content at this level. The results indicate the strata is stiff to hard, but the presence of cobbles is likely to increase the N values by obstructing the SPT shoe during driving. Anomalous results removed average N value is 19.

Laboratory testing

Particle size distribution

One particle size distribution test was performed on cohesive residual soil, by wet sieving and sedimentation testing of the fines to determine the classification of the layer. The results indicate that the cohesive residual soil comprises slightly clayey gravelly very silty SAND with low cobble content. No further PSD tests were performed.

Plasticity and Moisture Content

Six moisture content determination and four liquid and plastic limit tests were carried out on the cohesive residual soil from a range of depths ground level to 4.25mbgl. The results are presented in Table 6.4-14.

Table 6.4-14. MWTS Central and Southern ponds - summary of moisture content and Plasticity Index tests on cohesive residual soil.

	Moisture Content (%)	Liquid Limit (%)	Plastic Limit (%)	Plasticity Index (%)	Liquidity Index
Cohesive residual soil	13.7-30.6 (19)	32-48 (39)	16-35 (22)	13-23 (17)	-0.338-0.117 (-0.13)

The results indicate cohesive residual soil consist of clay with low to intermediate plasticity, typically intermediate. On average this layer has 19% moisture content.

Moisture Condition Value tests

Four MCV tests and one calibration tests were carried out at natural moisture content on samples of the cohesive residual soil in areas to be excavated for the ponds. Three of the four MCV results 0.0 due to change in penetration of 5mm has occurred after four blows.

The results of the MCV tests at natural moisture content are summarised in Table 6.4-15.

Table 6.4 -15 MWTS Central and Southern ponds - MCV tests on samples at natural moisture content on cohesive residual soil

Stratum	Natural Moisture Content (%) range and (average)	MCV value range and (average)
Cohesive residual soil	30	2

One MCV calibration test was performed on a sample of cohesive residual soil at 0.50mbgl (TP121). The results are summarised in table 6.4-16.

Table 6.4 -16 MWTS Central and Southern ponds - MCV calibration tests on samples on cohesive residual soil

Stratum	Moisture Content (%) range and (average)	MCV value range and (average)
Cohesive residual soil	22-27 (25)	2-6.2 (4.15)

The results indicate that the cohesive residual soil has MCV values which are below those normally considered appropriate for suitable fill for earthworks.

California Bearing Ratio test (CBR)

One laboratory CBR test was carried out on a sample from TP119 at 0.50m bgl in the cohesive residual soil. This indicated that the CBR value was 0.68%.

Drained direct shear box tests

Three direct shear box tests were carried out on samples of cohesive residual soil from the material to be excavated for the settlement ponds (peak values only). Tests were carried out on remoulded material. The summary of test results shown in Table 6.4.17.

Table 6.4-17 MWTS Central and Southern ponds - Direct shear box test results cohesive residual soil

Sample type	Drained cohesion (kN/m ²)	Angle of friction (degrees)
	Range and (average)	Range and (average)
BH106	9	30.5
TP117	10	29
TP118	17	27.5

Given the range of results, AECOM have considered conservative characteristic values. Conservative characteristic values derived from the plots are tabulated in Table 6.4-18.

Table 6.4-18 Recommended characteristic drained shear strength parameters for cohesive residual soil at MWTS Central and South pond:

	Characteristic drained cohesion (kN/m ²)	Characteristic drained angle of friction (degrees)
Peak shear strength	9.5	30

Compaction tests

Two compaction tests in the cohesive residual soil were carried out using the 2.5kg (WS107) and 4.5kg (TP118) rammer method, the results are presented in Table 6.4-19.

Table 6.4 -19 MWTS Central and Southern ponds - Compaction Tests cohesive residual soil

Stratum	Natural Moisture Content (%) range and (average)	Compacted Dry Density at natural moisture content (kN/m ³)	Optimum Moisture Content (%) range and (average)	Maximum Dry Density (kN/m ³) range and (average)
Cohesive residual soil	N/A	N/A	8.70 – 16 (12.4)	1.75 – 2.08 (1.92)

The results indicate optimum moisture content and maximum dry density, however unable to obtain natural moisture content as specimen was unsuitable due to gravel content.

6.4.11 Granular residual soil

Granular residual soil is encountered in WS109 only, underlying cohesive residual soil. Consisting of medium dense very gravelly very clayey fine to coarse SAND, gravel is subangular to subrounded fine to coarse of limestone. This layer is encountered at 2.30mbgl (500.22).

In-situ testing

SPT

One standard penetration test was performed in this layer. The 'N' values, corrected for depth, groundwater level and hammer efficiency. The results indicate refusal with 50 blows required for 140mm penetration, likely due to the presence of gravel obstructing the SPT shoe during driving.

No further testing was performed on this layer.

6.4.12 Limestone

Limestone bedrock was encountered in WS107, BH105 and BH106, underlying cohesive residual soil from a depth of 2.30mbgl (500.22). Consisting of Extremely weak to weak yellowish-brown (weathered) LIMESTONE.

In-situ testing

SPT

Four standard penetration tests was performed in this layer from 3.3mbgl to 5.8mbgl. The 'N' values, corrected for depth, groundwater level and hammer efficiency. The results indicate refusal with 50 blows required for 140mm penetration, likely due to the presence of gravel obstructing the SPT shoe during driving.

Table 6.4-20 MWTS Central and Southern Ponds - Summary of SPT tests on Limestone

Location ID	Depth (mbgl)	Corrected SPT 'N' Value	Classification
BH105	3.3	Refusal 50 blows for 150mm penetration	Refusal
BH105	3.6	Refusal 100 blows for 150mm penetration	Refusal
BH106	5.5	Refusal 50 blows for 150mm penetration	Refusal
BH106	5.8	Refusal 50 blows for 135mm penetration	Refusal

All standard penetration tests resulted in refusal, this confirms the depth of bedrock. No further tests were performed on this layer.

6.4.13 Interbedded Mudstone, Siltstone and Sandstone

Interbedded Mudstone, Siltstone and Sandstone bedrock is encountered, underlying Limestone at BH105 and made ground at BH107. Interbedded extremely weak to very weak thinly laminated black MUDSTONE and very weak to strong, typically medium strong to strong thinly laminated light grey SILTSTONE, with occasional layers of extremely weak to very weak grey brown SANDSTONE with very thin laminations of black mudstone. Layers are encountered from 3.94mbgl (501.54).

A void was noted in BH105 between 11.20m and 13.30m and is thought to be historic mine workings. To investigate further an additional borehole BH107 was commissioned, located at WS107, no void was found.

No in-situ or laboratory tests were performed.

6.4.14 Hydrogeology

Ground water installations were installed at BH106 and BH107 and ground water levels were measured at weekly intervals from 20th October 2019 to 25th November 2019.

It should be noted a seepage was noted within cohesive residual soil (soft to firm slightly gravelly sandy CLAY) at WS106 and WS107. WS106 with a strike at 1.20mbgl (503.71AOD) rose to 1.00mbgl (503.91AOD) after twenty minutes. WS107 strike at 1.00mbgl (503.47AOD) rose to 0.80mbgl (503.67AOD) after twenty minutes.

Assessment of the monitored ground water levels has indicated that the piezometric head in a northerly direction. Therefore, the interpreted flow direction is to the north.

The results of the groundwater monitoring are summarised in Table 6.4-21.

Table 6.4 -21 MWTS Central and Southern ponds - Ground Water Monitoring Results from 20.09.19 to 25.10.19

Location	Depths to Water range m bgl and (level mAOD)	Location	Ground water strata
BH106	0.93 – 1.40 (503.25 – 502.78)	Central Pond	firm slightly sandy slightly gravelly CLAY/ extremely weak LIMESTONE
BH107	0.46 – 0.75 (504.01 – 503.72)	South Pond	Sandy gravelly CLAY (Geology inferred from WS107)

6.5 Derived Geotechnical Parameters for use in Geotechnical Design.

Table 6.5 1 Derived Geotechnical Parameters for use in Geotechnical design

Stratum	γ (kN/m ³)	Φ' (°)	c_u (kPa)	c' (kPa)
Granular Made Ground	2.01 ⁽¹⁾	27 ⁽²⁾	-	2
Glacial Till	1.91 ⁽¹⁾	25.5 ⁽¹⁾	41 ⁽¹⁾	21
Weathered Glacial Till	1.79 ⁽¹⁾	30 ⁽²⁾	0	21 ⁽¹⁾
Alluvial Clay	2.05 ⁽¹⁾	27 ⁽²⁾	65 ⁽³⁾	-
Alluvial sand and gravel	2.00 ⁽¹⁾	-	70 ⁽³⁾	-
Cohesive residual soil	1.90 ⁽¹⁾	29 ⁽²⁾	95 ⁽³⁾	9.5 ⁽¹⁾

Notes:

- 1) Design parameters based on laboratory triaxial compression tests, and supplemented by SPT and hand shear vane test results for c_u values
- 2) The angle of shear resistance was derived from the plasticity index obtained and BS8004 (2015) Table 2.
- 3) Derived from $C_u=5N$ (CIRIA Report 143)

6.6 Aggressive Chemical Environment for Concrete.

Nine BRE water/ soil extract and five groundwater sample tests were carried out on samples throughout the site to determine the aggressivity of the ground to buried concrete. Worst case / highest values were considered together with lowest (worst case) pH values. The results are presented in table 6.6-1.

Table 6.6-1 Summary of ground aggressivity tests

Stratum	Location	pH	Soil		Groundwater		ACEC Class
			Water soil extract SO4 (mg/l)	pH	Groundwater SO4 (mg/l)	Design Sulphate (DS) Class	
Granular Made Ground	East Bank proposed pump hose	7.9	190	7.2	27	DS1	AC-1s
Granular Made Ground	West Bank Caplecleugh Mine adit	7.8	57	-	-	DS1	AC-1s
Cohesive Made ground	West Bank Caplecleugh Mine adit	8.0	71	-	-	DS1	AC-1s
Alluvial Sand and Gravel	West Bank Caplecleugh Mine adit	7.6	54	7.6	42	DS1	AC-1s
Alluvial Clay	West Bank Caplecleugh Mine adit	7.9	61	-	-	DS1	AC-1s
Cohesive Made Ground	Reed Bed and North Pond	-	-	9.4	96	DS1	AC-1s
Glacial Till	Reed Bed and North Pond	6.5	260	7.1	89	DS1	AC-1s

7. Geotechnical Assessment

7.1 Section 1: Eastern Bank of River Nent - Visitor centre and proposed pumping station

7.1.1 Introduction

It is proposed to construct a pumping station on the eastern bank of River Nent adjacent to the existing Nenthead Mines Visitor centre car park. The development at the pumping station site will comprise a small structure housing the pump, a pump well approximately 3m deep, and a small vehicle parking area and access road. The pump well structure will comprise segmental pre-cast concrete circular manhole rings with an external diameter of 2.7m.

The ground conditions at East Bank consist of unbound road surfacing overlying made ground and natural superficial deposits comprising soft to firm gravelly sandy clay with boulder sized rock fragments to 2.50mbgl underlain by dense clayey sand and gravel to 3.53mbgl. This in turn is underlain by weathered siltstone bedrock. The bedrock was investigated to a depth of 5.01m.

7.1.2 Excavation

Bedrock is not likely to be encountered during excavation for the pumping station, however the alluvial deposits could be difficult to excavate due to the presence of boulders.

Groundwater appears to be approximately 2.0 to 2.50mbgl, likely to be encountered during the excavation. Dewatering may be necessary to prevent rapid ingress of groundwater and “blowing” of silt and sand size fraction of the alluvium into the excavation.

7.1.3 Pump house

It may be necessary to found the pump house on the alluvial deposits. It may be necessary to pump groundwater from the base of the excavation for the foundations. It may be necessary to create an even platform by using a suitable well graded granular fill.

7.1.4 Access roads and car parking

The near surface made ground/alluvial clay is inadequate for constructing a road pavement. However, by excavating to the underlying cobbles and laying a well graded granular fill on a geotextile to provide an even surface, it should be possible to provide a satisfactory sub grade for pavement construction. CBR values should be confirmed by testing the subgrade prior to detailed pavement design.

7.1.5 Buried concrete design

The testing for ground aggressivity indicated that buried concrete can be designed for Design Sulphate Class DS1 and ACEC Class AC1 conditions.

7.2 Western Bank of River Nent: Caplecleugh mine adit

7.2.1 Introduction

It is proposed to construct the capture chamber outside the entrance to the Adit. It is understood that the chamber will have a depth of approximately 2.4m below ground level. The capture chamber is expected to be of 1.2m internal diameter.

7.2.2 Ground conditions

The ground conditions at the pumping station site comprise approximately 0.1m of topsoil overlying made ground and/or alluvial deposits with Large boulders are encountered 0.80-1.00mbgl and a high water table within 1m to 2m of ground level. No bedrock was encountered in this section of the site. Remains of a wall are noted at 0.40-0.50mbgl.

Groundwater is expected to be between 1.30-1.90mbgl and is likely to be encountered during excavation.

7.2.3 Pump well excavation

The excavation for the pump well will be mostly through made ground and or alluvial clay. This will require full support together with dewatering. The excavation will be of a diameter greater than the concrete ring diameter and will reach invert level prior to placing the first ring. The annulus between the excavation face and the rings will be backfilled with suitable engineering fill. Typically for excavations of this depth, mechanical shield trench / manhole boxes placed incrementally as the excavation depth proceeds would be a feasible method of support allowing worker entry into the excavation, with dewatering achieved via sump pumping from within the excavation. Alternatively, sheet piling could be considered to provide a key into the ground to form a groundwater cut off. However, there is a risk that the cobbles, boulders or wall remains form obstructions making sheet piling difficult to achieve. The sinking of the pump well is unlikely to require rock excavation, as the mudstone is weathered to clay to below the base of the well.

7.2.4 Caplecleugh Mine lower level

As the excavation for the chamber will be entirely above rock head Caplecleugh Mine lower level will not have any direct impact on the installation of the capture chamber. However, although it was not encountered during the ground investigation, it could be close by and it would still be prudent to determine its whereabouts, by non-intrusive geophysical survey, if possible.

7.2.5 Buried concrete design

The testing for ground aggressivity indicated that buried concrete can be designed for Design Sulphate Class DS1 and ACEC Class AC1 conditions.

7.3 Pipeline

7.3.1 Introduction

The pipeline will be laid within open excavation along the existing carriageway either within the carriageway or the verge. A short deviation will be made into the pumping station at section 1. It is understood that the pipeline will have a minimum cover of 1m and will be 600mm ID, beneath which there will be pipe bedding, assumed minimum 150mm but possibly greater. It is envisaged that the maximum depth of excavation will be in the range 1.80m to 2m.

7.3.2 Ground conditions

From the pump house to the MWTS access the pipeline will run along the carriageway, where the upper 1.0m to 2.50m will comprise road surfacing over granular road construction materials which in turn overlies alluvial deposits. Along most of its length the pipeline will be founded in made ground, mostly granular deposits southeast of pump station

From the MWTS access valley north the pipeline will be founded in glacial till consisting of firm to stiff slightly sandy gravelly CLAY with medium to high cobble content, locally high boulder content.

No groundwater strikes or seepages were recorded in any of the windowless sample holes. However, given that the pipeline route runs along the base of a long slope, it should not be assumed that groundwater will not be encountered anywhere along the pipeline route.

7.3.3 Excavation

The vast majority of the excavation will be carried out in made ground and superficial deposits which can be excavated using conventional plant such as back hoes on wheeled excavators. The excavations will need to be fully supported. Mechanical shield trench boxes are a likely method of support. Some overbreak must be anticipated, particularly near to Mill Cottage Bunkhouse, where boulder size fragments have been encountered (WSTP106, WSTP107, TP109 and TP124). It should be noted that TP108 encountered an obstruction 0.5mbgl.

Although the possibility of encountering groundwater elsewhere cannot be discounted, it is likely that within the excavation along the road, that provision for sump pumping should be sufficient to control any localised inflow.

7.4 Mine Water Treatment Site

7.4.1 Introduction

The works at MWTS will entail the following

- Excavations, benching, re-deposition and compaction of arisings for one reed bed in the west of the site;
- Excavations, benching, re-deposition and compaction of arisings for three settlement ponds in the east of the site;
- the construction of a maintenance building and single-track access roads to link the settlement ponds to the wetland;

It is assumed that the new settlement ponds and the new reed bed will be lined.

Overall the settlement ponds will be created by a benching and cut to fill. Thus the slope face, access track and pond footprints is entirely in cut up to 4-5m deep below existing level. The dividing bund / access track between Ponds, straddles the cut – fill interface. The reed bed is also formed in a similar manner, the reed bed footprint is being cut up to 3 m deep.

7.4.2 Ground conditions

7.4.2.1 Reed bed and North Pond

The northern part of the MWTS, where the reed bed and north pond are to be located is underlain by a thin layer of topsoil and in turn Glacial Till with a variable thickness. The upper, weathered section of Glacial Till comprises approximately 1.40m (locally up to 3.15m) typically soft to firm mottled slightly gravelly slightly sandy clay with a medium cobble content. The underlying till comprises of approximately 0.40m (locally up to 1.00m) of stiff mottled slightly sandy gravelly clay with a medium cobble content. Bedrock is likely to be encountered approximately 2.50mbgl in the reed bed and 3.50mbgl in the north pond, comprising extremely weak weathered mudstone/ siltstone. Underlying this competent bedrock is encountered in the reed bed 4.10mbgl (BH103), comprising very hard limestone. The recent ground investigation (2019) describes local hotspots of made ground and which are likely to be encountered during construction. The made ground is a product of historic mining activities.

7.4.2.2 Central and Southern Pond

The central and southern part of the MWTS is underlain by a thin layer of topsoil and in turn a series of residual soils. Firstly, the upper residual soils, which comprises approximately 0.60m of soft gravelly sandy clay, underlain by approximately 0.60m of loose very clayey gravelly sand. Underlying this layer is cohesive residual soil comprising approximately 1.75m (locally 5.5m) soft becoming firm to stiff slight gravelly sandy clay with a medium to high cobble content. Limestone bedrock is encountered locally from 3.30mbgl consisting of approximately 0.65m thick extremely weak to weak limestone, which in turn is underlain by a series of interbedded mudstones, siltstones and sandstones. Again, local hotspots of Made Ground are likely to be encountered.

7.4.3 Earthworks

7.4.3.1 Excavation

Topsoil should be stripped and stockpiled from all areas to be set aside for re-use on completion of earthworks.

For the proposed reed bed, it is anticipated that the excavation will be entirely within Glacial Till. There should be no difficulty in carrying out the excavation using conventional plant for undertaking bulk excavation. Based on borehole monitoring information ground water is expected to be approximately 0.65mbgl to 2.30mbgl therefore below these levels may require prior dewatering to make the bulk excavation process viable.

The settlement ponds are to be located on the eastern part of the MWTS. Within the northern pond it is anticipated that the cut zones will be excavated within the Glacial Till, mudstone/ siltstone and limestone bedrock. It should be entirely possible to carry out the excavation within the Glacial Till using conventional plant for undertaking bulk excavation, it should be noted that boulders may be encountered. Based on the weathered nature of extremely weak mudstone/ siltstone it is possible that this stratum may be rippable using conventional plant, it should be noted that the recent ground investigation (2019) in this area is limited and only encounters this stratum in two locations. BH103 within the proposed reed bed area encounters limestone bedrock at 4.10mbgl, based on drillers description this unit comprises of "very hard limestone", therefore it should be considered as a hard dig hazard and specialised digging techniques may be required. Within the proposed north pond, bedrock is encountered at 3.74mbgl (BH104), based on local borehole BH105 it is likely this stratum may consist of extremely weak limestone, therefore it is possible this stratum may be rippable. Based on borehole monitoring information groundwater is expected to be 0.20mbgl to 1.20mbgl therefore will be encountered during excavation, below this level may require prior dewatering to make the bulk excavation process viable.

Within the proposed central and southern settlement ponds, it is anticipated that the cut zones will be excavated within a series of residual soils, limestone and interbedded mudstone and siltstone. Within the residual soils it should be entirely possible to carry out the excavation using conventional plant for undertaking the bulk of the excavation. Based on the weathered nature of the extremely weak to weak limestone and extremely weak to very weak interbedded mudstone siltstone it is possible that these layers may be rippable using conventional plant. BH105 indicates a "strong laminated siltstone" at 9.00mbgl, however this is considered below the scheduled excavational depth for this scheme. Based on borehole monitoring information groundwater is expected to be 0.40mbgl to 1.40mbgl therefore will be encountered during excavation, below this level may require prior dewatering to make the bulk excavation process viable.

7.4.3.2 Material re-use

Compaction and MCV tests carried out indicate that the cohesive residual soil, weathered and lower Glacial Till will not be suitable for re-use in its present state, without processing and improvement. Both the weathered and lower Glacial Till would need some drying to reduce the moisture content significantly for re-compaction. Furthermore, the materials when re-used as fill will require improvement in order that they can provide the required slope angles for the bunds with an adequate factor of safety (see Section 7.4.4). It is therefore recommended that the material should be treated following excavation. Lime modification (reduction of water content) or lime stabilisation (chemical binding) is likely to be the most suitable method of improving the bulk of the material, the actual design mix being dependent upon laboratory and field trials. The proportion of lime should be determined from trials before the main phase of earthworks commences. At this stage AECOM considers that modification should be adequate in order to result in a soil of at-least firm to stiff consistency, subject to confirmation from the trials.

7.4.4 Slope stability

It is currently proposed that the excavated slopes surrounding the ponds in the MWTS are to be designed to stand at a slope of 1:3 (V:H). Within the settlement ponds themselves the bund slopes in the cut zone are required to stand at a slope of 1:2.5 (V:H). The main outer bunds on embankment formed from the excavated material are required to stand at a slope of 1:3, whilst the internal bunds are to be 1:2.5. The outer bunds will extend outward from the existing slope down towards the existing reservoir and will cover the natural slope.

The overall stability of the proposed cut and fill slopes should be subject to detailed stability analysis. The limitation of the footprint available for the ponds, together with the currently assumed need for freeboard above the water level in the ponds which controls the footprint of the ponds, dictates that the internal pond cut slopes and bund slopes on both inner and outer faces need to be of the order of 1v:2.5h, and 1v:3h, respectively. Where, after adopting the values of cohesion and friction set out above for short term and long-term stability and taking account of known or likely groundwater levels in and behind the slopes, the analysis indicates an inadequate factor of safety against failure of any particular slope element at the proposed angle then the following should be considered:

- Re-adjustment (reduction) of the pond footprints catering for a reduced freeboard, thereby allowing a reduction in the pond footprint area and allowing slacker side slopes to fit into the area.
- Improvement of material for re-use as embankment fill, by means of lime modification or stabilisation, to improve shear strength and thus allow steeper slopes to be stable
- In the cut areas with higher slopes, say greater than 3m, excavation of slopes at shallower angles
- In the cut areas with higher slopes as above, consider strengthening measures which could include:
 - Over-excavation, lime stabilisation and re-compaction to a design profile
 - Counterfort drains excavated and filled into the slope face
 - In situ strengthening by e.g. soil nails

Values of shear strength for lime stabilised till will have to be derived following the site trials but typically they are expected to exceed the values required for the material to be designed for a 1:2.5 slope in accordance with EC7 design.

The natural slope will require benching prior to placing the embankment fill for the outer bunds of the ponds. During the benching operation the exposed formation should be inspected for the presence of relict failure surfaces or features in order to confirm their absence. If such features are identified then over-excavation and replacement, or other stabilising measures, may be required.

7.4.5 Groundwater in settlement pond area

Results of groundwater monitoring indicate that there is locally high groundwater within the Glacial Till (reed bed and north pond) and cohesive residual soils (central and southern ponds) in the area to be excavated for the settlement ponds. To prevent groundwater pressure affecting the stability of the excavated slopes it is recommended that the slopes are positively drained using crest drains, toe drains and possibly deep (1m) counterfort drains installed on the excavated slopes (see above regarding the other optional measures which may be required for achieving stability).

7.4.6 Maintenance building foundations

It is envisaged that this will be a lightly loaded single storey structure within the northern area of MWTS. It will be necessary to excavate to below the base of any made ground encountered and found on the underlying Glacial Till at a minimum depth of 0.75m to prevent seasonal variations in moisture content causing settlement, as the till is typically low to medium plasticity clay. Localised peat or organic clay deposits may be present

Buried concrete can be designed for design sulphate DS1 and ACEC Class AC1 conditions.

7.4.7 Pavement design

Laboratory CBR tests carried out on Glacial Till and cohesive residual soils within the MWTS indicate that the material found is unsuitable as a subgrade unless improved or excavated. A CBR value of >1% is considered appropriate for the subgrade in its present condition. It is recommended that at approximately 1m of starter layer and capping, or geogrid with reduced capping thickness should be placed. This should then provide a surface suitable for construction of pavement based on a CBR value of 2.5%. It is also recommended that any pavement construction is taken down through the made ground to underlying Glacial Till or cohesive residual soil.

8. Human Health Risk Assessment

8.1 Introduction to Generic Risk Assessment Methodology

AECOM has a prescribed methodology for assessing risks to human health at a generic level termed 'generic quantitative risk assessment' (GQRA) or 'Stage 2' in CLR11².

For sites where the conceptual model (CM) has identified one or more complete contaminant linkages to human health it is often necessary to clarify the risk posed by that contaminant linkage by comparison of reported concentrations with guideline values that represent acceptable concentrations.

The procedures outlined in Environment Agency Science Reports SC050021/SR2³, SR3⁴, SR4⁵ and SR7⁶ have been adopted in conjunction with the amendments to generic land-use exposure models published in Defra research report SP1010 detailing the derivation of Category 4 Screening Levels (C4SL)⁷ to select and develop generic assessment criteria (GAC) for soil. This approach has also been adapted to develop assessment criteria for ground water and soil vapour.

8.2 Selection and Derivation of Stage 2 GAC

8.2.1 Hierarchy of Published Sources

For the purposes of this assessment AECOM has utilised the following hierarchy of published sources for Stage 2 generic assessment criteria (GAC) for soil:

- Land Quality Management (LQM) / Chartered Institute of Environmental Health (CIEH) Suitable for Use Levels (S4UL)⁸ for Sandy loam soil.
- Defra (2014) SP1010 – development of Category 4 screening levels for assessment of land affected by contamination⁹
- AECOM GAC.
- No LQM value is available for lead, and therefore the published C4SLs for lead are used as the default soil GAC. Further consideration of Defra SP1010 C4SLs for other substances is made where appropriate.

In accordance with Environment Agency guidance co-authored by AECOM¹⁰, GAC can be used as a starting point for evaluating long-term risks to human health from substances in soil. They address one specific consideration – long-term adverse effects on human health – and are designed to indicate where long-term (chronic) human health soil exposure risks are considered to be tolerable or minimal. They do not represent the "trigger" for an unacceptable risk under Part 2A of EPA 1990, and they do not address risk related to construction workers, acute exposure, ecology, controlled waters or building materials, they do not inform on the geotechnical suitability of the soil, and they do not inform on the aesthetic quality of the soil – both visual and olfactory. Therefore, the GAC have not been explicitly derived to define remediation standards and are just one component in the assessment of whether soil is suitable for use.

² Environment Agency (2004) Model Procedures for the Management of Land Contamination, Contaminated Land Report 11. September 2004.

³ Environment Agency (2009a) Human health toxicological assessment of contaminants in soil. Science Report SC050021/SR2. January 2009.

⁴ Environment Agency (2009b) Updated technical background to the CLEA model. Science Report SC050021/SR3. January 2009.

⁵ Environment Agency (2009c) CLEA Software (Version 1.05) Handbook. Science Report SC050021/SR4. October 2009.

⁶ Environment Agency (2008) Compilation of Data for Priority Organic Pollutants for Derivation of Soil Guideline Values. Science Report SC050021/SR7.

⁷ Defra (2014) SP1010 - Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination, Final Project Report (Revision 2), Contaminated Land: Applications in Real Environments (CL:AIRE), 24th September 2014

⁸ LQM (2015) *The LQM/CIEH S4ULs for Human Health Risk Assessment*, Land Quality Press, 2015

⁹ Defra (2014) SP1010 - Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination, Final Project Report (Revision 2), Contaminated Land: Applications in Real Environments (CL:AIRE), 24th September 2014

¹⁰ Environment Agency (2009) Using Soil Guideline Values, Better Regulation Science Programme Science report: SC050021/SGV introduction, March 2009

8.3 Proposed Land Use Scenario and Modelling Parameters

The Site is rural and the majority of the site comprises grassland with public access. A formal Public Right of Way (PRoW) footpath crosses the site from north to south and a bridleway comes up from the mine museum and joins the quarry track. Therefore, the end-use scenario that has been selected is Public Open Space, Park (POS_{Park}). This is still highly conservative because it is based on the exposure pathways listed below (Table 8.3-1) that are based on a public park that is used by children on a regular basis.

Table 8.3 1 Default Exposure Pathways

Exposure Pathway	Land-use
	Public open space (park)
Soil and indoor dust ingestion	✓ (outdoor)
Soil and indoor dust dermal contact	✓ (outdoor)
Dust inhalation (indoor and outdoor)	✓ (outdoor)
Soil vapour inhalation (indoor and outdoor)	✓ (outdoor)
Ground water vapour inhalation (indoor and / or outdoor)	✓ (outdoor)

The default parameters and assumptions which are used to model the exposure pathways are defined in the Environment Agency science report: SC050021/SR3¹¹ and CL:AIRE report: SP1010¹² (C4SL). Below is a summary of some of the relevant assumptions:

The POS_{park} scenario assumes a public park which has no buildings, is predominantly grassed and is not in close proximity to housing and thus indoor exposure and tracking back of soil to the home are not considered significant pathways. The park may also contain landscaped areas and children's play equipment and is assumed to be used for general park activities such as family visits and picnics, sports and dog walking.

The critical receptor is a child covering CLEA age classes 1-6 and exposure duration is 6 years (with the exception of contaminants where lifetime averaging applies (such as cadmium) where average daily exposure is estimated for age classes 1-18 over a 74 year duration).

It is clear that this is an overly conservative assessment however is a precautionary approach to initial screening.

The Total Organic Carbon (TOC) content of the soil is used in the calculation of GAC values. . Based on site data, all of the samples were analysed against the TOC range 1.45%-3.48%. However, as already noted, the open park scenario is already highly conservative.

8.4 Soils Analytical Data

Soil results and comparison to applicable screening criteria for the end use scenario are presented within the tables included in Appendix B and environmental laboratory certificates are provided within the Factual Report (Appendix A).

8.4.1 Non-volatile chemical exceedances (Metals)

Thirty nine locations were analysed for the full suite of metals. Exceedances of metals GAC for lead and arsenic were identified at 6 locations.

¹¹ Environment Agency (2009) *Updated Technical Background to the CLEA Model* Science Report: SC050021/SR13.

¹² CL:AIRE (2014) *Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination*: SP1010.

For lead, seven exceedances were identified at TP125 2m depth (5,300 mg/kg), along the proposed pipeline route (zone 3); TP128, 0.6m depth (2,800 mg/kg), along the proposed pipeline route (zone 2); WS101, 0.2m and 1m (10,000 and 1,400 mg/kg respectively) and WSTP101R, 0.5m (8,700 mg/kg) west bank Caplecleugh mine adit; WS102, 0.5m (5,300 mg/kg) and WSTP102, 1.2-1.56m depth (9,800 mg/kg) east bank car park.

For arsenic, one exceedance was identified at WSTP102, 1.2-1.56m depth (250 mg/kg) east bank car park.

The soil types at each location are not the same. Location TP125 (2m) (5,300 mg/kg lead) is described as natural, light brown mottled orange slightly sandy gravelly CLAY. Gravel is fine to coarse of sandstone, limestone and siltstone. TP128 (0.6m) (2,800 mg/kg) is described as dark brown mottled orange sandy gravelly organic CLAY. Location WS101 (0.2m) (10,000 mg/kg lead) is described natural material, slightly clayey SAND with gravel of sandstone, mudstone and limestone. WS102 (0.5m) (5,300 mg/kg lead) is described as MADE GROUND, dark grey slightly clayey fine to coarse sand sized fragments. Fine to coarse gravel of limestone. WSTP101R (0.5m) (8,700 mg/kg lead) is described as natural brown clayey fine to coarse sand and fine to coarse GRAVEL. Gravel of sandstone, mudstone and siltstone. WSTP102 (0.5m) (5,300 mg/kg lead) is described as MADE GROUND dark grey clayey gravelly fine to coarse sand sized fragments gravel is fine to coarse of sandstone, mudstone, siltstone, ash and clinker.

The high lead content within variable soil types (Clay, Sand, Gravel and made ground) at a variety of locations and depths indicates that lead is likely to be ubiquitous throughout the Site.

Table 8.3 2 Summary of metals exceedances of human health POS(parks) scenario.

Determinand (metals) mg/kg	All Data Summary				GAC HH POS_ parks	n > GAC	Max HQ
	n	Min mg/kg	Mean mg/kg	Max mg/kg			
Arsenic	54	2.6	28	250	170	1	1.5
Lead	51	25	1,097	10,000	1,300	7	7.7

Lead concentrations averaged 1,097 mg/kg and arsenic averaged 28 mg/kg. These values were about 2.5 times natural background concentrations (413 mg/kg and 11.93 mg/kg) for lead and arsenic respectively at the site as listed by the UK Soil observatory¹³. However, considering the mining history at the Site, the observed metal concentrations in the soil are likely to be due to naturally elevated 'background' levels at the Site.

As already noted, the screening criteria are highly conservative. It is therefore unlikely there will be an unacceptable risk to human health via direct (dermal) contact or ingestion pathways. Furthermore, soils containing elevated concentrations have been found in areas which will be retained beneath a hard standing or gravel surface. Therefore it is unlikely that a linkage would be present. It is therefore considered that there is negligible risk to human health taking into account the end use of the Site and that there is no risk posed via inhalation of soil vapours..

Asbestos was not detected in soil samples at the Site.

Based on the assessment of soils data there were soils exceedances for metals in the vicinity of the pipeline and carparking areas which will be maintained beneath hard or gravel cover and thus no unacceptable risk to human health is considered likely. No failures of the GAC were identified at the main mine water treatment site.

No further assessment or remedial action is considered necessary based on the available data.

¹³ Uk Soil Observatory (accessed 10/12/2019) available: <http://mapapps2.bgs.ac.uk/ukso/home.html>

8.5 Controlled Water Generic Risk Assessment Methodology

AECOM has a prescribed methodology for assessing risks to controlled waters at a generic level termed 'generic quantitative risk assessment' (GQRA) or 'Stage 2' in CLR11¹⁴.

For sites in England and Wales where the conceptual site model has identified a potentially complete contaminant linkage to controlled waters, the first step is to define a suitable water target value (WTV) for the identified point of compliance upon which the risk assessment can be based. For ground water compliance points which may support potable abstraction the drinking water standard (DWS) is used in England and Wales while for surface water compliance points or non-potable aquifer units an environmental quality standard (EQS) is adopted.

For England and Wales, Stage 2 WTV has been selected following the Level 1 assessment methodology detailed in the Environment Agency's Remedial Target Methodology (RTM).

8.5.1 Selection of Stage 2 WTV

8.5.1.1 Selection of DWS Criteria for England and Wales

The selection process used to determine the DWS is presented below in order of preference:

- United Kingdom drinking water standards.
- European Union (EU) drinking water standards.
- World Health Organisation (WHO) drinking water standards.

In addition, for some compounds other criteria have been considered, although these are also not published standards, such as

- Published taste or odour data which are relevant for aquifers used for potable supply have been selected for oxygenates such as MTBE which are known to have taste and odour thresholds which are significantly lower than toxicity based criteria.
- WHO (2008) proposals for drinking water guidelines which are based on the TPHCWG approach for TPH fractions.

8.5.1.2 Selection of EQS Criteria for England, Scotland and Wales

The selection process used to determine the freshwater and coastal EQS is presented below in order of preference:

- United Kingdom environmental quality standards including SEPA WAT-SG-53.
- PNEC derived for EU REACH registration dossiers/chemical safety reports (via the Fuel Ether REACH Consortium FERC).

When an EQS or PNEC is not available, a GAC will not be set.

8.5.2 Stage 2 Assessment for Groundwater Data

The Stage 2 assessment involves the comparison of measured groundwater concentrations against the WTV. If the concentrations are below the water target concentrations, then the risks are considered insignificant. If the concentrations in the source are above the WTV, there is a potentially unacceptable risk to ground water or surface water which requires further qualitative or quantitative assessment.

Whilst the hierarchies detailed above are appropriate for most sites there may be site specific conditions which require review of alternative criteria to be adopted, i.e. where an aquifer is located in an area of low environmental sensitivity and/ or is considered unlikely to be utilised for potable supply. Where alternative criteria have been considered this will be highlighted.

¹⁴ Environment Agency (2004) Model Procedures for the Management of Land Contamination, Contaminated Land Report 11. September 2004.

8.6 Selection of Appropriate Controlled Waters Criteria Values

The selection of appropriate controlled waters criteria has been based on the following data and assumptions:

- The Stainmore and Alston Formations with Firestone Sandstone bedrock has been identified as a secondary A aquifer.
- The superficial till deposits have been classified as a secondary (undifferentiated) aquifers.
- Records held by the local authority for private abstractions indicate that there are no groundwater abstraction licences within 1km of the Site.
- The Site is not located within a source protection zone.
- Potential surface water receptors are a Handsome Mea reservoir and the River Nent running along the south western boundary of the site. From review of Magic Maps¹⁵ surface water drainage from the Site, including the reservoir, flows towards the River Nent.

It is not anticipated that the groundwater will be used as a potable water source. Therefore, only EQS screening criteria has been considered further. It is of note that the River Nent already fails EQS due to high metal loading (lead, zinc and cadmium) due to mine water discharges from point source contributors including contributions from Caplecleugh mine adit portal. Hence the requirement for a mine water treatment scheme to treat the mine water entering the River Nent from Capleclough Adit. However, leachate and ground water from various locations throughout the Site have been tested and screened against EQS criteria.

The results are interpreted to assess potential risks to controlled waters. It should be noted that for a risk to be present then a relevant contaminant linkage must be present.

8.7 Leachate Analytical Results

Soil leachate results and comparison to appropriate screening criteria for environment quality standards (EQS) are presented within the tables included in Appendix B. The environmental laboratory certificates can be found in the factual report.

8.7.1 Environmental Quality Standard (leachate)

Exceedances of EQS freshwater screening criteria were observed for PAHs and metals only.

Exceedances of PAH were located throughout the site at 13 locations of the 19 locations screened for leachates, West bank Caplecleugh adit (WSBH101R, 0.2m), east bank car park (WS102, 0.5m), MWTS (BH103 (1m), BH104 (0.5m), BH106 (1m, 2m), TP118 (1m), WS103 (0.5m), WS108 (0.5m), WS109 (0.2m)), proposed pipeline route zone 1 (TP110 (2m), WSTP107 (1m)) and proposed pipeline route zone 2 (TP128, 1m).

Table 8 1 Summary of EQS exceedances (leachate) for PAH

Determinand (metals) ug/l	All Data Summary				EQS	n > EQS
	n	Min ug/l	Mean ug/l	Max ug/l		
Fluoranthene	19	<0.01	0.02	0.06	0.0063	13
benzo(a) pyrene	19	<0.01	0.0058	0.02	0.00017	1
indeno(1,2,3-c,d)pyrene	19	<0.01	0.0066	0.03	0.00017	2
benzo(g,h,i)perylene	19	<0.01	0.0076	0.03	0.0082	2

15 Magic Maps (ND) DEFRA, a
accessed 10/12/2019, available: <https://magic.defra.gov.uk/MagicMap.aspx>

benzo(b) fluoranthene	19	<0.01	0.014	0.06	0.017	7
benzo(k) fluoranthene	19	<0.01	0.0066	0.02	0.017	2

* note: the method limit of detection is 0.01. With the exception of Fluoranthene all mean concentrations are below or equal to the method limit of detection.

The exceedances for PAHs are due to the very low EQS freshwater screening criteria. PAH concentrations were very close to the method limit of detection. Exceedances were identified within a variety of different soil types at locations throughout the site. The breadth of locations found to have low level exceedances of PAH indicate that PAHs are ubiquitous throughout the site. It is therefore likely that concentrations are reflective of natural background levels.

Exceedances of metals were observed at 12 locations, throughout the site, west bank Caplecleugh adit (WS102 (0.5m), WSBH101R (0.2m)), pipeline route zone 1 (WSTP106 (0.5m), WSTP107 (1m)), pipeline route zone 2 (TP128, 1m) and MWTS (BH103 (1m), BH104 (3m), BH105 (1m), BH106 (1m), WS103 (0.5m), WS108 (05m), WS109 (0.2m)).

Table 8 2 Summary of EQS exceedances (leachate) for metals

Determinand (metals) ug/l	All Data Summary				EQS (ug/l)	n > EQS
	n	Min ug/l	Mean ug/l	Max ug/l		
Cadmium	19	0.07	0.38	3.1	0.08	4
Copper	19	0.4	0.7	2.1	1	6
Lead	19	0.1	2.4	10	1.2	8
Nickel	19	0.5	0.9	6.3	4	1
Zinc	19	5.1	85	440	10.9	12

EQS freshwater exceedances for metals in soil leachates were observed throughout the site within a variety of different soil types. The concentrations of metals in the soils at the site were found to be comparable to metal concentrations listed as natural background concentrations by the UK Soil observatory¹⁶ at the site. It is therefore considered that the metal exceedances for leachates are reflective of the soils containing naturally high background levels of metals.

Ground water results and comparison to appropriate screening criteria for EQS freshwater are presented within the tables including in Appendix B and the environmental laboratory certificates can be found in the factual report.

8.8.1 Environmental Quality Standard (ground water)

Similar to leachate data, exceedances of EQS freshwater screening criteria were observed for PAHs and metals only.

The only exception is one exceedance of the freshwater EQS for di-n-butyl phthalate (12µg/l) at location WS104, north east of the MWTS (response zone contains natural sandy, gravelly, clay). This is the only location found to contain concentrations of this chemical above method detection limit. Phthalates were also not observed above method detection limit in soils or leachate. Phthalates are ubiquitous within the environment, they are used in a wide range of materials. Specifically, dibutyl phthalate is used as a plasticizer that allows plastics such as PVC to be used, potentially in plumbing pipes. The identification of dibutyl phthalate is an anomaly and is not considered

¹⁶ Uk Soil Observatory (accessed 10/12/2019) available: <http://mapapps2.bgs.ac.uk/ukso/home.html>

to be representative of the site. The laboratory has stated that this is not a laboratory error. It may be that dibutyl phthalate leached into groundwater at this location due to the presence of plastics. Although the response soil type is described natural sandy gravelly clay.

Low level PAH exceedances were only observed at 1No. location WS103 within the area proposed for the wetland within section 4 -MWTS. These were fluoranthene (0.41 µg/l); benzo(g,h,i)perylene (0.2 µg/l); benzo(b)fluoranthene (0.71 µg/l); benzo(k)fluoranthene (0.16 µg/l); Anthracene (2.1 µg/l). PAH exceedances at this location are representative of the PAH observed in leachates. The response zone is within made ground described as gravelly sandy clay. The rest of the strata at this location is also clay to rock head at 3.1m. Owing to the impermeable nature of the strata it is unlikely there is a pathway.

Freshwater EQS exceedances of PAH in groundwater were not identified at any of the other locations where PAH in leachates exceeded freshwater EQS.

Of the 5No. locations screened for EQS freshwater, 5No. locations were identified as having exceedances for metals. The locations were: West bank, Caplecleugh adit (WSBH101R), east bank car park (BH102R) and MWTS (BH104, WS103, WS104). All locations had at least 1No. metal exceedance. The following metals were found to exceed freshwater EQS:

Table 8 3Summary of EQS exceedances (groundwater) for metals

Determinand (metals) mg/kg	All Data Summary				EQS (ug/l)	n > EQS
	n	Min ug/l	Mean ug/l	Max ug/l		
Cadmium	5	<0.03	1.6	3.5	0.08	4
Copper	5	1.1	49	210	1	5
Lead	5	0.4	145	660	1.2	4
Nickel	5	1	38	150	4	4
Zinc	5	3.3	607	1900	10.9	4
Vanadium	5	<0.6	21	91	20	1

With the exception of one exceedance of vanadium at location WS103, the metals found to exceed freshwater EQS were the same as those observed in leachate samples which results indicate are representative of natural background levels at the Site.

8.9 Implications

Exceedances of EQS freshwater screening criteria were observed for PAHs and metals in the soil leachate and groundwater throughout the site. As previously noted the site has a mining history. It is therefore expected that metals will be at naturally high levels. Average concentrations of metals in soil are slightly higher than those recorded by UK Soil Observatory data as natural background levels for topsoil at the site. However, it is likely that these exceedances represent naturally high 'background' levels. As a result, it is considered that there is no potential 'source' of contamination.

The identification of dibutyl phthalate in groundwater at location WS104 is an anomaly and is not considered to be representative of the site. The laboratory has stated that this is not a laboratory error. It may be that dibutyl phthalate leached into groundwater at this location due to the presence of plastics. The response soil type is described natural sandy gravelly clay and as such it is considered there is no pathway for this contaminant.

Based on the assessment of soils leachate and groundwater data there were exceedances for metals and PAH across the site however these are not considered to present an unacceptable risk to controlled waters.

No further assessment or remedial action is considered necessary based on the available data.

9. Ground Gas Risk Assessment

9.1 Approach to assessment

The generation or migration of ground gases from man-made or natural sources can pose a major hazard to buildings or other structures if the gases are able to accumulate within confined spaces.

BS8485:2015¹⁸ provides a framework, in line with Model procedures for the management of land contamination, CLR11. It gives recommendations on ground gas site characterisation and the choice of solutions for the design of integral gas protective measures for new buildings to prevent entry of carbon dioxide and methane.

A ground gas risk assessment was carried out using guidance from BS8485:2015. This process represents good practice and is based on CIRIA C665, NHBC guidance on evaluation of development proposals on sites where methane and carbon dioxide are present.

Gas screening values (GSVs) were determined using the following steps:

Calculation of borehole hazardous gas flow rate - Q_{hg} using:

C_{hg} Measured ground gas concentrations expressed as percentage –by volume (%v/v) of each hazardous ground gas being considered (methane and carbon dioxide);

and

q Measured borehole flow rate, i.e. volume of total gas flow (of all gases present) being emitted from the monitoring point, expressed in litres per hour (L/h).

$$Q_{hg} = q(C_{hg}/100)$$

The GSV is then determined taking into account the Q_{hg} and overall influencing factors at the Site.

The maximum concentration (peak) recorded during the monitoring event was used within this assessment and a worst case check, (peak concentration of methane and carbon dioxide and maximum flow, from any borehole) was carried out.

Following this, a CS (characteristic gas situation) was assigned by site characteristic GSV. The CS value provides an indication of the 'hazard potential' the gas poses. The ranges vary from CS1 (very low) to CS6 (very high) hazard potential.

9.2 Ground Gas monitoring results and assessment of hazard potential

Five wells, BH101R west bank and adit, BH102R east bank and car park, WS103 MWTS and potential wetland location, WS104, BH107 MWTS and potential compost based treatment pond locations, were monitored for ground gas at weekly intervals for 2 weeks (17/10/2019, 25/10/2019). Timing of monitoring visits was designed to provide gas and ground water monitoring results across a range of atmospheric pressures and conditions including low and falling pressures (<1000mb).

The maximum (peak) concentration of methane and steady state carbon dioxide and maximum flow, by location, are showed in Table 9.2-1 below. The Q_{hg} has been calculated for each location.

¹⁸ BS8485:2015 Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings.

Table 9.2 1 Maximum (peak) concentration of methane and steady state carbon dioxide, maximum flow and calculated Q_{hg}/GSV by gas monitoring location

Location	Close to Proposed Structure	Methane % v/v	Carbon dioxide % v/v	Flow (l/h)	Q _{hg} /GSV* Carbon dioxide (l/h)	Q _{hg} /GSV* Methane (l/h)	
B o r e h o l e 1 0 2 R	West bank, Hcar park	Pumpshaft 'kiosk'	<0.1	<0.1	0.1	0.0013	0.0001
W E B H 1 0 1 R	East bank, S adit	Pumpshaft 'kiosk'	<0.1	<0.1		0.0014	0.0002
* * B H 1 0 7	MWTS	None	<0.1	<0.1		0.0001	0.0001
* * W S 1 0 4	MWTS	Odour abatement building	<0.1	<0.1		0.003	0.0003
W M W T S 1 0 3	MWTS	Odour abatement building	<0.1	<0.1		0.0392	0.0028
W o r s t C a s e			<0.1	<0.1		0.0392	0.0028

* For the purposes of this assessment the GSV is the Q_{hg}. The monitoring locations were within the areas proposed for development.

**The results from BH107 and WS104 are unlikely to be accurate as the response zones were flooded but have been included for completeness.

According to BS8485:2015 a site characteristic GSV of <0.07 has a very low hazard potential. It can be seen from Table 9.2-1 that for all locations, and the worst case scenario, the GSV is <0.07 indicating the Site is classed as CS1 and therefore poses a very low hazard potential with regards to carbon dioxide and methane gas.

Oxygen levels did not fall below 19.4%.

9.3 Gas mitigation measures

Taking into consideration the above assessment results of very low hazard potential and Characteristic Situation 1, no mitigation measures are deemed necessary for the proposed structures based on the ground conditions presently encountered.

10. Revised Conceptual Model

This is a revision to the initial CM developed in the AECOM Desk Study (March 2019) and summarised in Section 3, based on the results of the intrusive investigation undertaken in October 2019.

As discussed in sections 8 and 9, the chemicals identified at the Site are predominantly metals and low level concentrations of PAHs.

10.1.1 Human health

Lead and Arsenic were found to exceed the GAC for POS_{parks} (39 locations were tested for the full metal suite). Exceedances of metals GAC for lead were identified at 6 locations and an exceedance for arsenic was identified at 1 location. The high lead content within variable soil types (Clay, Sand, Gravel and made ground) at a variety of locations and depths indicates that lead is likely to be ubiquitous throughout the Site. Lead concentrations averaged 1097 mg/kg and for arsenic the average was 28 mg/kg. These values approximately 2.5 times as high as natural background concentrations of these metals at the site as listed by the UK Soil observatory¹⁹. However, considering the mining history at the Site, the observed lead concentrations in the soil are likely to be due to naturally elevated 'background' levels at the Site. Furthermore, as previously noted, the human health screening criteria (POS_{parks}) is considered highly conservative as it is based on a public park that is used by children on a regular basis.

Therefore, it is considered that there will be no risk to human health via direct (dermal) contact or ingestion pathways and there is no risk posed via inhalation of soil vapours for the proposed end use. As a result, no source-pathway-receptor linkages have been identified. There is therefore no unacceptable risk to human health.

Based on the assessment of soils data there were soils exceedances for metals in the vicinity of the pipeline and carparking areas which will be maintained beneath hard or gravel cover and thus no unacceptable risk to human health is considered likely. No failures of the GAC were identified at the main mine water treatment site.

No further assessment or remedial action is considered necessary based on the available data.

10.1.2 Controlled Waters

Leachates

Of the 19 locations screened against EQS 13 were found to exceed EQS for PAH. This is due to the very low EQS freshwater screening criteria. PAH concentrations were very close to the method limit of detection. Exceedances were identified within a variety of different soil types at locations throughout the site. The breadth of locations found to have low level exceedances of PAH indicate that PAHs are ubiquitous throughout the site. It is therefore likely that concentrations are reflective of natural background levels.

Up to 12 of the 19 locations screened against EQS were found to exceed EQS for metals. EQS freshwater exceedances for metals in soil leachates were observed throughout the site within a variety of different soil types. The concentrations of metals in the soils at the site were found to be comparable to metal concentrations listed as natural background concentrations by the UK Soil observatory¹⁹ at the site. It is therefore considered that the metal exceedances for leachates are reflective of the soils containing naturally high background levels of metals.

Groundwater

Of the 5No. locations screened for EQS freshwater, 5No. locations were identified as having exceedances for metals. With the exception of one exceedance of vanadium at location WS103, the metals found to exceed freshwater EQS were the same as those observed in leachate samples. Average concentrations of metals in soil are slightly higher than those recorded by UK Soil Observatory data as natural background levels for topsoil at the site. However, owing to the mining history at the Site it is likely that these exceedances represent naturally high 'background' levels. As a result, it is considered that there is no potential 'source' of contamination.

Low level PAH exceedances were only observed at 1No. location WS103 within the area proposed for the wetland within section 4 -MWTS. PAH exceedances at this location are representative of the PAH observed in

¹⁹ UK Soil Observatory (accessed 10/12/2019) available: <http://mapapps2.bgs.ac.uk/ukso/home.html>

leachates. The response zone is within made ground described as gravelly sandy clay. The rest of the strata at this location is also clay to rock head at 3.1m. Owing to the impermeable nature of the strata it is unlikely there is a pathway.

The identification of dibutyl phthalate in groundwater at location WS104 is an anomaly and is not considered to be representative of the site. The laboratory has stated that this is not a laboratory error. It may be that dibutyl phthalate leached into groundwater at this location due to the presence of plastics. The response soil type is described natural sandy gravelly clay and as such it is considered there is no pathway for this contaminant.

Based on the assessment of soils leachate and groundwater data there were exceedances for metals, phthalates and PAH across the site however these are not considered to present an unacceptable risk to controlled waters.

No further assessment or remedial action is considered necessary based on the available data.

10.2 Refined Risk Assessment

No potential sources of contamination are considered to exist at the Site with the exception of soils and water with naturally elevated background metals concentrations and some low level PAHs. Therefore, no complete source-pathway-receptor linkages have been identified for these site areas.

No requirement for additional surveys or remedial action is considered necessary based on current data and the proposed design.

11. Hazardous Waste Classification

HazWasteOnline™ is a simple, accurate and auditable tool for the classification of waste materials. The software follows the latest Environment Agency guidance and European regulations. This tool allows waste producers, consultants, carriers and waste receivers to classify potentially hazardous and hazardous waste materials such as contaminated soils, filter cakes, sludge residues, sediments and wastes from organic processes. This can help in designing remedial, reuse and disposal strategies.

HazWasteOnline™ uses the solid waste analysis from sample analysis to classify materials as 'Hazardous', 'Not Hazardous' or in some cases 'Potentially Hazardous' (in accordance with Environment Agency technical guidance document WM3²¹).

11.1 Waste Classification

Materials should not be considered as Directive Waste unless it is the intention to discard it. If materials are classified by HazWasteOnline™ as Hazardous or Potentially Hazardous, then they should be subject to Waste Acceptance Criteria (WAC) testing to determine the appropriate receiving landfill classification. Where the intention is to re-use the material within a development it is considered that, subject to the outcome of adequate risk assessment and material classification, the material can be considered as part of the reclamation and re-development under the suitable-for-use approach. It is recommended that the use of excavated materials within a development should be undertaken within the 'Definition of Waste: Development Industry Code of Practice' framework, V2, 2011, CL:AIRE.

WM3 provides guidance on the assessment and classification of waste based on the European Waste Catalogue (EWC). Hazardous waste is defined as a waste possessing one or more of 16 hazardous properties. All substances are assigned a number of risk phrases which relate to the Hazardous Properties as defined by WM3. The potential Hazard Properties are listed below:

- HP1 (Explosive)
- HP2 (Oxidizing)
- HP3 (Flammable)
- HP4 (Irritant)
- HP5 (Specific Target Organ Toxicity/Aspiration Toxicity)
- HP6 (Acute Toxicity)
- HP7 (Carcinogenic)
- HP8 (Corrosive)
- HP9 (Infectious)
- HP10 (Toxic for reproduction)
- HP11 (Mutagenic)
- HP12 (Waste which releases toxic or very toxic gases in contact with water, air or acid)
- HP13 (Sensitising)
- HP14 (Ecotoxic)
- HP15 (Waste capable by any means, after disposal, of yielding another substance, e.g. a leachate, which possesses any of the characteristics above)
- HP16 (Persistent Organic Pollutants)

Under WM3 waste classification guidance, if the laboratory reports the results as 'dry weight', dry weight needs to be converted to actual concentrations because the hazardous waste classification uses concentrations of substances in the whole waste.

²¹ Waste Classification, Guidance on the classification and assessment of waste (1st edition 2015) Technical Guidance WM3

HazWasteOnline™ automatically assigns a worst case scenario, with regards to metal species. The assessor may use information on the history and use of the Site to determine the metal species most likely to be present.

Solid waste classification undertaken using the WM3 methodology should be done before any Waste Acceptance Criteria (WAC) testing is scheduled. WAC testing does not provide 'level of hazard' classifications and is only used by landfills to determine whether hazardous wastes determined by WM3 should be placed in hazardous, stable non-reactive hazardous, non-hazardous or inert cells based on such things as leachability, moisture content and putrescibility of materials. These will vary dependent on the individual landfill operator which, in turn, is based on the construction detail of the landfill.

The information generated by the waste classification tool can be used by clients to inform their budgets pre-acquisition of a site and to derive abnormal development costs. It can be used to estimate costs of disposal during earthworks and construction, as a cost benefit analysis with other potential remediation approaches.

11.2 Analytical data - Waste Characterisation

There are plans for soil excavated as part of the scheme within the MWTS to be re-used if the material is geotechnically suitable. However, it is possible that some material excavated along the pipeline routes may be discarded and therefore all soil samples have been analysed using the HazWasteOnline™ Tool.

11.2.1 European Waste Catalogue (EWC) Code

The samples are being assessed under construction and demolition waste (including excavated soil from contaminated sites), and therefore fall under EWC codes:

- 17 05 04 or 170503 (soil and stones other than those mentioned in 17 05 03 or soil and stones containing hazardous substances).

11.3 Waste Classification Results

The assessment summarised in Table 11.3-1 shows the hazardous properties assigned to each location. Three hazardous properties have been flagged:

- HP7 Carcinogenic;
- HP10 toxic for reproduction;
- HP14 (Ecotoxic).

Figure 6 details the approximate locations where hazardous properties have been flagged.

Table 11.3 Waste Classification Results

Sample ID	Depth (m)	Strata	Classification	Hazard Property
WS101	0.2	Natural – slightly clayey fine to coarse SAND	Hazardous	HP7, HP 10, HP 14
WS101	1	Natural – slightly sandy very gravelly CLAY	Hazardous	HP7, HP14
WSTP101	1.2-1.56	Natural – slightly sandy slightly gravelly CLAY	Hazardous	HP7, HP10, HP 14
WS102	0.5m	Made Ground – slightly clayey fine to coarse sand sized fragments with high cobble content.	Hazardous	HP7, HP 10, HP 14
WSTP102	1.2-1.56	Natural – slightly sandy slightly gravelly CLAY	Hazardous	HP7, HP 10, HP 14
TP109	1	Made Ground – mottled light orange slightly sandy gravelly clay	Hazardous	HP 14
TP125	2		Hazardous	HP7, HP 10, HP 14

Sample ID	Depth (m)	Strata	Classification	Hazard Property
TP126	1	Natural – very gravelly fine to coarse SAND.	Hazardous	HP7, HP 14
TP128	0.6	Natural – dark brown mottle orange sandy gravelly organic CLAY.	Hazardous	HP7, HP 14
BH105R	3	Natural – slightly sandy slightly gravelly CLAY.	Hazardous	HP 14
BH106	1	Natural – slightly sandy slightly gravelly CLAY.	Hazardous	HP 7
WS103	0.5	Made Ground – mottled orangish brown slightly gravelly sandy clay.	Hazardous	HP 14
WS109	0.2	Natural – mottled orangish brown slightly gravelly sandy CLAY.	Hazardous	HP 14

A HazWasteOnline™ waste classification report has been generated and is included in Appendix C.

11.4 Discussion of waste classification results

HP7, HP10 and HP14 have been triggered due to the naturally elevated levels of lead and zinc.

As previously noted, if the soil material is geotechnically suitable there are plans to re-use material on site. However, if this material is going to landfill, as a hazardous waste classification has been recorded, Waste Acceptance Criteria (WAC) testing will be required to determine the appropriate receiving landfill classification.

Figure 6, provides approximate locations where hazardous properties have been flagged and the depth of the soil samples.

12. Conclusions and Recommendations

12.1 Geo-Environmental

Human health risk assessment: Exceedances of metals GAC for lead were identified at 6 locations and an exceedance for arsenic was identified at 1 location. Lead concentrations averaged 1097 mg/kg and for arsenic the average was 28 mg/kg. These values are 2.5 times natural background concentrations of these metals at the site as listed by the UK Soil observatory²². However, considering the mining history at the Site, the observed lead concentrations in the soil are likely to be due to naturally elevated 'background' levels at the Site. Furthermore, the human health screening criteria (POS_parks) is considered to be highly conservative as it is based on a public park that is used by children on a regular basis. Therefore, it is considered that there will be no risk to human health via direct (dermal) contact or ingestion pathways and there is no risk posed via inhalation of soil vapours. As a result, no source-pathway-receptor linkages have been identified. **There is therefore no unacceptable environmental risk with regards to human health.**

Controlled Waters, leachate: PAHs were found to exceed freshwater EQS at 13No. of 19 locations. Based on the breadth of locations PAHs are clearly ubiquitous in the soil. The concentrations observed are low, only just above detection limit, and are likely to be reflective of natural background levels. Freshwater EQS exceedances for metals (cadmium, copper, lead, nickel and zinc) were observed at 12 locations: West bank Caplecleugh adit, east bank car park, pipeline route zones 1 and 2 and MWTS. The freshwater EQS exceedances for metals in soil leachates throughout the site are considered to be due to the naturally high concentrations of metals in the soil **and there are no unacceptable risks to controlled waters.**

Controlled Waters, ground water: Freshwater EQS exceedances of PAH were found at 1No. location. In general, the exceedances were reflective of those in leachate. Freshwater EQS exceedances of metals were found at 5 locations throughout the site. With the exception of 1 exceedance of vanadium, the metals found to exceed freshwater EQS were the same as those observed in leachate samples. As previously noted, the Site has naturally high background concentrations of metals. Therefore, it is likely that these exceedances represent naturally high 'background' levels. As a result, it is considered that there is no potential 'source' of contamination and no source-pathway-receptor linkages have been identified **and there are no unacceptable risks to controlled waters.**

Controlled Waters, dibutyl phthalate: The identification of dibutyl phthalate in groundwater at location WS104 is an anomaly and is not considered to be representative of the site. The laboratory has stated that this is not a laboratory error. It may be that dibutyl phthalate leached into groundwater at this location due to the presence of plastics. The response soil type is described natural sandy gravelly clay and as such it is considered there is no pathway for this contaminant **and there are no unacceptable risks to controlled waters.**

Ground Gas: Ground gas was monitored at selected locations for 2No. weeks. Analysis of the maximum (peak) concentration of methane and carbon dioxide and maximum flow, by location and a 'worst case' scenario (maximum concentration and maximum flow for the Site), found that the GSV is <0.07 indicating the Site poses a very low hazard potential with regards to carbon dioxide and methane gas. **No ground gas protection measures are deemed necessary based on current data though confirmatory ground investigation may be needed to confirm conditions once locations of buildings are finalised.**

Waste Classification: The HazWasteOnline™ tool was run to determine the solid waste classification of this soil using the WM3 methodology. Hazard property: HP7 (carcinogenic), HP10 (toxic for reproduction), HP14 (ecotoxic) were triggered due to the naturally elevated levels of lead and zinc. If this material is going to landfill, WAC testing will be required to determine the appropriate receiving landfill classification.

12.2 Geotechnical

A ground investigation has been carried out to provide information to assist in the design of Nenthead Minewater Treatment Scheme. The findings are discussed in the preceding chapters and geotechnical issues discussed in detail in Chapter 7. It is concluded that there are no particular issues relating to ground conditions that are likely to prevent the construction of the scheme. However, there are particular issues which must be taken into account during the detained design and construction. Significant issues are:

²² UK Soil Observatory (accessed 10/12/2019) available: <http://mapapps2.bgs.ac.uk/ukso/home.html>

- Overbreak during construction of Mine capture chamber, could result in undermining the existing car park surface
- Shallow groundwater and permeable strata at mine water treatment site requiring special consideration during construction of the pump well and excavation for the pipeline.
- Potential for settlement within the proposed central settlement pond in relation to the void identified in BH105.
- Potential for shallow rock within excavation for the proposed settlement ponds and reed bed within mine water treatment site.
- Excavated material unsuitable for reworking and not able to be designed to the required slope at the settlement ponds in its current condition. It is recommended that the excavated material is improved by lime stabilisation or another suitable method of improvement.
- Shallow groundwater and potential marginal slope stability in the settlement pond area. It is recommended that the measures listed in 7.4.4 above are considered further in conjunction with the earthworks modelling and design. Uplift of the wetland liner due to groundwater pressure. If any part of the liner is to be taken to below groundwater level, then adequate topsoil and/or other cover material must be placed to prevent uplift.
- Prior to pavement construction for the access roads, 1m of suitable capping material or lesser thickness of capping with a geogrid should be placed prior to pavement construction.

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Figures

Figure 1 – Site Location Pan

Figure 2 - SPT versus Depth - MWTS Section 4 Reed Bed and North Pond

Figure 3 - Plasticity Chart - Section 4 Reed Bed and North Pond

Figure 4 - SPT versus Depth – Section 4 Central and Lower Ponds

Figure 5 - Cu versus Depth - MWTS Section 4 Reed Bed and North Pond

Figure 6 - Locations/ depth of soils flagged as having hazardous properties

Figure 2 – SPT v Depth Plot – Mine Water Treatment Site – Reed Bed and North Pond

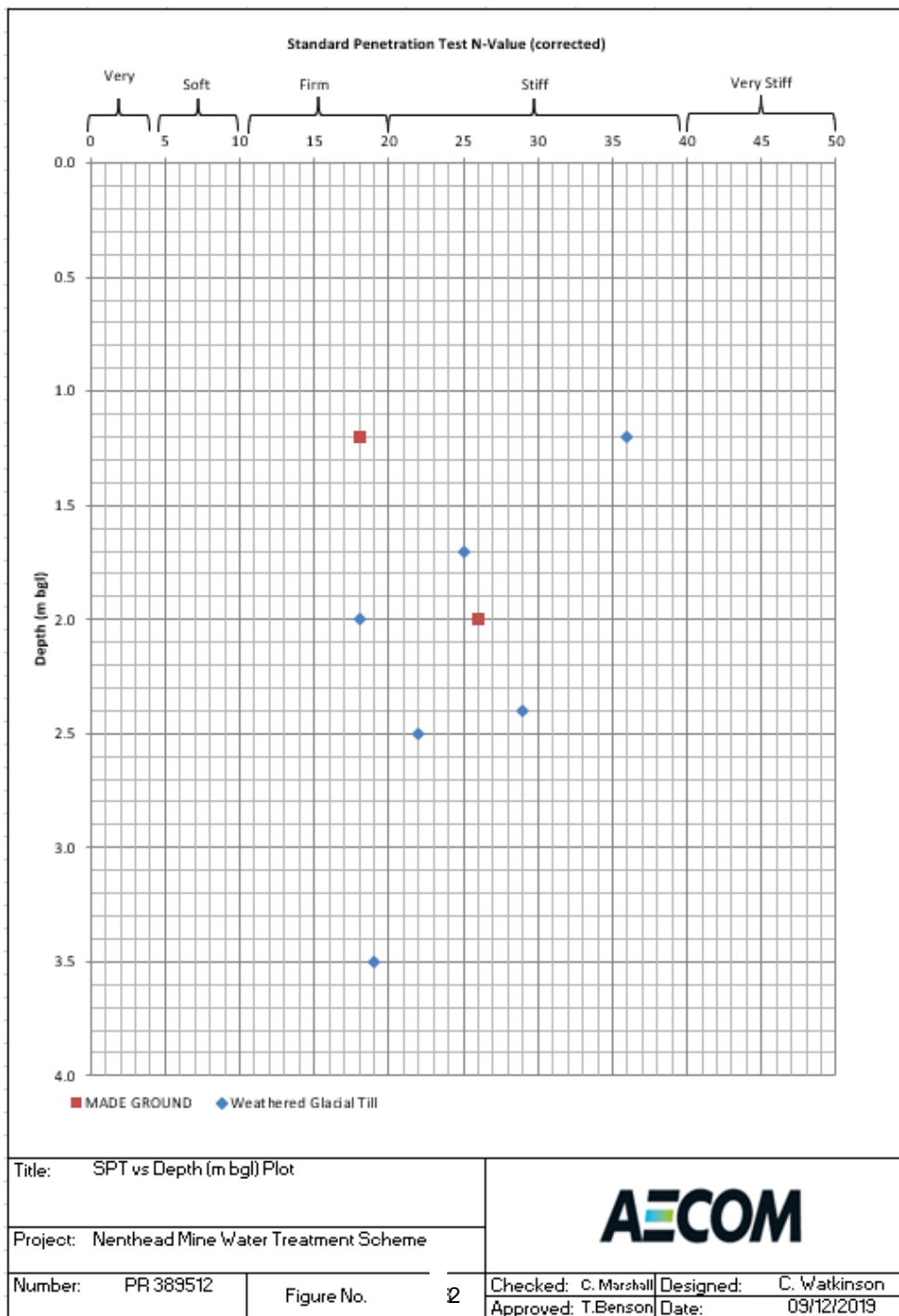
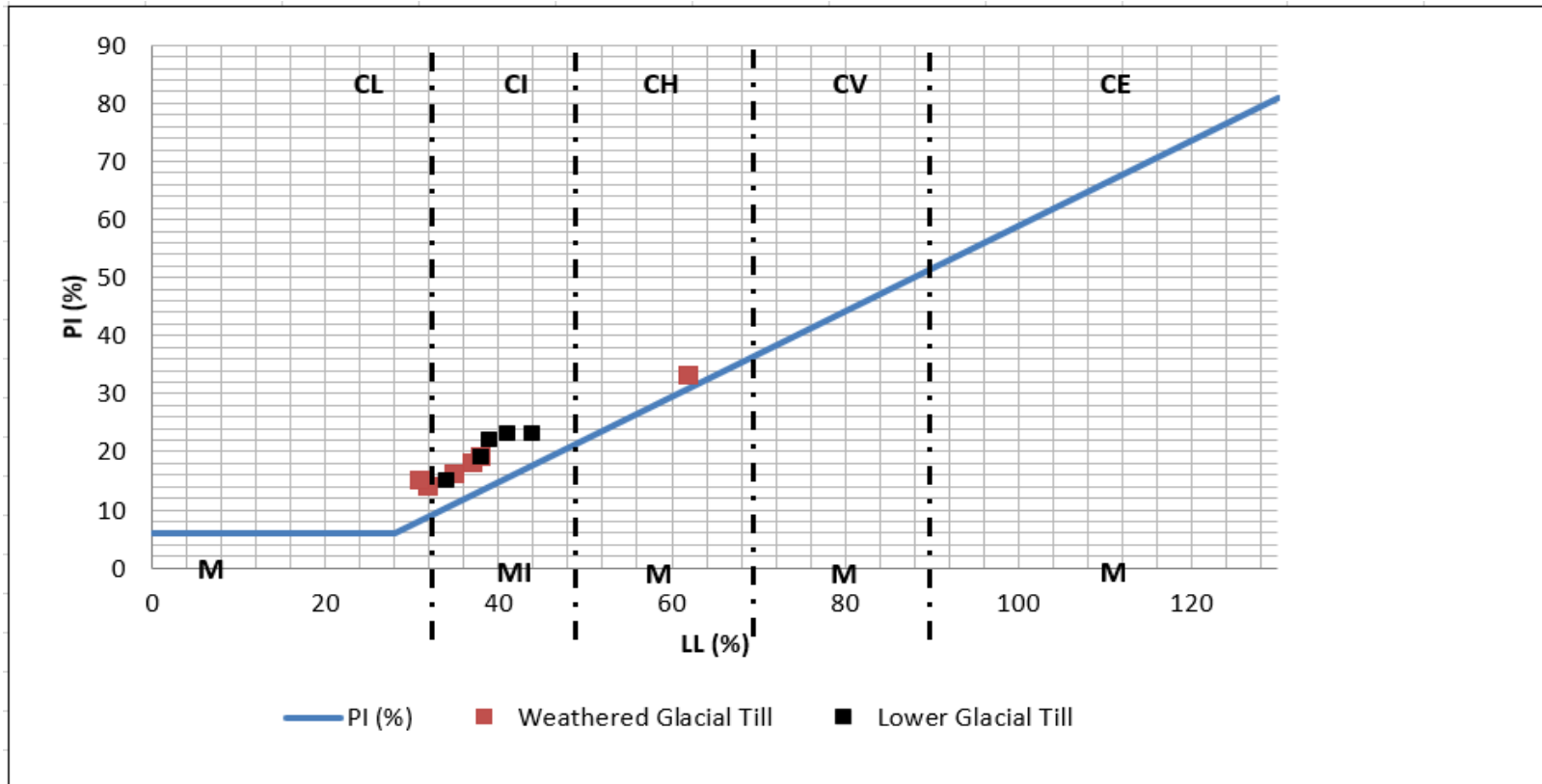


Figure 3: Plasticity Chart - Section 4 Reed Bed and North Pond




Title: Atterberg Limit Plot					
Project: Nenthead Mine Water Treatment Scheme					
Number: PR389512	Figure No. 3				
		Approved: T.Benson	Date: 09.12.2019		

Figure 4 SPT versus Depth – Section 4 Central and Lower Ponds

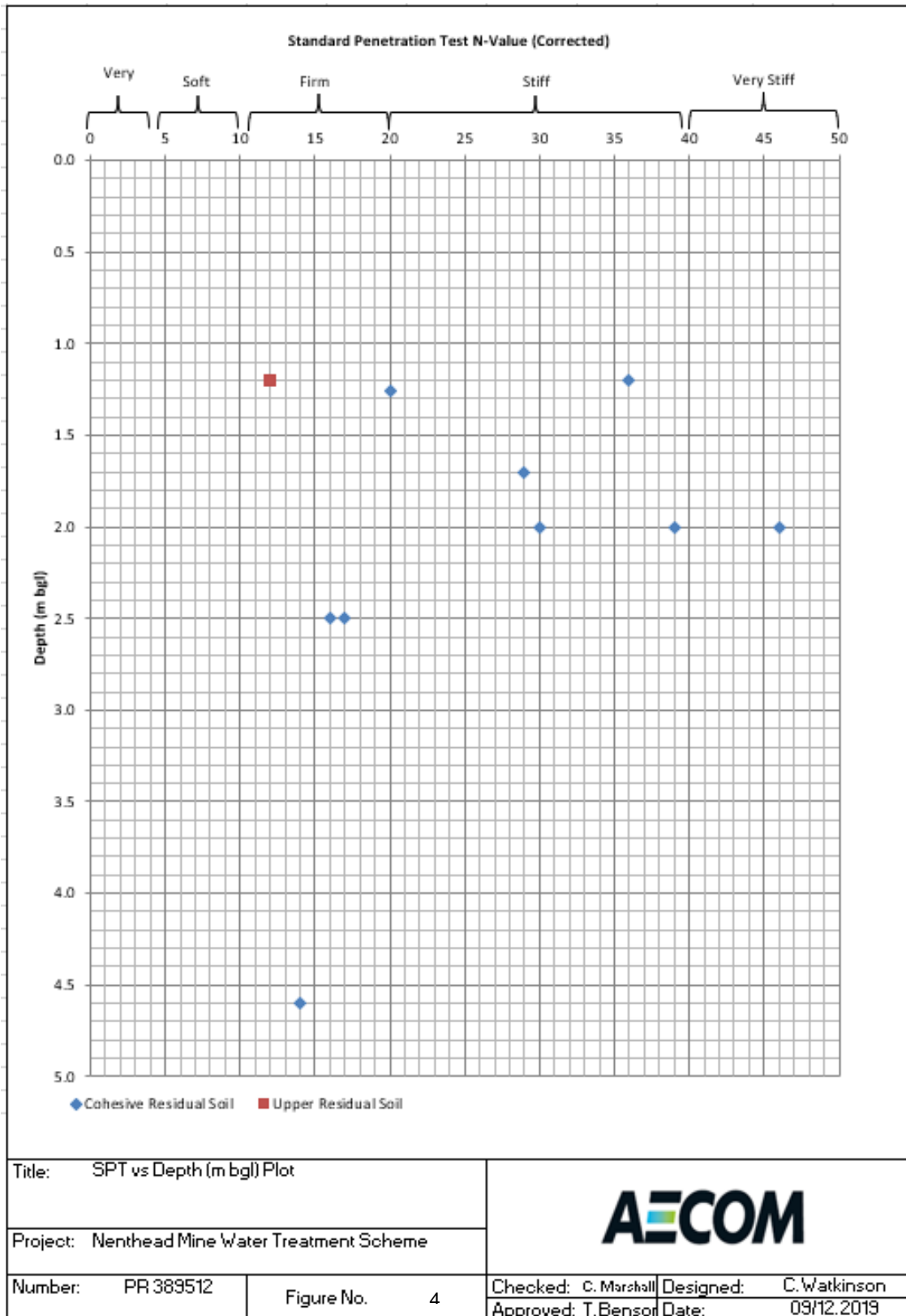
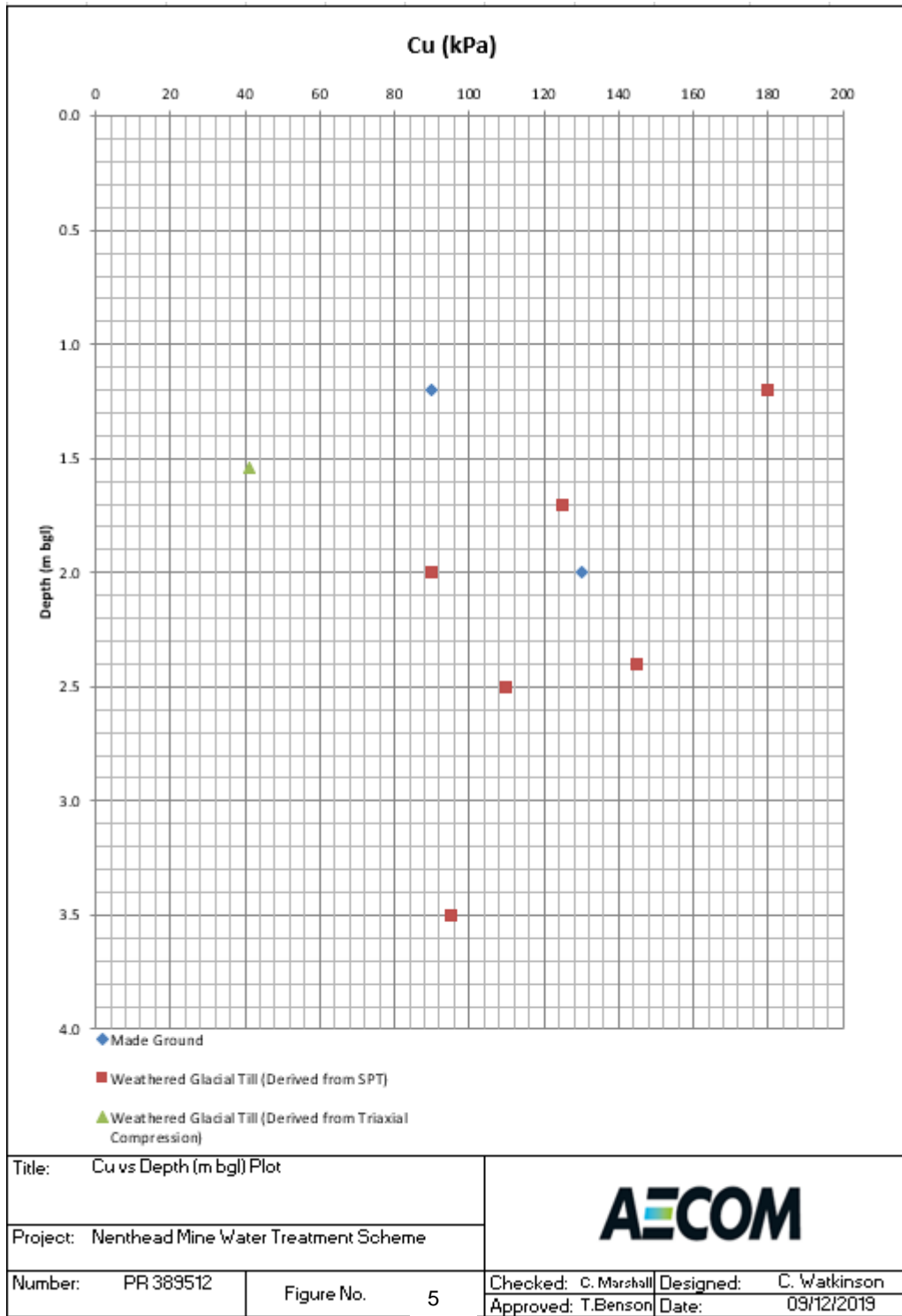


Figure 5 Cu versus Depth - MWTS Section 4 Reed Bed and North Pond



LEGEND

- Site Boundary
- Scheduled Monument Boundary
- + Proposed Trial Pit
- + Proposed Window Sample Borehole
- + Proposed Borehole
- Suggested Route of Rising Main and Outfall Chamber
- Proposed Access Track
- Proposed Contractor Compound
- Proposed Reed Bed
- Proposed Mine Water Treatment Pond

NOTE:
PROPOSED CONTRACTOR COMPOUNDS NOT TO SCALE

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Purpose of Issue
FOR INFORMATION

Client
THE COAL AUTHORITY

Project Title
NENTHEAD MWTS

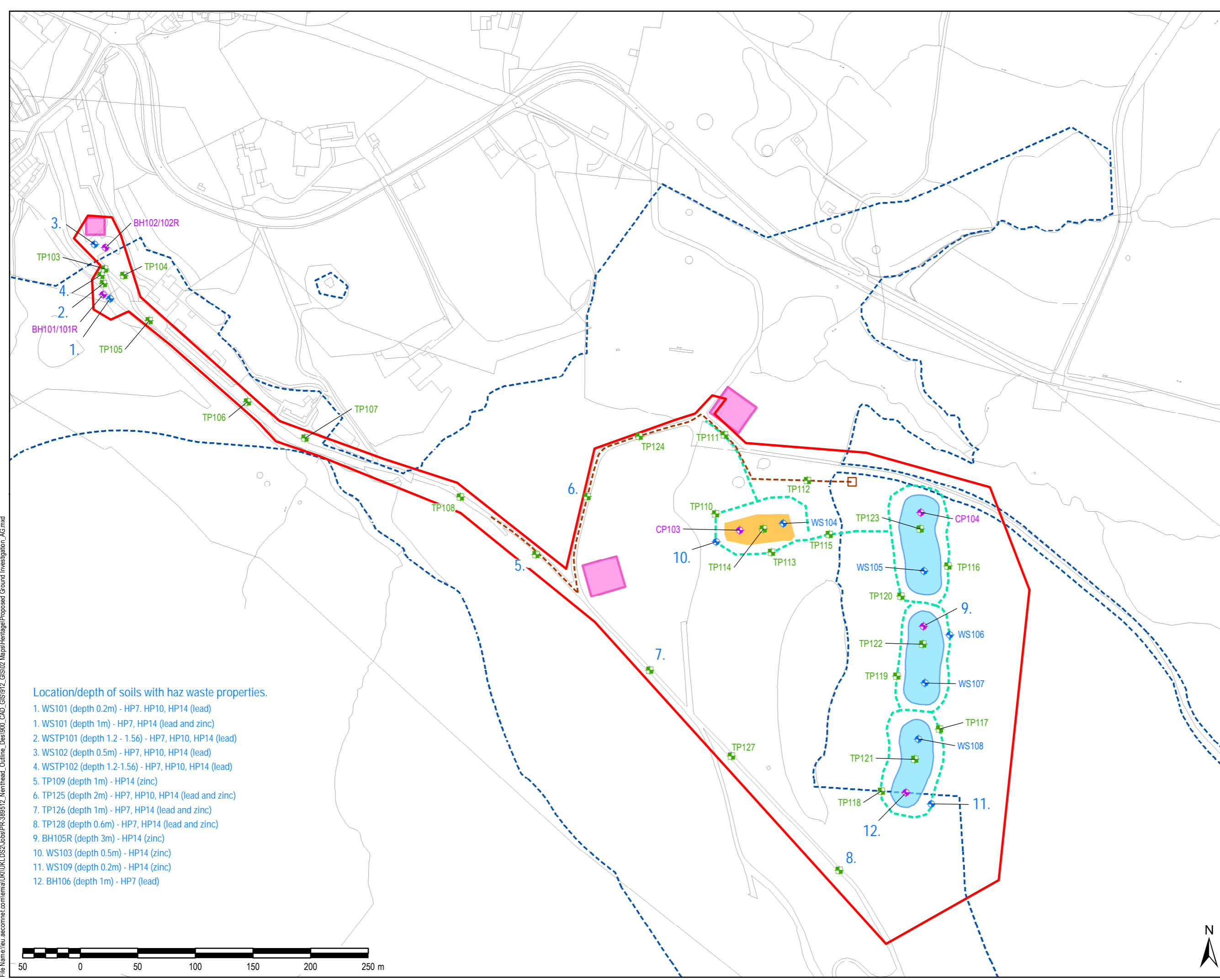
Drawing Title
Locations of Soils with Hazwaste Properties

Drawn AG	Checked LC	Approved JS	Date 06/01/2020
AECOM Internal Project No. 60596575		Scale @ A3 1:3,000	

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Location/depth of soils with haz waste properties.

1. WS101 (depth 0.2m) - HP7, HP10, HP14 (lead)
1. WS101 (depth 1m) - HP7, HP14 (lead and zinc)
2. WSTP101 (depth 1.2 - 1.56) - HP7, HP10, HP14 (lead)
3. WS102 (depth 0.5m) - HP7, HP10, HP14 (lead)
4. WSTP102 (depth 1.2-1.56) - HP7, HP10, HP14 (lead)
5. TP109 (depth 1m) - HP14 (zinc)
6. TP125 (depth 2m) - HP7, HP10, HP14 (lead and zinc)
7. TP126 (depth 1m) - HP7, HP14 (lead and zinc)
8. TP128 (depth 0.6m) - HP7, HP14 (lead and zinc)
9. BH105R (depth 3m) - HP14 (zinc)
10. WS103 (depth 0.5m) - HP14 (zinc)
11. WS109 (depth 0.2m) - HP14 (zinc)
12. BH106 (depth 1m) - HP7 (lead)

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Appendix A Factual report on ground investigation

Appendix B EQS and Health Screening results

Table ??
Analytical Results
Nenthead
The Coal Authority

Field ID	BH102R	BH104	WS103	WS104	WSBH101R
Location Code	BH102R	BH104	WS103	WS104	WSBH101R
Well					
Sampled Date Time	01/10/2019	01/10/2019	01/10/2019	01/10/2019	01/10/2019

Chem Group	ChemName	output unit	EQL	GAC	WTY	ENWA	EQS-Fresh						
Hardness	Hardness	mg/L	0.1					125	143	316	68.3	119	
	Di(2-ethylhexyl)adipate	µg/L		<1	<2	<10	<10	<2				<2	
PAH: Total - (Polynuclear Aromatic Hydrocarbons)	PAH: Total - (Polynuclear Aromatic Hydrocarbons)	µg/L	0.2					<0.2	<0.2	7	<1.6	<0.2	
	pH	pH Units						7.2	7.1	9.4	8.2	7.6	
TPH	>C5-C6 Aliphatics	µg/L	0.1					<0.1	<0.1	<0.1	<0.1	<0.1	
	>C6-C8 Aliphatics	µg/L	0.1					<0.1	<0.1	<0.1	<0.1	<0.1	
	>C8-C10 Aliphatics	µg/L	0.1					<0.1	<0.1	<0.1	<0.1	<0.1	
	>C10-C12 Aliphatics	µg/L	1					<1	<1	<1	<1	<1	
	>C12-C16 Aliphatics	µg/L	1					<1	1.4	<1	<1	<1	
	>C16-C21 Aliphatics	µg/L	1					<1	170	110	<1	<1	
	>C21-C35 Aliphatics	µg/L	1					<1	370	400	<1	<1	
	>C35 Aliphatics	µg/L	10					<10	540	510	<10	<10	
	>EC5-EC7 Aromatics	µg/L	0.1	10				<0.1	<0.1	<0.1	<0.1	<0.1	
	>EC7-EC8 Aromatics	µg/L	0.1	74				<0.1	<0.1	<0.1	<0.1	<0.1	
	>EC8-EC10 Aromatics	µg/L	0.1					<0.1	<0.1	<0.1	<0.1	<0.1	
	>EC10-EC12 Aromatics	µg/L	1					<1	<1	<1	<1	<1	
	>EC12-EC16 Aromatics	µg/L	1					<1	<1	<1	<1	<1	
	>EC16-EC21 Aromatics	µg/L	1					<1	<1	<1	<1	<1	
	>EC21-EC35 Aromatics	µg/L	1					<1	<1	<1	<1	<1	
>EC35-EC38 Aromatics	µg/L	10					<10	<10	<10	<10	<10		
>C5-C35 Aliphatics & Aromatics	µg/L	10					<10	540	510	<10	<10		
BTEX	Benzene	µg/L	1	10				<1	<1	<1	<1	<1	
	Toluene	µg/L	1	74				<1	<1	<1	<1	<1	
	Ethylbenzene	µg/L	1	20				<1	<1	<1	<1	<1	
	Xylene (m & p)	µg/L	2					<2	<2	<2	<2	<2	
Xylene Total	µg/L	1	30				<1	<1	<1	<1	<1		
Xylene (o)	µg/L	1					<1	<1	<1	<1	<1		
Oxygenates	MTBE	µg/L	1	5100				<1	<1	<1	<1	<1	
Chlorinated Hydrocarbons	Chloromethane	µg/L	1					<1	<1	<1	<1	<1	
	Vinyl chloride	µg/L	1	77				<1	<1	<1	<1	<1	
	Chloroethane	µg/L	1					<1	<1	<1	<1	<1	
	1,1-dichloroethane	µg/L	1	9				<1	<1	<1	<1	<1	
	Dichloromethane	µg/L	27	20				<27	<27	<27	<27	<27	
	trans-1,2-dichloroethene	µg/L	1					<1	<1	<1	<1	<1	
	1,1-dichloroethane	µg/L	1					<1	<1	<1	<1	<1	
	cis-1,2-dichloroethane	µg/L	1					<1	<1	<1	<1	<1	
	Chloroform	µg/L	1	2.5				<1	<1	<1	<1	<1	
	1,1,1-trichloroethane	µg/L	1	100				<1	<1	<1	<1	<1	
	Carbon tetrachloride	µg/L	1	12				<1	<1	<1	<1	<1	
	Trichloroethene	µg/L	1	10				<1	<1	<1	<1	<1	
	1,1,2-trichloroethane	µg/L	1	400				<1	<1	<1	<1	<1	
	Tetrachloroethene	µg/L	1	10				<1	<1	<1	<1	<1	
	VOC	2,2-dichloropropane	µg/L	2					<2	<2	<2	<2	<2
Bromochloromethane		µg/L	4					<4	<4	<4	<4	<4	
1,1-dichloropropane		µg/L	1					<1	<1	<1	<1	<1	
1,2-dichloroethane		µg/L	1	10				<1	<1	<1	<1	<1	
1,2-dichloropropane		µg/L	1					<1	<1	<1	<1	<1	
Dibromomethane		µg/L	1					<1	<1	<1	<1	<1	
Bromodichloromethane		µg/L	4					<4	<4	<4	<4	<4	
cis-1,3-dichloropropene		µg/L	1					<1	<1	<1	<1	<1	
trans-1,3-dichloropropene		µg/L	1					<1	<1	<1	<1	<1	
1,3-dichloropropane		µg/L	1					<1	<1	<1	<1	<1	
Chlorodibromomethane		µg/L	1					<1	<1	<1	<1	<1	
1,1,1,2-tetrachloroethane		µg/L	1					<1	<1	<1	<1	<1	
Styrene		µg/L	1	50				<1	<1	<1	<1	<1	
Bromoforn		µg/L	1					<1	<1	<1	<1	<1	
Isopropylbenzene		µg/L	1					<1	<1	<1	<1	<1	
1,1,2,2-tetrachloroethane		µg/L	1	140				<1	<1	<1	<1	<1	
1,2-trichloropropane		µg/L	1					<1	<1	<1	<1	<1	
n-propylbenzene		µg/L	1					<1	<1	<1	<1	<1	
1,3,5-trimethylbenzene		µg/L	1					<1	<1	<1	2	<1	
tert-butylbenzene		µg/L	1					<1	<1	<1	<1	<1	
1,2,4-trimethylbenzene		µg/L	1					<1	<1	<1	<1	<1	
sec-butylbenzene		µg/L	1					<1	<1	<1	<1	<1	
p-isopropyltoluene		µg/L	1					<1	<1	<1	<1	<1	
n-butylbenzene		µg/L	1					<1	<1	<1	<1	<1	
1,2-dibromo-3-chloropropane		µg/L	1					<1	<1	<1	<1	<1	
Hexachlorocyclopentadiene	µg/L	1	0.6				<1	<1	<1	<1	<1		
PAH	Naphthalene	µg/L	0.05	2				<0.05	<0.05	0.22	0.18	<0.05	
	Acenaphthylene	µg/L	0.01					<0.01	<0.01	<0.1	<0.1	<0.01	
	Acenaphthene	µg/L	0.01					<0.01	<0.01	<0.1	<0.1	<0.01	
	Fluorene	µg/L	0.01					<0.01	<0.01	0.22	<0.1	<0.01	
	Phenanthrene	µg/L	0.01					<0.01	<0.01	1.4	0.18	0.01	
	Anthracene	µg/L	0.01	0.1				<0.01	<0.01	2.1	<0.1	<0.01	
	Fluoranthene	µg/L	0.01	0.0063				<0.01	<0.01	0.41	<0.1	<0.01	
	Pyrene	µg/L	0.01					<0.01	<0.01	0.44	<0.1	<0.01	
	Benzo(a)anthracene	µg/L	0.01					<0.01	<0.01	0.19	<0.1	<0.01	
	Chrysene	µg/L	0.01					<0.01	<0.01	0.98	<0.1	<0.01	
	Benzo(a)pyrene	µg/L	0.01	0.00017				<0.01	<0.01	<0.1	<0.1	<0.01	
	Indeno(1,2,3-c,d)pyrene	µg/L	0.01	see BaP and notes 8.999000000000001				<0.01	<0.01	0.1	<0.1	<0.01	
	Dibenz(a,h)anthracene	µg/L	0.01					<0.01	<0.01	<0.1	<0.1	<0.01	
	Benzo(g,h,i)perylene	µg/L	0.01	0.0082				<0.01	<0.01	0.2	<0.1	<0.01	
	Benzo(b)fluoranthene	µg/L	0.01	0.017				<0.01	<0.01	0.71	<0.1	<0.01	
	Benzo(k)fluoranthene	µg/L	0.01	0.017				<0.01	<0.01	0.16	<0.1	<0.01	
	SVOC	2-methylnaphthalene	µg/L	1					<1	<2	<10	<10	<2
		4-bromophenyl phenyl ether	µg/L	1					<1	<2	<10	<10	<2
		4-chlorophenyl phenyl ether	µg/L	1					<1	<2	<10	<10	<2
		Azobenzene	µg/L	1					<1	<2	<10	<10	<2
Bis(2-chloroethoxy) methane		µg/L	1					<1	<2	<10	<10	<2	
Carbazole		µg/L	1					<1	<2	<10	<10	<2	
Dibenzofuran		µg/L	1					<1	<2	<10	<10	<2	
Hexachlorocyclopentadiene		µg/L	1					<1	<2	<10	<10	<2	
1-Methylnaphthalene		µg/L	1					<1	<2	<10	<10	<2	
Benzyl alcohol		µg/L	1					<1	<2	<10	<10	<2	
Phenolics		2-methylphenol	µg/L	1					<1	<2	<10	<10	<2
		2,4-dimethylphenol	µg/L	1					<1	<2	<10	<10	<2
		4-chloro-3-methylphenol	µg/L	1	40				<1	<2	<10	<10	<2
		4-nitrophenol	µg/L	1					<1	<2	<10	<10	<2
		Phenol	µg/L	1	7.7				<1	<2	<10	<10	<2
	2-chloronaphthalene	µg/L	1					<1	<2	<10	<10	<2	
Amino Aromatics	3,4-methylphenol	µg/L	1					<1	<2	<10	<10	<2	
	Phenols (Mono)	µg/L	100					<100	<100	<100	<100	<100	
Anilines	Diphenylamine	µg/L	1					<1	<2	<10	<10	<2	
	2-nitroaniline	µg/L	1					<1	<2	<10	<10	<2	
	3-nitroaniline	µg/L	1					<1	<2	<10	<10	<2	
	4-nitroaniline	µg/L	1					<1	<2	<10	<10	<2	
Explosives	1,3-Dinitrobenzene	µg/L	1					<1	<2	<10	<10	<2	
	2,4-Dinitrotoluene	µg/L	1					<1	<2	<10	<10	<2	
	2,6-Dinitrotoluene	µg/L	1					<1	<2	<10	<10	<2	
	Chlorobenzene	µg/L	1					<1	<1	<1	<1	<1	
	Bromobenzene	µg/L	1</										

Appendix C Hazwaste Results

Waste Classification Report



8KTZW-NJCLR-NB928

Job name

Nenthead

Description/Comments

Project

60596575

Site

Nenthead Mines

Related Documents

#	Name	Description
None		

Waste Stream Template

AECOM Waste Stream - Nenthead (60596575, 2019)

Classified by

Name:
Lawrence Bowden
Date:
21 Dec 2019 14:10 GMT
Telephone:
0161 236 8655

Company:
AECOM Infrastructure & Environment (UK) Limited
Brunel House
54 Princess Street
Manchester
M1 6HS

Report

Created by: Lawrence Bowden
Created date: 21 Dec 2019 14:10 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	BH102R	1.75	Non Hazardous		3
2	BH103	0.2	Non Hazardous		4
3	BH103[2]	1	Non Hazardous		6
4	BH104	0.5	Non Hazardous		9
5	BH104[2]	2	Non Hazardous		12
6	BH104[3]	3	Non Hazardous		14
7	BH105	1	Non Hazardous		17
8	BH105[2]	2	Non Hazardous		20
9	BH105[3]	3	Hazardous	HP 14	22
10	BH106	1	Hazardous	HP 7	25
11	BH106[2]	2	Non Hazardous		28
12	BH106[3]	3	Non Hazardous		31

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
13	TP104	1	Non Hazardous		33
14	TP109	1	Hazardous	HP 14	35
15	TP110	1	Non Hazardous		37
16	TP110[2]	2	Non Hazardous		39
17	TP110[3]	3	Non Hazardous		42
18	TP111	1	Non Hazardous		44
19	TP112	1	Non Hazardous		46
20	TP113	1	Non Hazardous		48
21	TP114	1	Non Hazardous		50
22	TP115	1	Non Hazardous		52
23	TP115[2]	1.2	Non Hazardous		55
24	TP116	1	Non Hazardous		57
25	TP117	1	Non Hazardous		59
26	TP118	1	Non Hazardous		61
27	TP119	0.8	Non Hazardous		64
28	TP120	1	Non Hazardous		66
29	TP122	0.8	Non Hazardous		68
30	TP123	0.6	Non Hazardous		70
31	TP124	1	Non Hazardous		72
32	TP125	0.25	Non Hazardous		74
33	TP125[2]	2	Hazardous	HP 7, HP 10, HP 14	76
34	TP126	1	Hazardous	HP 7, HP 14	79
35	TP127	1	Non Hazardous		82
36	TP128	0.6	Hazardous	HP 7, HP 14	84
37	TP128[2]	1	Non Hazardous		87
38	WS101	0.2	Hazardous	HP 7, HP 10, HP 14	90
39	WS101[2]	1	Hazardous	HP 7, HP 14	93
40	WS102	0.5	Hazardous	HP 7, HP 10, HP 14	96
41	WS102[2]	1	Non Hazardous		99
42	WS103	0.5	Hazardous	HP 14	101
43	WS104	1	Non Hazardous		104
44	WS105	0.5	Non Hazardous		106
45	WS106	1	Non Hazardous		108
46	WS107	0.5	Non Hazardous		110
47	WS108	0.5	Non Hazardous		112
48	WS108[2]	1	Non Hazardous		115
49	WS109	0.2	Hazardous	HP 14	117
50	WSBH101R	0.1	Non Hazardous		120
51	WSBH101R[2]	0.2	Non Hazardous		121
52	WSBH101R[3]	0.5	Non Hazardous		124
53	WSBH101R[4]	1	Non Hazardous		126
54	WSTP101	0.85	Non Hazardous		127
55	WSTP101[2]	1.2	Non Hazardous		128
56	WSTP101[3]	1.2-1.56	Hazardous	HP 7, HP 10, HP 14	129
57	WSTP102	0.1	Non Hazardous		132
58	WSTP102[2]	0.5	Non Hazardous		133
59	WSTP102[3]	1.2-1.56	Hazardous	HP 7, HP 10, HP 14	135
60	WSTP103	0.5	Non Hazardous		138
61	WSTP103[2]	1	Non Hazardous		140
62	WSTP105	0.5	Non Hazardous		141
63	WSTP106	0.5	Non Hazardous		143
64	WSTP107	1	Non Hazardous		145

Appendices	Page
Appendix A: Classifier defined and non CLP determinands	147
Appendix B: Rationale for selection of metal species	148
Appendix C: Version	149

Classification of sample: BH102R

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

Sample details

Sample Name:	LoW Code:	
BH102R	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1.75 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	● pH				7.9 pH		7.9 pH	7.9 pH		
Total:								0%		

Key

- User supplied data
- Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: BH103

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

Sample details

Sample Name:	BH103	LoW Code:	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	0.2 m	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)	

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	8.8 mg/kg	1.32	11.619 mg/kg	0.00116 %	✔	
2	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.9 mg/kg	2.775	5.273 mg/kg	0.000527 %	✔	
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2	1.9 mg/kg	3.22	6.118 mg/kg	0.000612 %	✔	
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0	<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9	0.4 mg/kg	1.462	0.585 mg/kg	0.0000585 %	✔	
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	20 mg/kg	1.126	22.518 mg/kg	0.00225 %	✔	
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			130 mg/kg		130 mg/kg	0.013 %	✔	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7	<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.00000677 %		<LOD
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7	32 mg/kg	2.976	95.24 mg/kg	0.00952 %	✔	
11	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }	034-002-00-8			<0.5 mg/kg	2.554	<1.277 mg/kg	<0.000128 %		<LOD
12	zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]	130 mg/kg	2.469	321.009 mg/kg	0.0321 %	✔	
13	TPH (C6 to C40) petroleum group			TPH	<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, }				<0.1 mg/kg	1.884	<0.188 mg/kg	<0.0000188 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
	ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }									
	006-007-00-5									
15	pH				6.1 pH		6.1 pH	6.1 pH		
			PH							
16	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
17	acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8							
18	acenaphthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9							
19	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7							
20	phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8							
21	anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7							
22	fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0							
23	pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0							
24	benzo[a]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
25	chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
26	benzo[b]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
27	benzo[k]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
28	benzo[a]pyrene; benzo[def]chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
29	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5							
30	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
31	benzo[ghi]perylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2							
32	phenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
33	barium { barium oxide }				190 mg/kg	1.117	212.136 mg/kg	0.0212 %	✓	
		215-127-9	1304-28-5							
Total:								0.082 %		

Key

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

Classification of sample: BH103[2]

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

Sample details

Sample Name:	BH103[2]	LoW Code:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	1 m	Chapter:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
		Entry:	

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				11	mg/kg	1.32	14.524	mg/kg	0.00145 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	beryllium { beryllium oxide }				1.7	mg/kg	2.775	4.718	mg/kg	0.000472 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
3	boron { diboron trioxide; boric oxide }				1.7	mg/kg	3.22	5.474	mg/kg	0.000547 %	✓	
	005-008-00-8	215-125-8	1303-86-2									
4	cadmium { cadmium oxide }				<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0									
5	chromium in chromium(III) compounds { chromium(III) oxide }				0.8	mg/kg	1.462	1.169	mg/kg	0.000117 %	✓	
		215-160-9	1308-38-9									
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0									
7	copper { dicopper oxide; copper (I) oxide }				20	mg/kg	1.126	22.518	mg/kg	0.00225 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	220	mg/kg		220	mg/kg	0.022 %	✓	
	082-001-00-6											
9	mercury { mercury dichloride }				<0.05	mg/kg	1.353	<0.0677	mg/kg	<0.00000677 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
10	nickel { nickel chromate }				30	mg/kg	2.976	89.288	mg/kg	0.00893 %	✓	
	028-035-00-7	238-766-5	14721-18-7									
11	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				<0.5	mg/kg	2.554	<1.277	mg/kg	<0.000128 %		<LOD
	034-002-00-8											
12	zinc { zinc sulphate }				270	mg/kg	2.469	666.71	mg/kg	0.0667 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
13	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X 216-653-1 1634-04-4				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
15	benzene 601-020-00-8 200-753-7 71-43-2				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
16	toluene 601-021-00-3 203-625-9 108-88-3				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
17	ethylbenzene 601-023-00-4 202-849-4 100-41-4				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
18	xylene 601-022-00-9 202-422-2 [1] 95-47-6 [1] 203-396-5 [2] 106-42-3 [2] 203-576-3 [3] 108-38-3 [3] 215-535-7 [4] 1330-20-7 [4]				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
19	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<0.1 mg/kg	1.884	<0.188 mg/kg	<0.0000188 %		<LOD
20	pH PH				5.3 pH		5.3 pH	5.3 pH		
21	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
22	acenaphthylene 205-917-1 208-96-8				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
23	acenaphthene 201-469-6 83-32-9				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
24	fluorene 201-695-5 86-73-7				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
25	phenanthrene 201-581-5 85-01-8				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
26	anthracene 204-371-1 120-12-7				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
27	fluoranthene 205-912-4 206-44-0				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
28	pyrene 204-927-3 129-00-0				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
29	benzo[a]anthracene 601-033-00-9 200-280-6 56-55-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
30	chrysene 601-048-00-0 205-923-4 218-01-9				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
31	benzo[b]fluoranthene 601-034-00-4 205-911-9 205-99-2				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
32	benzo[k]fluoranthene 601-036-00-5 205-916-6 207-08-9				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
33	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3 200-028-5 50-32-8				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
34	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
35	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
36	benzo[ghi]perylene 205-883-8 191-24-2				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
37	phenol 604-001-00-2 203-632-7 108-95-2				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
38	4-nitrophenol; p-nitrophenol 609-015-00-2 202-811-7 100-02-7				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
39	hexachlorobutadiene 201-765-5 87-68-3				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
40	1,1,2,2-tetrachloroethane 602-015-00-3 201-197-8 79-34-5				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
41	1,2,3-trichloropropane				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD	
	602-062-00-X	202-486-1	96-18-4								
42	barium { ● barium oxide }				280 mg/kg	1.117	312.622 mg/kg	0.0313 %	✓		
		215-127-9	1304-28-5								
Total:								0.135 %			

Key

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

Classification of sample: BH104

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

Sample details

Sample Name:	LoW Code:	
BH104	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.5 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide } 033-003-00-0 215-481-4 1327-53-3				10	mg/kg	1.32	13.203	mg/kg	0.00132 %	✓	
2	beryllium { beryllium oxide } 004-003-00-8 215-133-1 1304-56-9				2.2	mg/kg	2.775	6.106	mg/kg	0.000611 %	✓	
3	boron { diboron trioxide; boric oxide } 005-008-00-8 215-125-8 1303-86-2				2.2	mg/kg	3.22	7.084	mg/kg	0.000708 %	✓	
4	cadmium { cadmium oxide } 048-002-00-0 215-146-2 1306-19-0				0.4	mg/kg	1.142	0.457	mg/kg	0.0000457 %	✓	
5	chromium in chromium(III) compounds { chromium(III) oxide } 215-160-9 1308-38-9				0.5	mg/kg	1.462	0.731	mg/kg	0.0000731 %	✓	
6	chromium in chromium(VI) compounds { chromium(VI) oxide } 024-001-00-0 215-607-8 1333-82-0				<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %		<LOD
7	copper { dicopper oxide; copper (I) oxide } 029-002-00-X 215-270-7 1317-39-1				35	mg/kg	1.126	39.406	mg/kg	0.00394 %	✓	
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) } 082-001-00-6			1	110	mg/kg		110	mg/kg	0.011 %	✓	
9	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				<0.05	mg/kg	1.353	<0.0677	mg/kg	<0.00000677 %		<LOD
10	nickel { nickel chromate } 028-035-00-7 238-766-5 14721-18-7				14	mg/kg	2.976	41.668	mg/kg	0.00417 %	✓	
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				<0.5	mg/kg	2.554	<1.277	mg/kg	<0.000128 %		<LOD
12	zinc { zinc sulphate } 030-006-00-9 231-793-3 [1] 7446-19-7 [1] 231-793-3 [2] 7733-02-0 [2]				150	mg/kg	2.469	370.394	mg/kg	0.037 %	✓	
13	TPH (C6 to C40) petroleum group TPH				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X 216-653-1 1634-04-4				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
15	benzene 601-020-00-8 200-753-7 71-43-2				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
16	toluene 601-021-00-3 203-625-9 108-88-3				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
17	ethylbenzene 601-023-00-4 202-849-4 100-41-4				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
18	xylene 601-022-00-9 202-422-2 [1] 95-47-6 [1] 203-396-5 [2] 106-42-3 [2] 203-576-3 [3] 108-38-3 [3] 215-535-7 [4] 1330-20-7 [4]				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
19	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<0.1 mg/kg	1.884	<0.188 mg/kg	<0.0000188 %		<LOD
20	pH PH				5 pH		5 pH	5pH		
21	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
22	acenaphthylene 205-917-1 208-96-8				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
23	acenaphthene 201-469-6 83-32-9				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
24	fluorene 201-695-5 86-73-7				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
25	phenanthrene 201-581-5 85-01-8				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
26	anthracene 204-371-1 120-12-7				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
27	fluoranthene 205-912-4 206-44-0				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
28	pyrene 204-927-3 129-00-0				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
29	benzo[a]anthracene 601-033-00-9 200-280-6 56-55-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
30	chrysene 601-048-00-0 205-923-4 218-01-9				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
31	benzo[b]fluoranthene 601-034-00-4 205-911-9 205-99-2				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
32	benzo[k]fluoranthene 601-036-00-5 205-916-6 207-08-9				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
33	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3 200-028-5 50-32-8				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
34	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
35	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
36	benzo[ghi]perylene 205-883-8 191-24-2				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
37	phenol 604-001-00-2 203-632-7 108-95-2				<		<	<		ND
38	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate 616-106-00-0 237-199-0 13684-63-4				1 mg/kg		1 mg/kg	0.0001 %	✓	
39	4-nitrophenol; p-nitrophenol 609-015-00-2 202-811-7 100-02-7				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
40	hexachlorobutadiene				0.01 mg/kg		0.01 mg/kg	0.000001 %	✓	
		201-765-5	87-68-3							
41	1,1,2,2-tetrachloroethane				0.01 mg/kg		0.01 mg/kg	0.000001 %	✓	
	602-015-00-3	201-197-8	79-34-5							
42	1,2,3-trichloropropane				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	602-062-00-X	202-486-1	96-18-4							
43	barium { barium oxide }				230 mg/kg	1.117	256.796 mg/kg	0.0257 %	✓	
		215-127-9	1304-28-5							
Total:								0.0862 %		

Key

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

Classification of sample: BH104[2]

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

Sample details

Sample Name:	BH104[2]	LoW Code:	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	2 m	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)	

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				11	mg/kg	1.32	14.524	mg/kg	0.00145 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	beryllium { beryllium oxide }				1.8	mg/kg	2.775	4.996	mg/kg	0.0005 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
3	boron { diboron trioxide; boric oxide }				1.8	mg/kg	3.22	5.796	mg/kg	0.00058 %	✓	
	005-008-00-8	215-125-8	1303-86-2									
4	cadmium { cadmium oxide }				0.2	mg/kg	1.142	0.228	mg/kg	0.0000228 %	✓	
	048-002-00-0	215-146-2	1306-19-0									
5	chromium in chromium(III) compounds { chromium(III) oxide }				0.1	mg/kg	1.462	0.146	mg/kg	0.0000146 %	✓	
		215-160-9	1308-38-9									
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0									
7	copper { dicopper oxide; copper (I) oxide }				23	mg/kg	1.126	25.895	mg/kg	0.00259 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	180	mg/kg		180	mg/kg	0.018 %	✓	
	082-001-00-6											
9	mercury { mercury dichloride }				<0.05	mg/kg	1.353	<0.0677	mg/kg	<0.0000677 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
10	nickel { nickel chromate }				23	mg/kg	2.976	68.454	mg/kg	0.00685 %	✓	
	028-035-00-7	238-766-5	14721-18-7									
11	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				<0.5	mg/kg	2.554	<1.277	mg/kg	<0.000128 %		<LOD
	034-002-00-8											
12	zinc { zinc sulphate }				68	mg/kg	2.469	167.912	mg/kg	0.0168 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
13	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, }				<0.1	mg/kg	1.884	<0.188	mg/kg	<0.0000188 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
	ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }									
	006-007-00-5									
15	pH				5.7 pH		5.7 pH	5.7 pH		
			PH							
16	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
17	acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8							
18	acenaphthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9							
19	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7							
20	phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8							
21	anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7							
22	fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0							
23	pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0							
24	benzo[a]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
25	chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
26	benzo[b]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
27	benzo[k]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
28	benzo[a]pyrene; benzo[def]chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
29	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5							
30	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
31	benzo[ghi]perylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2							
32	phenol				0.9 mg/kg		0.9 mg/kg	0.00009 %	✓	
	604-001-00-2	203-632-7	108-95-2							
33	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate				0.9 mg/kg		0.9 mg/kg	0.00009 %	✓	
	616-106-00-0	237-199-0	13684-63-4							
34	barium { barium oxide }				240 mg/kg	1.117	267.961 mg/kg	0.0268 %	✓	
		215-127-9	1304-28-5							
Total:								0.0753 %		

Key

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

Classification of sample: BH104[3]

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

Sample details

Sample Name:	LoW Code:	
BH104[3]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
3 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				16 mg/kg	1.32	21.125 mg/kg	0.00211 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				2.6 mg/kg	2.775	7.216 mg/kg	0.000722 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				2.6 mg/kg	3.22	8.372 mg/kg	0.000837 %	✓	
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				0.3 mg/kg	1.142	0.343 mg/kg	0.0000343 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide }				<0.1 mg/kg	1.462	<0.146 mg/kg	<0.0000146 %		<LOD
		215-160-9	1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
7	copper { dicopper oxide; copper (I) oxide }				22 mg/kg	1.126	24.77 mg/kg	0.00248 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	25 mg/kg		25 mg/kg	0.0025 %	✓	
	082-001-00-6									
9	mercury { mercury dichloride }				<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.00000677 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel chromate }				37 mg/kg	2.976	110.122 mg/kg	0.011 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				1.8 mg/kg	2.554	4.596 mg/kg	0.00046 %	✓	
	034-002-00-8									
12	zinc { zinc sulphate }				22 mg/kg	2.469	54.325 mg/kg	0.00543 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
13	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X 216-653-1 1634-04-4				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
15	benzene 601-020-00-8 200-753-7 71-43-2				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
16	toluene 601-021-00-3 203-625-9 108-88-3				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
17	ethylbenzene 601-023-00-4 202-849-4 100-41-4				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
18	xylene 601-022-00-9 202-422-2 [1] 95-47-6 [1] 203-396-5 [2] 106-42-3 [2] 203-576-3 [3] 108-38-3 [3] 215-535-7 [4] 1330-20-7 [4]				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
19	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<0.1 mg/kg	1.884	<0.188 mg/kg	<0.0000188 %			<LOD
20	pH PH				6.5 pH		6.5 pH	6.5 pH			
21	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
22	acenaphthylene 205-917-1 208-96-8				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
23	acenaphthene 201-469-6 83-32-9				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
24	fluorene 201-695-5 86-73-7				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
25	phenanthrene 201-581-5 85-01-8				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
26	anthracene 204-371-1 120-12-7				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
27	fluoranthene 205-912-4 206-44-0				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
28	pyrene 204-927-3 129-00-0				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
29	benzo[a]anthracene 601-033-00-9 200-280-6 56-55-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
30	chrysene 601-048-00-0 205-923-4 218-01-9				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
31	benzo[b]fluoranthene 601-034-00-4 205-911-9 205-99-2				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
32	benzo[k]fluoranthene 601-036-00-5 205-916-6 207-08-9				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
33	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3 200-028-5 50-32-8				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
34	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
35	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
36	benzo[ghi]perylene 205-883-8 191-24-2				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
37	phenol 604-001-00-2 203-632-7 108-95-2				<		<	<			ND
38	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate 616-106-00-0 237-199-0 13684-63-4				0.5 mg/kg		0.5 mg/kg	0.00005 %	✓		
39	4-nitrophenol; p-nitrophenol 609-015-00-2 202-811-7 100-02-7				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
40	hexachlorobutadiene	201-765-5	87-68-3		0.01 mg/kg		0.01 mg/kg	0.000001 %	✓		
41	1,1,2,2-tetrachloroethane	602-015-00-3	201-197-8	79-34-5	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD	
42	1,2,3-trichloropropane	602-062-00-X	202-486-1	96-18-4	<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD	
43	barium { barium oxide }	215-127-9	1304-28-5		160 mg/kg	1.117	178.641 mg/kg	0.0179 %	✓		
Total:								0.0449 %			

Key

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

Classification of sample: BH105

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

Sample details

Sample Name:	LoW Code:	
BH105	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				12 mg/kg	1.32	15.844 mg/kg	0.00158 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				3.6 mg/kg	2.775	9.991 mg/kg	0.000999 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				3.6 mg/kg	3.22	11.592 mg/kg	0.00116 %	✓	
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				0.3 mg/kg	1.142	0.343 mg/kg	0.0000343 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide }				1.4 mg/kg	1.462	2.046 mg/kg	0.000205 %	✓	
		215-160-9	1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
7	copper { dicopper oxide; copper (I) oxide }				23 mg/kg	1.126	25.895 mg/kg	0.00259 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	430 mg/kg		430 mg/kg	0.043 %	✓	
	082-001-00-6									
9	mercury { mercury dichloride }				0.06 mg/kg	1.353	0.0812 mg/kg	0.00000812 %	✓	
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel chromate }				57 mg/kg	2.976	169.647 mg/kg	0.017 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<0.5 mg/kg	2.554	<1.277 mg/kg	<0.000128 %		<LOD
	034-002-00-8									
12	zinc { zinc sulphate }				740 mg/kg	2.469	1827.279 mg/kg	0.183 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
13	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X 216-653-1 1634-04-4				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
15	benzene 601-020-00-8 200-753-7 71-43-2				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
16	toluene 601-021-00-3 203-625-9 108-88-3				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
17	ethylbenzene 601-023-00-4 202-849-4 100-41-4				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
18	xylene 601-022-00-9 202-422-2 [1] 95-47-6 [1] 203-396-5 [2] 106-42-3 [2] 203-576-3 [3] 108-38-3 [3] 215-535-7 [4] 1330-20-7 [4]				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
19	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<0.1 mg/kg	1.884	<0.188 mg/kg	<0.0000188 %		<LOD
20	pH PH				5.7 pH		5.7 pH	5.7 pH		
21	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
22	acenaphthylene 205-917-1 208-96-8				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
23	acenaphthene 201-469-6 83-32-9				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
24	fluorene 201-695-5 86-73-7				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
25	phenanthrene 201-581-5 85-01-8				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
26	anthracene 204-371-1 120-12-7				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
27	fluoranthene 205-912-4 206-44-0				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
28	pyrene 204-927-3 129-00-0				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
29	benzo[a]anthracene 601-033-00-9 200-280-6 56-55-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
30	chrysene 601-048-00-0 205-923-4 218-01-9				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
31	benzo[b]fluoranthene 601-034-00-4 205-911-9 205-99-2				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
32	benzo[k]fluoranthene 601-036-00-5 205-916-6 207-08-9				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
33	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3 200-028-5 50-32-8				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
34	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
35	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
36	benzo[ghi]perylene 205-883-8 191-24-2				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
37	phenol 604-001-00-2 203-632-7 108-95-2				<		<	<		ND
38	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate 616-106-00-0 237-199-0 13684-63-4				0.4 mg/kg		0.4 mg/kg	0.00004 %	✓	
39	4-nitrophenol; p-nitrophenol 609-015-00-2 202-811-7 100-02-7				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
40	hexachlorobutadiene				0.01 mg/kg		0.01 mg/kg	0.000001 %	✓	
		201-765-5	87-68-3							
41	1,1,2,2-tetrachloroethane				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		602-015-00-3	201-197-8							
42	1,2,3-trichloropropane				0.01 mg/kg		0.01 mg/kg	0.000001 %	✓	
		602-062-00-X	202-486-1							
43	barium { barium oxide }				380 mg/kg	1.117	424.272 mg/kg	0.0424 %	✓	
		215-127-9	1304-28-5							
Total:								0.293 %		

Key

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

Classification of sample: BH105[2]

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

Sample details

Sample Name:	BH105[2]	LoW Code:	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	2 m	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)	

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				11	mg/kg	1.32	14.524	mg/kg	0.00145 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	beryllium { beryllium oxide }				3.3	mg/kg	2.775	9.159	mg/kg	0.000916 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
3	boron { diboron trioxide; boric oxide }				3.3	mg/kg	3.22	10.626	mg/kg	0.00106 %	✓	
	005-008-00-8	215-125-8	1303-86-2									
4	cadmium { cadmium oxide }				0.3	mg/kg	1.142	0.343	mg/kg	0.0000343 %	✓	
	048-002-00-0	215-146-2	1306-19-0									
5	chromium in chromium(III) compounds { chromium(III) oxide }				1.6	mg/kg	1.462	2.338	mg/kg	0.000234 %	✓	
		215-160-9	1308-38-9									
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0									
7	copper { dicopper oxide; copper (I) oxide }				20	mg/kg	1.126	22.518	mg/kg	0.00225 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	110	mg/kg		110	mg/kg	0.011 %	✓	
	082-001-00-6											
9	mercury { mercury dichloride }				<0.05	mg/kg	1.353	<0.0677	mg/kg	<0.0000677 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
10	nickel { nickel chromate }				57	mg/kg	2.976	169.647	mg/kg	0.017 %	✓	
	028-035-00-7	238-766-5	14721-18-7									
11	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				<0.5	mg/kg	2.554	<1.277	mg/kg	<0.000128 %		<LOD
	034-002-00-8											
12	zinc { zinc sulphate }				860	mg/kg	2.469	2123.595	mg/kg	0.212 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
13	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, }				<0.1	mg/kg	1.884	<0.188	mg/kg	<0.0000188 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
	ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }									
	006-007-00-5									
15	pH				5.9 pH		5.9 pH	5.9 pH		
			PH							
16	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
17	acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8							
18	acenaphthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9							
19	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7							
20	phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8							
21	anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7							
22	fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0							
23	pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0							
24	benzo[a]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
25	chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
26	benzo[b]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
27	benzo[k]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
28	benzo[a]pyrene; benzo[def]chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
29	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5							
30	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
31	benzo[ghi]perylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2							
32	phenol				0.4 mg/kg		0.4 mg/kg	0.00004 %	✓	
	604-001-00-2	203-632-7	108-95-2							
33	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate				0.4 mg/kg		0.4 mg/kg	0.00004 %	✓	
	616-106-00-0	237-199-0	13684-63-4							
34	barium { barium oxide }				440 mg/kg	1.117	491.263 mg/kg	0.0491 %	✓	
		215-127-9	1304-28-5							
Total:								0.297 %		

Key

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

Classification of sample: BH105[3]

Hazardous Waste
 Classified as **17 05 03 ***
 in the List of Waste

Sample details

Sample Name:	BH105[3]	LoW Code:	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	3 m	Entry:	17 05 03 *	(Soil and stones containing hazardous substances)

Hazard properties

HP 14: Ecotoxic "waste which presents or may present immediate or delayed risks for one or more sectors of the environment"

Hazard Statements hit:

Aquatic Chronic 1; H410 "Very toxic to aquatic life with long lasting effects."

Because of determinand:

zinc sulphate: (compound conc.: 0.296%)

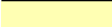




Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MIC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				19	mg/kg	1.32	25.086	mg/kg	0.00251 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	beryllium { beryllium oxide }				3.9	mg/kg	2.775	10.824	mg/kg	0.00108 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
3	boron { diboron trioxide; boric oxide }				3.9	mg/kg	3.22	12.558	mg/kg	0.00126 %	✓	
	005-008-00-8	215-125-8	1303-86-2									
4	cadmium { cadmium oxide }				<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0									
5	chromium in chromium(III) compounds { chromium(III) oxide }				1	mg/kg	1.462	1.462	mg/kg	0.000146 %	✓	
		215-160-9	1308-38-9									
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0									
7	copper { dicopper oxide; copper (I) oxide }				20	mg/kg	1.126	22.518	mg/kg	0.00225 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	76	mg/kg		76	mg/kg	0.0076 %	✓	
	082-001-00-6											
9	mercury { mercury dichloride }				<0.05	mg/kg	1.353	<0.0677	mg/kg	<0.00000677 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
10	nickel { nickel chromate }				110	mg/kg	2.976	327.389	mg/kg	0.0327 %	✓	
	028-035-00-7	238-766-5	14721-18-7									
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				5.4	mg/kg	2.554	13.789	mg/kg	0.00138 %	✓	
	034-002-00-8											

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
12	zinc { zinc sulphate }				1200	mg/kg	2.469	2963.156	mg/kg	0.296 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
13	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.1	mg/kg	1.884	<0.188	mg/kg	<0.0000188 %		<LOD
	006-007-00-5											
15	pH				6.3	pH		6.3	pH	6.3 pH		
			PH									
16	naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
17	acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8									
18	acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9									
19	fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7									
20	phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8									
21	anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7									
22	fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0									
23	pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0									
24	benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3									
25	chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9									
26	benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2									
27	benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9									
28	benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8									
29	indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5									
30	dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
31	benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2									
32	phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
33	phenmedipham (ISO); methyl 3-(3-methylcarbaniloxy)carbanilate				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
	616-106-00-0	237-199-0	13684-63-4									
34	barium { barium oxide }				400	mg/kg	1.117	446.602	mg/kg	0.0447 %	✓	
		215-127-9	1304-28-5									
Total:										0.391 %		

Key

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

Classification of sample: BH106

Hazardous Waste
 Classified as **17 05 03 ***
 in the List of Waste

Sample details

Sample Name:	LoW Code:	
BH106	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 03 * (Soil and stones containing hazardous substances)
1 m		

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1A; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

lead compounds with the exception of those specified elsewhere in this Annex (worst case): (Note 1 conc.: 0.11%)

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				16	mg/kg	1.32	21.125	mg/kg	0.00211 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	beryllium { beryllium oxide }				1.5	mg/kg	2.775	4.163	mg/kg	0.000416 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
3	boron { diboron trioxide; boric oxide }				1.5	mg/kg	3.22	4.83	mg/kg	0.000483 %	✓	
	005-008-00-8	215-125-8	1303-86-2									
4	cadmium { cadmium oxide }				0.3	mg/kg	1.142	0.343	mg/kg	0.0000343 %	✓	
	048-002-00-0	215-146-2	1306-19-0									
5	chromium in chromium(III) compounds { chromium(III) oxide }				0.3	mg/kg	1.462	0.438	mg/kg	0.0000438 %	✓	
		215-160-9	1308-38-9									
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0									
7	copper { dicopper oxide; copper (I) oxide }				20	mg/kg	1.126	22.518	mg/kg	0.00225 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	1100	mg/kg		1100	mg/kg	0.11 %	✓	
	082-001-00-6											
9	mercury { mercury dichloride }				<0.05	mg/kg	1.353	<0.0677	mg/kg	<0.00000677 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
10	nickel { nickel chromate }				30	mg/kg	2.976	89.288	mg/kg	0.00893 %	✓	
	028-035-00-7	238-766-5	14721-18-7									
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<0.5	mg/kg	2.554	<1.277	mg/kg	<0.000128 %		<LOD
	034-002-00-8											

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
12	zinc { zinc sulphate }				190	mg/kg	2.469	469.166	mg/kg	0.0469 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
13	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									
15	benzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
16	toluene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
17	ethylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
18	xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
19	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				0.2	mg/kg	1.884	0.377	mg/kg	0.0000377 %	✓	
	006-007-00-5											
20	pH				5.1	pH		5.1	pH	5.1 pH		
			PH									
21	naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
22	acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8									
23	acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9									
24	fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7									
25	phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8									
26	anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7									
27	fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0									
28	pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0									
29	benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3									
30	chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9									
31	benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2									
32	benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9									
33	benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8									
34	indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5									
35	dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
36	benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2									
37	phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
38	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	616-106-00-0	237-199-0	13684-63-4							
39	4-nitrophenol; p-nitrophenol				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	609-015-00-2	202-811-7	100-02-7							
40	hexachlorobutadiene				0.01 mg/kg		0.01 mg/kg	0.000001 %	✓	
		201-765-5	87-68-3							
41	1,1,2,2-tetrachloroethane				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	602-015-00-3	201-197-8	79-34-5							
42	1,2,3-trichloropropane				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	602-062-00-X	202-486-1	96-18-4							
43	barium { barium oxide }				200 mg/kg	1.117	223.301 mg/kg	0.0223 %	✓	
		215-127-9	1304-28-5							
Total:								0.195 %		

Key

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

Classification of sample: BH106[2]

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

Sample details

Sample Name:	BH106[2]	LoW Code:	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	2 m	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)	

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				11	mg/kg	1.32	14.524	mg/kg	0.00145 %	✔	
	033-003-00-0	215-481-4	1327-53-3									
2	beryllium { beryllium oxide }				1.7	mg/kg	2.775	4.718	mg/kg	0.000472 %	✔	
	004-003-00-8	215-133-1	1304-56-9									
3	boron { diboron trioxide; boric oxide }				1.7	mg/kg	3.22	5.474	mg/kg	0.000547 %	✔	
	005-008-00-8	215-125-8	1303-86-2									
4	cadmium { cadmium oxide }				0.3	mg/kg	1.142	0.343	mg/kg	0.0000343 %	✔	
	048-002-00-0	215-146-2	1306-19-0									
5	chromium in chromium(III) compounds { chromium(III) oxide }				0.2	mg/kg	1.462	0.292	mg/kg	0.0000292 %	✔	
		215-160-9	1308-38-9									
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0									
7	copper { dicopper oxide; copper (I) oxide }				21	mg/kg	1.126	23.644	mg/kg	0.00236 %	✔	
	029-002-00-X	215-270-7	1317-39-1									
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	100	mg/kg		100	mg/kg	0.01 %	✔	
	082-001-00-6											
9	mercury { mercury dichloride }				<0.05	mg/kg	1.353	<0.0677	mg/kg	<0.0000677 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
10	nickel { nickel chromate }				36	mg/kg	2.976	107.146	mg/kg	0.0107 %	✔	
	028-035-00-7	238-766-5	14721-18-7									
11	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				0.5	mg/kg	2.554	1.277	mg/kg	0.000128 %	✔	
	034-002-00-8											
12	zinc { zinc sulphate }				150	mg/kg	2.469	370.394	mg/kg	0.037 %	✔	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
13	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X 216-653-1 1634-04-4				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
15	benzene 601-020-00-8 200-753-7 71-43-2				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
16	toluene 601-021-00-3 203-625-9 108-88-3				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
17	ethylbenzene 601-023-00-4 202-849-4 100-41-4				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
18	xylene 601-022-00-9 202-422-2 [1] 95-47-6 [1] 203-396-5 [2] 106-42-3 [2] 203-576-3 [3] 108-38-3 [3] 215-535-7 [4] 1330-20-7 [4]				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
19	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<0.1 mg/kg	1.884	<0.188 mg/kg	<0.0000188 %		<LOD
20	pH PH				6.6 pH		6.6 pH	6.6 pH		
21	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
22	acenaphthylene 205-917-1 208-96-8				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
23	acenaphthene 201-469-6 83-32-9				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
24	fluorene 201-695-5 86-73-7				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
25	phenanthrene 201-581-5 85-01-8				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
26	anthracene 204-371-1 120-12-7				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
27	fluoranthene 205-912-4 206-44-0				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
28	pyrene 204-927-3 129-00-0				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
29	benzo[a]anthracene 601-033-00-9 200-280-6 56-55-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
30	chrysene 601-048-00-0 205-923-4 218-01-9				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
31	benzo[b]fluoranthene 601-034-00-4 205-911-9 205-99-2				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
32	benzo[k]fluoranthene 601-036-00-5 205-916-6 207-08-9				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
33	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3 200-028-5 50-32-8				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
34	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
35	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
36	benzo[ghi]perylene 205-883-8 191-24-2				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
37	phenol 604-001-00-2 203-632-7 108-95-2				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
38	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate 616-106-00-0 237-199-0 13684-63-4				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
39	4-nitrophenol; p-nitrophenol 609-015-00-2 202-811-7 100-02-7				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
40	hexachlorobutadiene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD	
		201-765-5	87-68-3								
41	1,1,2,2-tetrachloroethane				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD	
	602-015-00-3	201-197-8	79-34-5								
42	1,2,3-trichloropropane				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD	
	602-062-00-X	202-486-1	96-18-4								
43	barium { barium oxide }				630 mg/kg	1.117	703.399 mg/kg	0.0703 %	✓		
		215-127-9	1304-28-5								
Total:								0.135 %			

Key

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

Classification of sample: BH106[3]

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

Sample details

Sample Name:	LoW Code:	
BH106[3]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
3 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				9.9 mg/kg	1.32	13.071 mg/kg	0.00131 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				1.3 mg/kg	2.775	3.608 mg/kg	0.000361 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				1.3 mg/kg	3.22	4.186 mg/kg	0.000419 %	✓	
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				0.3 mg/kg	1.142	0.343 mg/kg	0.0000343 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide }				<0.1 mg/kg	1.462	<0.146 mg/kg	<0.0000146 %		<LOD
		215-160-9	1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
7	copper { dicopper oxide; copper (I) oxide }				17 mg/kg	1.126	19.14 mg/kg	0.00191 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	100 mg/kg		100 mg/kg	0.01 %	✓	
	082-001-00-6									
9	mercury { mercury dichloride }				<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.00000677 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel chromate }				19 mg/kg	2.976	56.549 mg/kg	0.00565 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<0.5 mg/kg	2.554	<1.277 mg/kg	<0.000128 %		<LOD
	034-002-00-8									
12	zinc { zinc sulphate }				45 mg/kg	2.469	111.118 mg/kg	0.0111 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
13	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,				<0.1 mg/kg	1.884	<0.188 mg/kg	<0.0000188 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
	ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }									
	006-007-00-5									
15	pH				6.9 pH		6.9 pH	6.9 pH		
			PH							
16	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
17	acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8							
18	acenaphthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9							
19	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7							
20	phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8							
21	anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7							
22	fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0							
23	pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0							
24	benzo[a]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
25	chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
26	benzo[b]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
27	benzo[k]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
28	benzo[a]pyrene; benzo[def]chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
29	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5							
30	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
31	benzo[ghi]perylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2							
32	phenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
33	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	616-106-00-0	237-199-0	13684-63-4							
34	barium { barium oxide }				470 mg/kg	1.117	524.758 mg/kg	0.0525 %	✓	
		215-127-9	1304-28-5							
Total:								0.0849 %		

Key

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

Classification of sample: TP104

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

Sample details

Sample Name:	LoW Code:	
TP104	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

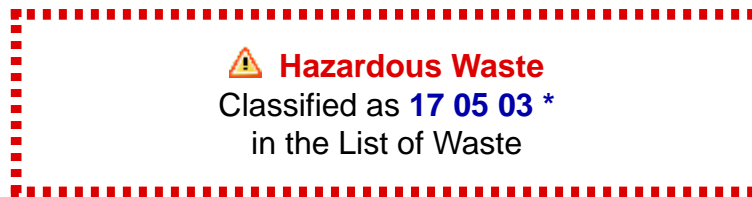
#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				12 mg/kg	1.32	15.844 mg/kg	0.00158 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				1.8 mg/kg	2.775	4.996 mg/kg	0.0005 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				1.8 mg/kg	3.22	5.796 mg/kg	0.00058 %	✓	
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				0.2 mg/kg	1.142	0.228 mg/kg	0.0000228 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide }				1.1 mg/kg	1.462	1.608 mg/kg	0.000161 %	✓	
		215-160-9	1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
7	copper { dicopper oxide; copper (I) oxide }				27 mg/kg	1.126	30.399 mg/kg	0.00304 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	730 mg/kg		730 mg/kg	0.073 %	✓	
	082-001-00-6									
9	mercury { mercury dichloride }				<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.00000677 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel chromate }				19 mg/kg	2.976	56.549 mg/kg	0.00565 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<0.5 mg/kg	2.554	<1.277 mg/kg	<0.000128 %		<LOD
	034-002-00-8									
12	zinc { zinc sulphate }				390 mg/kg	2.469	963.026 mg/kg	0.0963 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
13	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,				<0.1 mg/kg	1.884	<0.188 mg/kg	<0.0000188 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
	ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }									
	006-007-00-5									
15	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
16	acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8							
17	acenaphthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9							
18	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7							
19	phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8							
20	anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7							
21	fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0							
22	pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0							
23	benzo[a]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
24	chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
25	benzo[b]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
26	benzo[k]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
27	benzo[a]pyrene; benzo[def]chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
28	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5							
29	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
30	benzo[ghi]perylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2							
31	phenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
32	barium { barium oxide }				210 mg/kg	1.117	234.466 mg/kg	0.0234 %	✓	
		215-127-9	1304-28-5							
Total:								0.206 %		

Key

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

Classification of sample: TP109



Sample details

Sample Name:	LoW Code:	
TP109	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 03 * (Soil and stones containing hazardous substances)
1 m		

Hazard properties

HP 14: Ecotoxic "waste which presents or may present immediate or delayed risks for one or more sectors of the environment"

Hazard Statements hit:

Aquatic Chronic 1; H410 "Very toxic to aquatic life with long lasting effects."

Because of determinand:

zinc sulphate: (compound conc.: 0.519%)

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				11 mg/kg	1.32	14.524 mg/kg	0.00145 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				1.4 mg/kg	2.775	3.885 mg/kg	0.000389 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				1.4 mg/kg	3.22	4.508 mg/kg	0.000451 %	✓	
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide }				6.2 mg/kg	1.462	9.062 mg/kg	0.000906 %	✓	
		215-160-9	1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
7	copper { dicopper oxide; copper (I) oxide }				18 mg/kg	1.126	20.266 mg/kg	0.00203 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	900 mg/kg		900 mg/kg	0.09 %	✓	
	082-001-00-6									
9	mercury { mercury dichloride }				<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.00000677 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel chromate }				26 mg/kg	2.976	77.383 mg/kg	0.00774 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium selenide and those specified elsewhere in this Annex }				2.8 mg/kg	2.554	7.15 mg/kg	0.000715 %	✓	
	034-002-00-8									

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
12	zinc { zinc sulphate }				2100	mg/kg	2.469	5185.522	mg/kg	0.519 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
13	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.1	mg/kg	1.884	<0.188	mg/kg	<0.0000188 %		<LOD
	006-007-00-5											
15	pH				8	pH		8	pH	8pH		
			PH									
16	naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
17	acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8									
18	acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9									
19	fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7									
20	phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8									
21	anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7									
22	fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0									
23	pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0									
24	benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3									
25	chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9									
26	benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2									
27	benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9									
28	benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8									
29	indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5									
30	dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
31	benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2									
32	phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
33	barium { barium oxide }				130	mg/kg	1.117	145.146	mg/kg	0.0145 %	✓	
		215-127-9	1304-28-5									
Total:										0.638 %		

Key

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

Classification of sample: TP110

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

Sample details

Sample Name:	LoW Code:	
TP110	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				6.4 mg/kg	1.32	8.45 mg/kg	0.000845 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				1.7 mg/kg	2.775	4.718 mg/kg	0.000472 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				1.7 mg/kg	3.22	5.474 mg/kg	0.000547 %	✓	
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide }				0.1 mg/kg	1.462	0.146 mg/kg	0.0000146 %	✓	
		215-160-9	1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
7	copper { dicopper oxide; copper (I) oxide }				17 mg/kg	1.126	19.14 mg/kg	0.00191 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	64 mg/kg		64 mg/kg	0.0064 %	✓	
	082-001-00-6									
9	mercury { mercury dichloride }				<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.00000677 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel chromate }				11 mg/kg	2.976	32.739 mg/kg	0.00327 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<0.5 mg/kg	2.554	<1.277 mg/kg	<0.000128 %		<LOD
	034-002-00-8									
12	zinc { zinc sulphate }				65 mg/kg	2.469	160.504 mg/kg	0.0161 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
13	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,				<0.1 mg/kg	1.884	<0.188 mg/kg	<0.0000188 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
	ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }									
	006-007-00-5									
15	•	pH			5.2 pH		5.2 pH	5.2 pH		
			PH							
16		naphthalene			<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3						
17	•	acenaphthylene			<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8						
18	•	acenaphthene			<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9						
19	•	fluorene			<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7						
20	•	phenanthrene			<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8						
21	•	anthracene			<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7						
22	•	fluoranthene			<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
			205-912-4	206-44-0						
23	•	pyrene			<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0						
24		benzo[a]anthracene			<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3						
25		chrysene			<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9						
26		benzo[b]fluoranthene			<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2						
27		benzo[k]fluoranthene			<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9						
28		benzo[a]pyrene; benzo[def]chrysene			<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8						
29	•	indeno[123-cd]pyrene			<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5						
30		dibenz[a,h]anthracene			<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3						
31	•	benzo[ghi]perylene			<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2						
32		phenol			<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
		604-001-00-2	203-632-7	108-95-2						
33	🌿	barium { • barium oxide }			120 mg/kg	1.117	133.981 mg/kg	0.0134 %	✓	
			215-127-9	1304-28-5						
Total:								0.0445 %		

Key

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

Classification of sample: TP110[2]

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

Sample details

Sample Name:	LoW Code:	
TP110[2]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
2 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				12 mg/kg	1.32	15.844 mg/kg	0.00158 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				1.8 mg/kg	2.775	4.996 mg/kg	0.0005 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				1.8 mg/kg	3.22	5.796 mg/kg	0.00058 %	✓	
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide }				0.3 mg/kg	1.462	0.438 mg/kg	0.0000438 %	✓	
		215-160-9	1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
7	copper { dicopper oxide; copper (I) oxide }				20 mg/kg	1.126	22.518 mg/kg	0.00225 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	110 mg/kg		110 mg/kg	0.011 %	✓	
	082-001-00-6									
9	mercury { mercury dichloride }				<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.00000677 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel chromate }				32 mg/kg	2.976	95.24 mg/kg	0.00952 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<0.5 mg/kg	2.554	<1.277 mg/kg	<0.000128 %		<LOD
	034-002-00-8									
12	zinc { zinc sulphate }				90 mg/kg	2.469	222.237 mg/kg	0.0222 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
13	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X 216-653-1 1634-04-4				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
15	benzene 601-020-00-8 200-753-7 71-43-2				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
16	toluene 601-021-00-3 203-625-9 108-88-3				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
17	ethylbenzene 601-023-00-4 202-849-4 100-41-4				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
18	xylene 601-022-00-9 202-422-2 [1] 95-47-6 [1] 203-396-5 [2] 106-42-3 [2] 203-576-3 [3] 108-38-3 [3] 215-535-7 [4] 1330-20-7 [4]				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
19	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<0.1 mg/kg	1.884	<0.188 mg/kg	<0.0000188 %		<LOD
20	pH PH				5.2 pH		5.2 pH	5.2 pH		
21	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
22	acenaphthylene 205-917-1 208-96-8				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
23	acenaphthene 201-469-6 83-32-9				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
24	fluorene 201-695-5 86-73-7				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
25	phenanthrene 201-581-5 85-01-8				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
26	anthracene 204-371-1 120-12-7				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
27	fluoranthene 205-912-4 206-44-0				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
28	pyrene 204-927-3 129-00-0				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
29	benzo[a]anthracene 601-033-00-9 200-280-6 56-55-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
30	chrysene 601-048-00-0 205-923-4 218-01-9				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
31	benzo[b]fluoranthene 601-034-00-4 205-911-9 205-99-2				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
32	benzo[k]fluoranthene 601-036-00-5 205-916-6 207-08-9				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
33	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3 200-028-5 50-32-8				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
34	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
35	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
36	benzo[ghi]perylene 205-883-8 191-24-2				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
37	phenol 604-001-00-2 203-632-7 108-95-2				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
38	4-nitrophenol; p-nitrophenol 609-015-00-2 202-811-7 100-02-7				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
39	hexachlorobutadiene 201-765-5 87-68-3				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
40	1,1,2,2-tetrachloroethane 602-015-00-3 201-197-8 79-34-5				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
41	1,2,3-trichloropropane				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	602-062-00-X	202-486-1	96-18-4							
42	barium { ■ barium oxide }				390 mg/kg	1.117	435.437 mg/kg	0.0435 %	✓	
		215-127-9	1304-28-5							
Total:								0.0928 %		

Key

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

Classification of sample: TP110[3]

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

Sample details

Sample Name:	LoW Code:	
TP110[3]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
3 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				16	mg/kg	1.32	21.125	mg/kg	0.00211 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	beryllium { beryllium oxide }				2	mg/kg	2.775	5.551	mg/kg	0.000555 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
3	boron { diboron trioxide; boric oxide }				2	mg/kg	3.22	6.44	mg/kg	0.000644 %	✓	
	005-008-00-8	215-125-8	1303-86-2									
4	cadmium { cadmium oxide }				<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0									
5	chromium in chromium(III) compounds { chromium(III) oxide }				0.1	mg/kg	1.462	0.146	mg/kg	0.0000146 %	✓	
		215-160-9	1308-38-9									
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0									
7	copper { dicopper oxide; copper (I) oxide }				34	mg/kg	1.126	38.28	mg/kg	0.00383 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	240	mg/kg		240	mg/kg	0.024 %	✓	
	082-001-00-6											
9	mercury { mercury dichloride }				<0.05	mg/kg	1.353	<0.0677	mg/kg	<0.00000677 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
10	nickel { nickel chromate }				31	mg/kg	2.976	92.264	mg/kg	0.00923 %	✓	
	028-035-00-7	238-766-5	14721-18-7									
11	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				<0.5	mg/kg	2.554	<1.277	mg/kg	<0.000128 %		<LOD
	034-002-00-8											
12	zinc { zinc sulphate }				92	mg/kg	2.469	227.175	mg/kg	0.0227 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
13	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,				<0.1	mg/kg	1.884	<0.188	mg/kg	<0.0000188 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
	ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }									
	006-007-00-5									
15	pH				5.1 pH		5.1 pH	5.1 pH		
			PH							
16	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
17	acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8							
18	acenaphthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9							
19	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7							
20	phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8							
21	anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7							
22	fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0							
23	pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0							
24	benzo[a]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
25	chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
26	benzo[b]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
27	benzo[k]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
28	benzo[a]pyrene; benzo[def]chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
29	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5							
30	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
31	benzo[ghi]perylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2							
32	phenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
33	barium { barium oxide }				420 mg/kg	1.117	468.932 mg/kg	0.0469 %	✓	
		215-127-9	1304-28-5							
Total:								0.112 %		

Key

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

Classification of sample: TP111

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

Sample details

Sample Name:	TP111	LoW Code:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	1 m	Chapter:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
Entry:			

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	11 mg/kg	1.32	14.524 mg/kg	0.00145 %	✔	
2	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.5 mg/kg	2.775	4.163 mg/kg	0.000416 %	✔	
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2	1.5 mg/kg	3.22	4.83 mg/kg	0.000483 %	✔	
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0	<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9	<0.1 mg/kg	1.462	<0.146 mg/kg	<0.0000146 %		<LOD
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	19 mg/kg	1.126	21.392 mg/kg	0.00214 %	✔	
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			41 mg/kg		41 mg/kg	0.0041 %	✔	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7	<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.00000677 %		<LOD
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7	27 mg/kg	2.976	80.359 mg/kg	0.00804 %	✔	
11	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }	034-002-00-8			<0.5 mg/kg	2.554	<1.277 mg/kg	<0.000128 %		<LOD
12	zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]	65 mg/kg	2.469	160.504 mg/kg	0.0161 %	✔	
13	TPH (C6 to C40) petroleum group		TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, }				<0.1 mg/kg	1.884	<0.188 mg/kg	<0.0000188 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
	ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }									
	006-007-00-5									
15	pH				5.5 pH		5.5 pH	5.5 pH		
			PH							
16	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
17	acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8							
18	acenaphthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9							
19	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7							
20	phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8							
21	anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7							
22	fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0							
23	pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0							
24	benzo[a]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
25	chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
26	benzo[b]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
27	benzo[k]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
28	benzo[a]pyrene; benzo[def]chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
29	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5							
30	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
31	benzo[ghi]perylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2							
32	phenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
33	barium { barium oxide }				250 mg/kg	1.117	279.126 mg/kg	0.0279 %	✓	
		215-127-9	1304-28-5							
Total:								0.0622 %		

Key

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

Classification of sample: TP112

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

Sample details

Sample Name:	LoW Code:	
TP112	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				20 mg/kg	1.32	26.407 mg/kg	0.00264 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				2.5 mg/kg	2.775	6.938 mg/kg	0.000694 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				2.5 mg/kg	3.22	8.05 mg/kg	0.000805 %	✓	
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide }				7.2 mg/kg	1.462	10.523 mg/kg	0.00105 %	✓	
		215-160-9	1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
7	copper { dicopper oxide; copper (I) oxide }				23 mg/kg	1.126	25.895 mg/kg	0.00259 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	100 mg/kg		100 mg/kg	0.01 %	✓	
	082-001-00-6									
9	mercury { mercury dichloride }				0.05 mg/kg	1.353	0.0677 mg/kg	0.00000677 %	✓	
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel chromate }				30 mg/kg	2.976	89.288 mg/kg	0.00893 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				<0.5 mg/kg	2.554	<1.277 mg/kg	<0.000128 %		<LOD
	034-002-00-8									
12	zinc { zinc sulphate }				840 mg/kg	2.469	2074.209 mg/kg	0.207 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
13	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, }				<0.1 mg/kg	1.884	<0.188 mg/kg	<0.0000188 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
	ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }									
	006-007-00-5									
15	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
16	acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8							
17	acenaphthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9							
18	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7							
19	phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8							
20	anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7							
21	fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0							
22	pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0							
23	benzo[a]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
24	chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
25	benzo[b]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
26	benzo[k]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
27	benzo[a]pyrene; benzo[def]chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
28	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5							
29	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
30	benzo[ghi]perylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2							
31	phenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
32	barium { barium oxide }				150 mg/kg	1.117	167.476 mg/kg	0.0167 %	✓	
		215-127-9	1304-28-5							
Total:								0.252 %		

Key

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

Classification of sample: TP113

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

Sample details

Sample Name:	LoW Code:	
TP113	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				11 mg/kg	1.32	14.524 mg/kg	0.00145 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				1.1 mg/kg	2.775	3.053 mg/kg	0.000305 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				1.1 mg/kg	3.22	3.542 mg/kg	0.000354 %	✓	
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide }				<0.1 mg/kg	1.462	<0.146 mg/kg	<0.0000146 %		<LOD
		215-160-9	1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
7	copper { dicopper oxide; copper (I) oxide }				13 mg/kg	1.126	14.637 mg/kg	0.00146 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	31 mg/kg		31 mg/kg	0.0031 %	✓	
	082-001-00-6									
9	mercury { mercury dichloride }				<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.0000677 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel chromate }				14 mg/kg	2.976	41.668 mg/kg	0.00417 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				<0.5 mg/kg	2.554	<1.277 mg/kg	<0.000128 %		<LOD
	034-002-00-8									
12	zinc { zinc sulphate }				82 mg/kg	2.469	202.482 mg/kg	0.0202 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
13	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, }				0.1 mg/kg	1.884	0.188 mg/kg	0.0000188 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
	ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }									
	006-007-00-5									
15	pH				6.9 pH		6.9 pH	6.9 pH		
			PH							
16	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
17	acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8							
18	acenaphthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9							
19	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7							
20	phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8							
21	anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7							
22	fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0							
23	pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0							
24	benzo[a]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
25	chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
26	benzo[b]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
27	benzo[k]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
28	benzo[a]pyrene; benzo[def]chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
29	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5							
30	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
31	benzo[ghi]perylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2							
32	phenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
33	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	616-106-00-0	237-199-0	13684-63-4							
34	barium { barium oxide }				96 mg/kg	1.117	107.185 mg/kg	0.0107 %	✓	
		215-127-9	1304-28-5							
Total:								0.0434 %		

Key

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

Classification of sample: TP114

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

Sample details

Sample Name: TP114	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth: 1 m	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				12 mg/kg	1.32	15.844 mg/kg	0.00158 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				1.6 mg/kg	2.775	4.441 mg/kg	0.000444 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				1.6 mg/kg	3.22	5.152 mg/kg	0.000515 %	✓	
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide }				<0.1 mg/kg	1.462	<0.146 mg/kg	<0.0000146 %		<LOD
		215-160-9	1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
7	copper { dicopper oxide; copper (I) oxide }				21 mg/kg	1.126	23.644 mg/kg	0.00236 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	47 mg/kg		47 mg/kg	0.0047 %	✓	
	082-001-00-6									
9	mercury { mercury dichloride }				<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.00000677 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel chromate }				21 mg/kg	2.976	62.502 mg/kg	0.00625 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				<0.5 mg/kg	2.554	<1.277 mg/kg	<0.000128 %		<LOD
	034-002-00-8									
12	zinc { zinc sulphate }				44 mg/kg	2.469	108.649 mg/kg	0.0109 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
13	TPH (C6 to C40) petroleum group		TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, }				<0.1 mg/kg	1.884	<0.188 mg/kg	<0.0000188 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
	ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }									
	006-007-00-5									
15	pH				5.1 pH		5.1 pH	5.1 pH		
			PH							
16	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
17	acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8							
18	acenaphthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9							
19	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7							
20	phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8							
21	anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7							
22	fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0							
23	pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0							
24	benzo[a]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
25	chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
26	benzo[b]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
27	benzo[k]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
28	benzo[a]pyrene; benzo[def]chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
29	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5							
30	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
31	benzo[ghi]perylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2							
32	phenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
33	barium { barium oxide }				170 mg/kg	1.117	189.806 mg/kg	0.019 %	✓	
		215-127-9	1304-28-5							
Total:								0.0473 %		

Key

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

Classification of sample: TP115

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

Sample details

Sample Name:	LoW Code:	
TP115	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				16	mg/kg	1.32	21.125	mg/kg	0.00211 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	beryllium { beryllium oxide }				2	mg/kg	2.775	5.551	mg/kg	0.000555 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
3	boron { diboron trioxide; boric oxide }				2	mg/kg	3.22	6.44	mg/kg	0.000644 %	✓	
	005-008-00-8	215-125-8	1303-86-2									
4	cadmium { cadmium oxide }				0.2	mg/kg	1.142	0.228	mg/kg	0.0000228 %	✓	
	048-002-00-0	215-146-2	1306-19-0									
5	chromium in chromium(III) compounds { chromium(III) oxide }				0.3	mg/kg	1.462	0.438	mg/kg	0.0000438 %	✓	
		215-160-9	1308-38-9									
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0									
7	copper { dicopper oxide; copper (I) oxide }				19	mg/kg	1.126	21.392	mg/kg	0.00214 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	76	mg/kg		76	mg/kg	0.0076 %	✓	
	082-001-00-6											
9	mercury { mercury dichloride }				<0.05	mg/kg	1.353	<0.0677	mg/kg	<0.0000677 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
10	nickel { nickel chromate }				11	mg/kg	2.976	32.739	mg/kg	0.00327 %	✓	
	028-035-00-7	238-766-5	14721-18-7									
11	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				<0.5	mg/kg	2.554	<1.277	mg/kg	<0.000128 %		<LOD
	034-002-00-8											
12	zinc { zinc sulphate }				180	mg/kg	2.469	444.473	mg/kg	0.0444 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
13	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X 216-653-1 1634-04-4				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
15	benzene 601-020-00-8 200-753-7 71-43-2				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
16	toluene 601-021-00-3 203-625-9 108-88-3				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
17	ethylbenzene 601-023-00-4 202-849-4 100-41-4				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
18	xylene 601-022-00-9 202-422-2 [1] 95-47-6 [1] 203-396-5 [2] 106-42-3 [2] 203-576-3 [3] 108-38-3 [3] 215-535-7 [4] 1330-20-7 [4]				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
19	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<0.1 mg/kg	1.884	<0.188 mg/kg	<0.0000188 %			<LOD
20	pH PH				6.2 pH		6.2 pH	6.2 pH			
21	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
22	acenaphthylene 205-917-1 208-96-8				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
23	acenaphthene 201-469-6 83-32-9				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
24	fluorene 201-695-5 86-73-7				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
25	phenanthrene 201-581-5 85-01-8				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
26	anthracene 204-371-1 120-12-7				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
27	fluoranthene 205-912-4 206-44-0				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
28	pyrene 204-927-3 129-00-0				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
29	benzo[a]anthracene 601-033-00-9 200-280-6 56-55-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
30	chrysene 601-048-00-0 205-923-4 218-01-9				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
31	benzo[b]fluoranthene 601-034-00-4 205-911-9 205-99-2				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
32	benzo[k]fluoranthene 601-036-00-5 205-916-6 207-08-9				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
33	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3 200-028-5 50-32-8				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
34	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
35	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
36	benzo[ghi]perylene 205-883-8 191-24-2				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
37	phenol 604-001-00-2 203-632-7 108-95-2				<		<	<			ND
38	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate 616-106-00-0 237-199-0 13684-63-4				0.3 mg/kg		0.3 mg/kg	0.00003 %	✓		
39	4-nitrophenol; p-nitrophenol 609-015-00-2 202-811-7 100-02-7				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
40	hexachlorobutadiene				0.01 mg/kg		0.01 mg/kg	0.000001 %	✓		
		201-765-5	87-68-3								
41	1,1,2,2-tetrachloroethane				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD	
	602-015-00-3	201-197-8	79-34-5								
42	1,2,3-trichloropropane				0.01 mg/kg		0.01 mg/kg	0.000001 %	✓		
	602-062-00-X	202-486-1	96-18-4								
43	barium { barium oxide }				130 mg/kg	1.117	145.146 mg/kg	0.0145 %	✓		
		215-127-9	1304-28-5								
Total:								0.0769 %			

Key

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

Classification of sample: TP115[2]

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

Sample details

Sample Name:	LoW Code:	
TP115[2]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1.2 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				16 mg/kg	1.32	21.125 mg/kg	0.00211 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				3.5 mg/kg	2.775	9.714 mg/kg	0.000971 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				3.5 mg/kg	3.22	11.27 mg/kg	0.00113 %	✓	
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide }				0.2 mg/kg	1.462	0.292 mg/kg	0.0000292 %	✓	
		215-160-9	1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
7	copper { dicopper oxide; copper (I) oxide }				16 mg/kg	1.126	18.014 mg/kg	0.0018 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	30 mg/kg		30 mg/kg	0.003 %	✓	
	082-001-00-6									
9	mercury { mercury dichloride }				0.05 mg/kg	1.353	0.0677 mg/kg	0.00000677 %	✓	
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel chromate }				18 mg/kg	2.976	53.573 mg/kg	0.00536 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<0.5 mg/kg	2.554	<1.277 mg/kg	<0.000128 %		<LOD
	034-002-00-8									
12	zinc { zinc sulphate }				380 mg/kg	2.469	938.333 mg/kg	0.0938 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
13	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,				<0.1 mg/kg	1.884	<0.188 mg/kg	<0.0000188 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
	ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }									
	006-007-00-5									
15	• pH		PH		5.2 pH		5.2 pH	5.2 pH		
16	naphthalene	601-052-00-2	202-049-5	91-20-3	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
17	• acenaphthylene		205-917-1	208-96-8	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
18	• acenaphthene		201-469-6	83-32-9	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
19	• fluorene		201-695-5	86-73-7	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
20	• phenanthrene		201-581-5	85-01-8	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
21	• anthracene		204-371-1	120-12-7	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
22	• fluoranthene		205-912-4	206-44-0	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
23	• pyrene		204-927-3	129-00-0	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
24	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
25	chrysene	601-048-00-0	205-923-4	218-01-9	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
26	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
27	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
28	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
29	• indeno[123-cd]pyrene		205-893-2	193-39-5	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
30	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
31	• benzo[ghi]perylene		205-883-8	191-24-2	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
32	phenol	604-001-00-2	203-632-7	108-95-2	<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
33	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate	616-106-00-0	237-199-0	13684-63-4	<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
34	• barium { • barium oxide }		215-127-9	1304-28-5	140 mg/kg	1.117	156.311 mg/kg	0.0156 %	✓	
Total:								0.125 %		

Key

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

Classification of sample: TP116

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

Sample details

Sample Name:	LoW Code:	
TP116	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				10 mg/kg	1.32	13.203 mg/kg	0.00132 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				1.8 mg/kg	2.775	4.996 mg/kg	0.0005 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				1.8 mg/kg	3.22	5.796 mg/kg	0.00058 %	✓	
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide }				<0.1 mg/kg	1.462	<0.146 mg/kg	<0.0000146 %		<LOD
		215-160-9	1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
7	copper { dicopper oxide; copper (I) oxide }				21 mg/kg	1.126	23.644 mg/kg	0.00236 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	61 mg/kg		61 mg/kg	0.0061 %	✓	
	082-001-00-6									
9	mercury { mercury dichloride }				<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.00000677 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel chromate }				21 mg/kg	2.976	62.502 mg/kg	0.00625 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<0.5 mg/kg	2.554	<1.277 mg/kg	<0.000128 %		<LOD
	034-002-00-8									
12	zinc { zinc sulphate }				54 mg/kg	2.469	133.342 mg/kg	0.0133 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
13	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,				<0.1 mg/kg	1.884	<0.188 mg/kg	<0.0000188 %		<LOD

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
	ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }											
	006-007-00-5											
15	• pH		PH		5.3	pH		5.3	pH	5.3 pH		
16	naphthalene	601-052-00-2	202-049-5	91-20-3	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
17	• acenaphthylene		205-917-1	208-96-8	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
18	• acenaphthene		201-469-6	83-32-9	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
19	• fluorene		201-695-5	86-73-7	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
20	• phenanthrene		201-581-5	85-01-8	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
21	• anthracene		204-371-1	120-12-7	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
22	• fluoranthene		205-912-4	206-44-0	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
23	• pyrene		204-927-3	129-00-0	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
24	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
25	chrysene	601-048-00-0	205-923-4	218-01-9	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
26	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
27	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
28	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
29	• indeno[123-cd]pyrene		205-893-2	193-39-5	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
30	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
31	• benzo[ghi]perylene		205-883-8	191-24-2	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
32	phenol	604-001-00-2	203-632-7	108-95-2	<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
33	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate	616-106-00-0	237-199-0	13684-63-4	<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
34	• barium { • barium oxide }		215-127-9	1304-28-5	390	mg/kg	1.117	435.437	mg/kg	0.0435 %	✓	
Total:										0.0756 %		

Key

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

Classification of sample: TP117

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

Sample details

Sample Name:	LoW Code:	
TP117	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				8.5 mg/kg	1.32	11.223 mg/kg	0.00112 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				1.5 mg/kg	2.775	4.163 mg/kg	0.000416 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				1.5 mg/kg	3.22	4.83 mg/kg	0.000483 %	✓	
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				0.2 mg/kg	1.142	0.228 mg/kg	0.0000228 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide }				0.4 mg/kg	1.462	0.585 mg/kg	0.0000585 %	✓	
		215-160-9	1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
7	copper { dicopper oxide; copper (I) oxide }				17 mg/kg	1.126	19.14 mg/kg	0.00191 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	51 mg/kg		51 mg/kg	0.0051 %	✓	
	082-001-00-6									
9	mercury { mercury dichloride }				<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.00000677 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel chromate }				20 mg/kg	2.976	59.525 mg/kg	0.00595 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<0.5 mg/kg	2.554	<1.277 mg/kg	<0.000128 %		<LOD
	034-002-00-8									
12	zinc { zinc sulphate }				230 mg/kg	2.469	567.938 mg/kg	0.0568 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
13	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,				<0.1 mg/kg	1.884	<0.188 mg/kg	<0.0000188 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
	ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }									
	006-007-00-5									
15	pH				5.4 pH		5.4 pH	5.4 pH		
			PH							
16	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
17	acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8							
18	acenaphthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9							
19	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7							
20	phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8							
21	anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7							
22	fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0							
23	pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0							
24	benzo[a]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
25	chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
26	benzo[b]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
27	benzo[k]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
28	benzo[a]pyrene; benzo[def]chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
29	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5							
30	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
31	benzo[ghi]perylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2							
32	phenol				0.3 mg/kg		0.3 mg/kg	0.00003 %	✓	
	604-001-00-2	203-632-7	108-95-2							
33	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate				0.3 mg/kg		0.3 mg/kg	0.00003 %	✓	
	616-106-00-0	237-199-0	13684-63-4							
34	barium { barium oxide }				230 mg/kg	1.117	256.796 mg/kg	0.0257 %	✓	
		215-127-9	1304-28-5							
Total:								0.0991 %		

Key

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

Classification of sample: TP118

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

Sample details

Sample Name:	LoW Code:	
TP118	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				8 mg/kg	1.32	10.563 mg/kg	0.00106 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				1.4 mg/kg	2.775	3.885 mg/kg	0.000389 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				1.4 mg/kg	3.22	4.508 mg/kg	0.000451 %	✓	
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				0.2 mg/kg	1.142	0.228 mg/kg	0.0000228 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide }				<0.1 mg/kg	1.462	<0.146 mg/kg	<0.0000146 %		<LOD
		215-160-9	1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
7	copper { dicopper oxide; copper (I) oxide }				19 mg/kg	1.126	21.392 mg/kg	0.00214 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	25 mg/kg		25 mg/kg	0.0025 %	✓	
	082-001-00-6									
9	mercury { mercury dichloride }				<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.00000677 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel chromate }				19 mg/kg	2.976	56.549 mg/kg	0.00565 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<0.5 mg/kg	2.554	<1.277 mg/kg	<0.000128 %		<LOD
	034-002-00-8									
12	zinc { zinc sulphate }				38 mg/kg	2.469	93.833 mg/kg	0.00938 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
13	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X 216-653-1 1634-04-4				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
15	benzene 601-020-00-8 200-753-7 71-43-2				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
16	toluene 601-021-00-3 203-625-9 108-88-3				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
17	ethylbenzene 601-023-00-4 202-849-4 100-41-4				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
18	xylene 601-022-00-9 202-422-2 [1] 95-47-6 [1] 203-396-5 [2] 106-42-3 [2] 203-576-3 [3] 108-38-3 [3] 215-535-7 [4] 1330-20-7 [4]				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
19	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				<0.1 mg/kg	1.884	<0.188 mg/kg	<0.0000188 %		<LOD
20	pH PH				5.3 pH		5.3 pH	5.3 pH		
21	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
22	acenaphthylene 205-917-1 208-96-8				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
23	acenaphthene 201-469-6 83-32-9				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
24	fluorene 201-695-5 86-73-7				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
25	phenanthrene 201-581-5 85-01-8				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
26	anthracene 204-371-1 120-12-7				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
27	fluoranthene 205-912-4 206-44-0				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
28	pyrene 204-927-3 129-00-0				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
29	benzo[a]anthracene 601-033-00-9 200-280-6 56-55-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
30	chrysene 601-048-00-0 205-923-4 218-01-9				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
31	benzo[b]fluoranthene 601-034-00-4 205-911-9 205-99-2				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
32	benzo[k]fluoranthene 601-036-00-5 205-916-6 207-08-9				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
33	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3 200-028-5 50-32-8				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
34	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
35	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
36	benzo[ghi]perylene 205-883-8 191-24-2				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
37	phenol 604-001-00-2 203-632-7 108-95-2				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
38	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate 616-106-00-0 237-199-0 13684-63-4				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
39	4-nitrophenol; p-nitrophenol 609-015-00-2 202-811-7 100-02-7				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
40	hexachlorobutadiene	201-765-5	87-68-3		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
41	1,1,2,2-tetrachloroethane	201-197-8	79-34-5		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
42	1,2,3-trichloropropane	202-486-1	96-18-4		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
43	barium { barium oxide }	215-127-9	1304-28-5		260 mg/kg	1.117	290.292 mg/kg	0.029 %	✓	
Total:								0.0522 %		

Key

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

Classification of sample: TP119

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

Sample details

Sample Name: TP119	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth: 0.8 m	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	8.6 mg/kg	1.32	11.355 mg/kg	0.00114 %	✔	
2	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.2 mg/kg	2.775	3.33 mg/kg	0.000333 %	✔	
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2	1.2 mg/kg	3.22	3.864 mg/kg	0.000386 %	✔	
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0	0.2 mg/kg	1.142	0.228 mg/kg	0.0000228 %	✔	
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9	0.6 mg/kg	1.462	0.877 mg/kg	0.0000877 %	✔	
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	15 mg/kg	1.126	16.888 mg/kg	0.00169 %	✔	
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			180 mg/kg		180 mg/kg	0.018 %	✔	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7	<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.0000677 %		<LOD
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7	15 mg/kg	2.976	44.644 mg/kg	0.00446 %	✔	
11	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }	034-002-00-8			<0.5 mg/kg	2.554	<1.277 mg/kg	<0.000128 %		<LOD
12	zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]	220 mg/kg	2.469	543.245 mg/kg	0.0543 %	✔	
13	TPH (C6 to C40) petroleum group			TPH	<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, }				<0.1 mg/kg	1.884	<0.188 mg/kg	<0.0000188 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
	ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }									
	006-007-00-5									
15	pH				5.9 pH		5.9 pH	5.9 pH		
			PH							
16	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
17	acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8							
18	acenaphthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9							
19	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7							
20	phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8							
21	anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7							
22	fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0							
23	pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0							
24	benzo[a]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
25	chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
26	benzo[b]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
27	benzo[k]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
28	benzo[a]pyrene; benzo[def]chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
29	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5							
30	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
31	benzo[ghi]perylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2							
32	phenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
33	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	616-106-00-0	237-199-0	13684-63-4							
34	barium { barium oxide }				440 mg/kg	1.117	491.263 mg/kg	0.0491 %	✓	
		215-127-9	1304-28-5							
Total:								0.131 %		

Key

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

Classification of sample: TP120

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

Sample details

Sample Name:	LoW Code:	
TP120	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				4.5 mg/kg	1.32	5.941 mg/kg	0.000594 %	✔	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				1.4 mg/kg	2.775	3.885 mg/kg	0.000389 %	✔	
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				1.4 mg/kg	3.22	4.508 mg/kg	0.000451 %	✔	
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				0.2 mg/kg	1.142	0.228 mg/kg	0.0000228 %	✔	
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide }				0.5 mg/kg	1.462	0.731 mg/kg	0.0000731 %	✔	
		215-160-9	1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
7	copper { dicopper oxide; copper (I) oxide }				19 mg/kg	1.126	21.392 mg/kg	0.00214 %	✔	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	40 mg/kg		40 mg/kg	0.004 %	✔	
	082-001-00-6									
9	mercury { mercury dichloride }				<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.0000677 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel chromate }				27 mg/kg	2.976	80.359 mg/kg	0.00804 %	✔	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				<0.5 mg/kg	2.554	<1.277 mg/kg	<0.000128 %		<LOD
	034-002-00-8									
12	zinc { zinc sulphate }				450 mg/kg	2.469	1111.183 mg/kg	0.111 %	✔	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
13	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, }				<0.1 mg/kg	1.884	<0.188 mg/kg	<0.0000188 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
	ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }									
	006-007-00-5									
15	pH				5.9 pH		5.9 pH	5.9 pH		
			PH							
16	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
17	acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8							
18	acenaphthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9							
19	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7							
20	phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8							
21	anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7							
22	fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0							
23	pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0							
24	benzo[a]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
25	chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
26	benzo[b]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
27	benzo[k]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
28	benzo[a]pyrene; benzo[def]chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
29	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5							
30	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
31	benzo[ghi]perylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2							
32	phenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
33	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	616-106-00-0	237-199-0	13684-63-4							
34	barium { barium oxide }				190 mg/kg	1.117	212.136 mg/kg	0.0212 %	✓	
		215-127-9	1304-28-5							
Total:								0.15 %		

Key

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

Classification of sample: TP122

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

Sample details

Sample Name:	LoW Code:	
TP122	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.8 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				17 mg/kg	1.32	22.446 mg/kg	0.00224 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				1.7 mg/kg	2.775	4.718 mg/kg	0.000472 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				1.7 mg/kg	3.22	5.474 mg/kg	0.000547 %	✓	
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide }				0.2 mg/kg	1.462	0.292 mg/kg	0.0000292 %	✓	
		215-160-9	1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
7	copper { dicopper oxide; copper (I) oxide }				23 mg/kg	1.126	25.895 mg/kg	0.00259 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	61 mg/kg		61 mg/kg	0.0061 %	✓	
	082-001-00-6									
9	mercury { mercury dichloride }				<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.0000677 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel chromate }				25 mg/kg	2.976	74.407 mg/kg	0.00744 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				0.6 mg/kg	2.554	1.532 mg/kg	0.000153 %	✓	
	034-002-00-8									
12	zinc { zinc sulphate }				140 mg/kg	2.469	345.701 mg/kg	0.0346 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
13	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, }				<0.1 mg/kg	1.884	<0.188 mg/kg	<0.0000188 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
	ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }									
	006-007-00-5									
15	pH				5.1 pH		5.1 pH	5.1 pH		
			PH							
16	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
17	acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8							
18	acenaphthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9							
19	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7							
20	phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8							
21	anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7							
22	fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0							
23	pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0							
24	benzo[a]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
25	chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
26	benzo[b]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
27	benzo[k]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
28	benzo[a]pyrene; benzo[def]chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
29	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5							
30	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
31	benzo[ghi]perylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2							
32	phenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
33	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	616-106-00-0	237-199-0	13684-63-4							
34	barium { barium oxide }				390 mg/kg	1.117	435.437 mg/kg	0.0435 %	✓	
		215-127-9	1304-28-5							
Total:								0.0992 %		

Key

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

Classification of sample: TP123

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

Sample details

Sample Name:	LoW Code:	
TP123	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.6 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				14	mg/kg	1.32	18.485	mg/kg	0.00185 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	beryllium { beryllium oxide }				2.2	mg/kg	2.775	6.106	mg/kg	0.000611 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
3	boron { diboron trioxide; boric oxide }				2.2	mg/kg	3.22	7.084	mg/kg	0.000708 %	✓	
	005-008-00-8	215-125-8	1303-86-2									
4	cadmium { cadmium oxide }				0.4	mg/kg	1.142	0.457	mg/kg	0.0000457 %	✓	
	048-002-00-0	215-146-2	1306-19-0									
5	chromium in chromium(III) compounds { chromium(III) oxide }				0.2	mg/kg	1.462	0.292	mg/kg	0.0000292 %	✓	
		215-160-9	1308-38-9									
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0									
7	copper { dicopper oxide; copper (I) oxide }				21	mg/kg	1.126	23.644	mg/kg	0.00236 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	270	mg/kg		270	mg/kg	0.027 %	✓	
	082-001-00-6											
9	mercury { mercury dichloride }				0.07	mg/kg	1.353	0.0947	mg/kg	0.00000947 %	✓	
	080-010-00-X	231-299-8	7487-94-7									
10	nickel { nickel chromate }				21	mg/kg	2.976	62.502	mg/kg	0.00625 %	✓	
	028-035-00-7	238-766-5	14721-18-7									
11	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				<0.5	mg/kg	2.554	<1.277	mg/kg	<0.000128 %		<LOD
	034-002-00-8											
12	zinc { zinc sulphate }				190	mg/kg	2.469	469.166	mg/kg	0.0469 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
13	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,				<0.1	mg/kg	1.884	<0.188	mg/kg	<0.0000188 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
	ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }									
	006-007-00-5									
15	pH				5 pH		5 pH	5pH		
			PH							
16	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
17	acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8							
18	acenaphthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9							
19	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7							
20	phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8							
21	anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7							
22	fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0							
23	pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0							
24	benzo[a]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
25	chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
26	benzo[b]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
27	benzo[k]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
28	benzo[a]pyrene; benzo[def]chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
29	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5							
30	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
31	benzo[ghi]perylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2							
32	phenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
33	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	616-106-00-0	237-199-0	13684-63-4							
34	barium { barium oxide }				280 mg/kg	1.117	312.622 mg/kg	0.0313 %	✓	
		215-127-9	1304-28-5							
Total:								0.119 %		

Key

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

Classification of sample: TP124

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

Sample details

Sample Name:	LoW Code:	
TP124	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				26	mg/kg	1.32	34.328	mg/kg	0.00343 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	beryllium { beryllium oxide }				4.4	mg/kg	2.775	12.212	mg/kg	0.00122 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
3	boron { diboron trioxide; boric oxide }				4.4	mg/kg	3.22	14.167	mg/kg	0.00142 %	✓	
	005-008-00-8	215-125-8	1303-86-2									
4	cadmium { cadmium oxide }				<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0									
5	chromium in chromium(III) compounds { chromium(III) oxide }				1.5	mg/kg	1.462	2.192	mg/kg	0.000219 %	✓	
		215-160-9	1308-38-9									
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0									
7	copper { dicopper oxide; copper (I) oxide }				27	mg/kg	1.126	30.399	mg/kg	0.00304 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	170	mg/kg		170	mg/kg	0.017 %	✓	
	082-001-00-6											
9	mercury { mercury dichloride }				0.07	mg/kg	1.353	0.0947	mg/kg	0.00000947 %	✓	
	080-010-00-X	231-299-8	7487-94-7									
10	nickel { nickel chromate }				43	mg/kg	2.976	127.979	mg/kg	0.0128 %	✓	
	028-035-00-7	238-766-5	14721-18-7									
11	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				<0.5	mg/kg	2.554	<1.277	mg/kg	<0.000128 %		<LOD
	034-002-00-8											
12	zinc { zinc sulphate }				540	mg/kg	2.469	1333.42	mg/kg	0.133 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
13	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, }				<0.1	mg/kg	1.884	<0.188	mg/kg	<0.0000188 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
	ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }									
	006-007-00-5									
15	• pH		PH		4.9 pH		4.9 pH	4.9 pH		
16	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
17	• acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8							
18	• acenaphthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9							
19	• fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7							
20	• phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8							
21	• anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7							
22	• fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0							
23	• pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0							
24	benzo[a]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
25	chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
26	benzo[b]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
27	benzo[k]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
28	benzo[a]pyrene; benzo[def]chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
29	• indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5							
30	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
31	• benzo[ghi]perylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2							
32	phenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
33	☠ barium { • barium oxide }				180 mg/kg	1.117	200.971 mg/kg	0.0201 %	✓	
		215-127-9	1304-28-5							
Total:								0.194 %		

Key

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

Classification of sample: TP125

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

Sample details

Sample Name: TP125	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth: 0.25 m	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	12 mg/kg	1.32	15.844 mg/kg	0.00158 %	✔	
2	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	0.6 mg/kg	2.775	1.665 mg/kg	0.000167 %	✔	
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2	0.6 mg/kg	3.22	1.932 mg/kg	0.000193 %	✔	
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0	<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9	1.8 mg/kg	1.462	2.631 mg/kg	0.000263 %	✔	
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	13 mg/kg	1.126	14.637 mg/kg	0.00146 %	✔	
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			730 mg/kg		730 mg/kg	0.073 %	✔	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7	<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.0000677 %		<LOD
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7	12 mg/kg	2.976	35.715 mg/kg	0.00357 %	✔	
11	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }	034-002-00-8			1 mg/kg	2.554	2.554 mg/kg	0.000255 %	✔	
12	zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]	260 mg/kg	2.469	642.017 mg/kg	0.0642 %	✔	
13	TPH (C6 to C40) petroleum group			TPH	<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, }				<0.1 mg/kg	1.884	<0.188 mg/kg	<0.0000188 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
	ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }									
	006-007-00-5									
15	pH				6.2 pH		6.2 pH	6.2 pH		
			PH							
16	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
17	acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8							
18	acenaphthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9							
19	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7							
20	phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8							
21	anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7							
22	fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0							
23	pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0							
24	benzo[a]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
25	chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
26	benzo[b]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
27	benzo[k]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
28	benzo[a]pyrene; benzo[def]chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
29	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5							
30	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
31	benzo[ghi]perylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2							
32	phenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
33	barium { barium oxide }				33 mg/kg	1.117	36.845 mg/kg	0.00368 %	✓	
		215-127-9	1304-28-5							
Total:								0.15 %		

Key

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

Classification of sample: TP125[2]

Hazardous Waste
 Classified as **17 05 03 ***
 in the List of Waste

Sample details

Sample Name:	LoW Code:
TP125[2]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry: 17 05 03 * (Soil and stones containing hazardous substances)
2 m	

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1A; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

lead compounds with the exception of those specified elsewhere in this Annex (worst case): (Note 1 conc.: 0.53%)

HP 10: Toxic for reproduction "waste which has adverse effects on sexual function and fertility in adult males and females, as well as developmental toxicity in the offspring"

Hazard Statements hit:

Repr. 1A; H360Df "May damage the unborn child. Suspected of damaging fertility."

Because of determinand:

lead compounds with the exception of those specified elsewhere in this Annex (worst case): (Note 1 conc.: 0.53%)

HP 14: Ecotoxic "waste which presents or may present immediate or delayed risks for one or more sectors of the environment"

Hazard Statements hit:

Aquatic Chronic 1; H410 "Very toxic to aquatic life with long lasting effects."

Because of determinands:

lead compounds with the exception of those specified elsewhere in this Annex (worst case): (Note 1 conc.: 0.53%)

zinc sulphate: (compound conc.: 0.346%)

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				18 mg/kg	1.32	23.766 mg/kg	0.00238 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				2.7 mg/kg	2.775	7.493 mg/kg	0.000749 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				2.7 mg/kg	3.22	8.694 mg/kg	0.000869 %	✓	
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide }				1.9 mg/kg	1.462	2.777 mg/kg	0.000278 %	✓	
		215-160-9	1308-38-9							

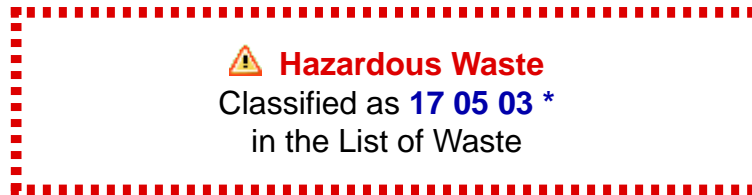
#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
6	chromium in chromium(VI) compounds { chromium(VI) oxide }			1	<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0									
7	copper { dicopper oxide; copper (I) oxide }				31	mg/kg	1.126	34.903	mg/kg	0.00349 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }				5300	mg/kg		5300	mg/kg	0.53 %	✓	
	082-001-00-6											
9	mercury { mercury dichloride }				0.12	mg/kg	1.353	0.162	mg/kg	0.0000162 %	✓	
	080-010-00-X	231-299-8	7487-94-7									
10	nickel { nickel chromate }				32	mg/kg	2.976	95.24	mg/kg	0.00952 %	✓	
	028-035-00-7	238-766-5	14721-18-7									
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				4.9	mg/kg	2.554	12.513	mg/kg	0.00125 %	✓	
	034-002-00-8											
12	zinc { zinc sulphate }				1400	mg/kg	2.469	3457.015	mg/kg	0.346 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
13	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									
15	benzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
16	toluene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
17	ethylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
18	xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
19	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.1	mg/kg	1.884	<0.188	mg/kg	<0.0000188 %		<LOD
	006-007-00-5											
20	pH				5.3	pH		5.3	pH	5.3 pH		
			PH									
21	naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
22	acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8									
23	acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9									
24	fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7									
25	phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8									
26	anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7									
27	fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0									
28	pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0									
29	benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3									
30	chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9									

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
31	benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2									
32	benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9									
33	benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8									
34	indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5									
35	dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
36	benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2									
37	phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
38	4-nitrophenol; p-nitrophenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	609-015-00-2	202-811-7	100-02-7									
39	hexachlorobutadiene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-765-5	87-68-3									
40	1,1,2,2-tetrachloroethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	602-015-00-3	201-197-8	79-34-5									
41	1,2,3-trichloropropane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	602-062-00-X	202-486-1	96-18-4									
42	barium { barium oxide }				140	mg/kg	1.117	156.311	mg/kg	0.0156 %	✓	
		215-127-9	1304-28-5									
Total:										0.911 %		

Key

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

Classification of sample: TP126



Sample details

Sample Name:	LoW Code:	
TP126	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 03 * (Soil and stones containing hazardous substances)
1 m		

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1A; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

lead compounds with the exception of those specified elsewhere in this Annex (worst case): (Note 1 conc.: 0.1%)

HP 14: Ecotoxic "waste which presents or may present immediate or delayed risks for one or more sectors of the environment"

Hazard Statements hit:

Aquatic Chronic 1; H410 "Very toxic to aquatic life with long lasting effects."

Because of determinands:

lead compounds with the exception of those specified elsewhere in this Annex (worst case): (Note 1 conc.: 0.1%)
zinc sulphate: (compound conc.: 0.494%)

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				22	mg/kg	1.32	29.047	mg/kg	0.0029 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	beryllium { beryllium oxide }				1.6	mg/kg	2.775	4.441	mg/kg	0.000444 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
3	boron { diboron trioxide; boric oxide }				1.6	mg/kg	3.22	5.152	mg/kg	0.000515 %	✓	
	005-008-00-8	215-125-8	1303-86-2									
4	cadmium { cadmium oxide }				<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0									
5	chromium in chromium(III) compounds { chromium(III) oxide }				4.9	mg/kg	1.462	7.162	mg/kg	0.000716 %	✓	
		215-160-9	1308-38-9									
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0									
7	copper { dicopper oxide; copper (I) oxide }				22	mg/kg	1.126	24.77	mg/kg	0.00248 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	1000	mg/kg		1000	mg/kg	0.1 %	✓	
	082-001-00-6											

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
9	mercury { mercury dichloride }				0.09	mg/kg	1.353	0.122	mg/kg	0.0000122 %	✓	
	080-010-00-X	231-299-8	7487-94-7									
10	nickel { nickel chromate }				27	mg/kg	2.976	80.359	mg/kg	0.00804 %	✓	
	028-035-00-7	238-766-5	14721-18-7									
11	selenium { selenium compounds with the exception of cadmium selenoselenide and those specified elsewhere in this Annex }				2.2	mg/kg	2.554	5.618	mg/kg	0.000562 %	✓	
	034-002-00-8											
12	zinc { zinc sulphate }				2000	mg/kg	2.469	4938.593	mg/kg	0.494 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
13	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									
15	benzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
16	toluene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
17	ethylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
18	xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
19	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.1	mg/kg	1.884	<0.188	mg/kg	<0.0000188 %		<LOD
	006-007-00-5											
20	pH				7.1	pH		7.1	pH	7.1 pH		
			PH									
21	naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
22	acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8									
23	acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9									
24	fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7									
25	phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8									
26	anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7									
27	fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0									
28	pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0									
29	benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3									
30	chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9									
31	benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2									
32	benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9									
33	benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8									
34	indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5									

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
35	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
36	benzo[ghi]perylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2							
37	phenol				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
38	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	616-106-00-0	237-199-0	13684-63-4							
39	4-nitrophenol; p-nitrophenol				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	609-015-00-2	202-811-7	100-02-7							
40	hexachlorobutadiene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		201-765-5	87-68-3							
41	1,1,2,2-tetrachloroethane				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	602-015-00-3	201-197-8	79-34-5							
42	1,2,3-trichloropropane				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	602-062-00-X	202-486-1	96-18-4							
43	barium { barium oxide }				270 mg/kg	1.117	301.457 mg/kg	0.0301 %	✓	
		215-127-9	1304-28-5							
Total:								0.641 %		

Key

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

Classification of sample: TP127

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

Sample details

Sample Name: TP127	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth: 1 m	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				13	mg/kg	1.32	17.164	mg/kg	0.00172 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	beryllium { beryllium oxide }				2.2	mg/kg	2.775	6.106	mg/kg	0.000611 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
3	boron { diboron trioxide; boric oxide }				2.2	mg/kg	3.22	7.084	mg/kg	0.000708 %	✓	
	005-008-00-8	215-125-8	1303-86-2									
4	cadmium { cadmium oxide }				0.2	mg/kg	1.142	0.228	mg/kg	0.0000228 %	✓	
	048-002-00-0	215-146-2	1306-19-0									
5	chromium in chromium(III) compounds { chromium(III) oxide }				0.2	mg/kg	1.462	0.292	mg/kg	0.0000292 %	✓	
		215-160-9	1308-38-9									
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0									
7	copper { dicopper oxide; copper (I) oxide }				21	mg/kg	1.126	23.644	mg/kg	0.00236 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	71	mg/kg		71	mg/kg	0.0071 %	✓	
	082-001-00-6											
9	mercury { mercury dichloride }				<0.05	mg/kg	1.353	<0.0677	mg/kg	<0.0000677 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
10	nickel { nickel chromate }				35	mg/kg	2.976	104.169	mg/kg	0.0104 %	✓	
	028-035-00-7	238-766-5	14721-18-7									
11	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				<0.5	mg/kg	2.554	<1.277	mg/kg	<0.000128 %		<LOD
	034-002-00-8											
12	zinc { zinc sulphate }				91	mg/kg	2.469	224.706	mg/kg	0.0225 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
13	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, }				<0.1	mg/kg	1.884	<0.188	mg/kg	<0.0000188 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
	ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }									
	006-007-00-5									
15	pH				6.3 pH		6.3 pH	6.3 pH		
			PH							
16	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
17	acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8							
18	acenaphthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9							
19	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7							
20	phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8							
21	anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7							
22	fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0							
23	pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0							
24	benzo[a]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
25	chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
26	benzo[b]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
27	benzo[k]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
28	benzo[a]pyrene; benzo[def]chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
29	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5							
30	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
31	benzo[ghi]perylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2							
32	phenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
33	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	616-106-00-0	237-199-0	13684-63-4							
34	barium { barium oxide }				320 mg/kg	1.117	357.282 mg/kg	0.0357 %	✓	
		215-127-9	1304-28-5							
Total:								0.0827 %		

Key

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

Classification of sample: TP128

Hazardous Waste
 Classified as **17 05 03 ***
 in the List of Waste

Sample details

Sample Name:	LoW Code:
TP128	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry: 17 05 03 * (Soil and stones containing hazardous substances)
0.6 m	

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1A; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

lead compounds with the exception of those specified elsewhere in this Annex (worst case): (Note 1 conc.: 0.28%)

HP 14: Ecotoxic "waste which presents or may present immediate or delayed risks for one or more sectors of the environment"

Hazard Statements hit:

Aquatic Chronic 1; H410 "Very toxic to aquatic life with long lasting effects."

Because of determinands:

lead compounds with the exception of those specified elsewhere in this Annex (worst case): (Note 1 conc.: 0.28%)
 zinc sulphate: (compound conc.: 1.136%)

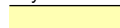




Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				64	mg/kg	1.32	84.501	mg/kg	0.00845 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	beryllium { beryllium oxide }				6.2	mg/kg	2.775	17.207	mg/kg	0.00172 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
3	boron { diboron trioxide; boric oxide }				6.2	mg/kg	3.22	19.963	mg/kg	0.002 %	✓	
	005-008-00-8	215-125-8	1303-86-2									
4	cadmium { cadmium oxide }				<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0									
5	chromium in chromium(III) compounds { chromium(III) oxide }				11	mg/kg	1.462	16.077	mg/kg	0.00161 %	✓	
		215-160-9	1308-38-9									
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0									
7	copper { dicopper oxide; copper (I) oxide }				110	mg/kg	1.126	123.848	mg/kg	0.0124 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	2800	mg/kg		2800	mg/kg	0.28 %	✓	
	082-001-00-6											

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
9	mercury { mercury dichloride }				0.06	mg/kg	1.353	0.0812	mg/kg	0.00000812 %	✓	
	080-010-00-X	231-299-8	7487-94-7									
10	nickel { nickel chromate }				95	mg/kg	2.976	282.745	mg/kg	0.0283 %	✓	
	028-035-00-7	238-766-5	14721-18-7									
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				9.3	mg/kg	2.554	23.748	mg/kg	0.00237 %	✓	
	034-002-00-8											
12	zinc { zinc sulphate }				4600	mg/kg	2.469	11358.764	mg/kg	1.136 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
13	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				0.3	mg/kg	1.884	0.565	mg/kg	0.0000565 %	✓	
	006-007-00-5											
15	pH				6.5	pH		6.5	pH	6.5 pH		
			PH									
16	naphthalene				0.1	mg/kg		0.1	mg/kg	0.00001 %	✓	
	601-052-00-2	202-049-5	91-20-3									
17	acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8									
18	acenaphthene				0.3	mg/kg		0.3	mg/kg	0.00003 %	✓	
		201-469-6	83-32-9									
19	fluorene				0.3	mg/kg		0.3	mg/kg	0.00003 %	✓	
		201-695-5	86-73-7									
20	phenanthrene				0.8	mg/kg		0.8	mg/kg	0.00008 %	✓	
		201-581-5	85-01-8									
21	anthracene				0.3	mg/kg		0.3	mg/kg	0.00003 %	✓	
		204-371-1	120-12-7									
22	fluoranthene				0.6	mg/kg		0.6	mg/kg	0.00006 %	✓	
		205-912-4	206-44-0									
23	pyrene				1.3	mg/kg		1.3	mg/kg	0.00013 %	✓	
		204-927-3	129-00-0									
24	benzo[a]anthracene				0.3	mg/kg		0.3	mg/kg	0.00003 %	✓	
	601-033-00-9	200-280-6	56-55-3									
25	chrysene				0.3	mg/kg		0.3	mg/kg	0.00003 %	✓	
	601-048-00-0	205-923-4	218-01-9									
26	benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2									
27	benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9									
28	benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8									
29	indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5									
30	dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
31	benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2									
32	phenol				1.1	mg/kg		1.1	mg/kg	0.00011 %	✓	
	604-001-00-2	203-632-7	108-95-2									
33	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate				1.1	mg/kg		1.1	mg/kg	0.00011 %	✓	
	616-106-00-0	237-199-0	13684-63-4									
34	barium { barium oxide }				1000	mg/kg	1.117	1116.506	mg/kg	0.112 %	✓	
		215-127-9	1304-28-5									
Total:										1.586 %		

Key

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

Classification of sample: TP128[2]

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

Sample details

Sample Name: TP128[2]	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth: 1 m	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				4.8 mg/kg	1.32	6.338 mg/kg	0.000634 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				1.1 mg/kg	2.775	3.053 mg/kg	0.000305 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				1.1 mg/kg	3.22	3.542 mg/kg	0.000354 %	✓	
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide }				1.3 mg/kg	1.462	1.9 mg/kg	0.00019 %	✓	
		215-160-9	1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
7	copper { dicopper oxide; copper (I) oxide }				13 mg/kg	1.126	14.637 mg/kg	0.00146 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	99 mg/kg		99 mg/kg	0.0099 %	✓	
	082-001-00-6									
9	mercury { mercury dichloride }				0.17 mg/kg	1.353	0.23 mg/kg	0.000023 %	✓	
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel chromate }				11 mg/kg	2.976	32.739 mg/kg	0.00327 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				1.1 mg/kg	2.554	2.809 mg/kg	0.000281 %	✓	
	034-002-00-8									
12	zinc { zinc sulphate }				490 mg/kg	2.469	1209.955 mg/kg	0.121 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
13	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X 216-653-1 1634-04-4				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
15	benzene 601-020-00-8 200-753-7 71-43-2				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
16	toluene 601-021-00-3 203-625-9 108-88-3				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
17	ethylbenzene 601-023-00-4 202-849-4 100-41-4				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
18	xylene 601-022-00-9 202-422-2 [1] 95-47-6 [1] 203-396-5 [2] 106-42-3 [2] 203-576-3 [3] 108-38-3 [3] 215-535-7 [4] 1330-20-7 [4]				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
19	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				0.3 mg/kg	1.884	0.565 mg/kg	0.0000565 %	✓	
20	pH PH				6.8 pH		6.8 pH	6.8 pH		
21	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
22	acenaphthylene 205-917-1 208-96-8				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
23	acenaphthene 201-469-6 83-32-9				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
24	fluorene 201-695-5 86-73-7				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
25	phenanthrene 201-581-5 85-01-8				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
26	anthracene 204-371-1 120-12-7				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
27	fluoranthene 205-912-4 206-44-0				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
28	pyrene 204-927-3 129-00-0				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
29	benzo[a]anthracene 601-033-00-9 200-280-6 56-55-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
30	chrysene 601-048-00-0 205-923-4 218-01-9				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
31	benzo[b]fluoranthene 601-034-00-4 205-911-9 205-99-2				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
32	benzo[k]fluoranthene 601-036-00-5 205-916-6 207-08-9				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
33	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3 200-028-5 50-32-8				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
34	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
35	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
36	benzo[ghi]perylene 205-883-8 191-24-2				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
37	phenol 604-001-00-2 203-632-7 108-95-2				<		<	<		ND
38	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate 616-106-00-0 237-199-0 13684-63-4				0.4 mg/kg		0.4 mg/kg	0.00004 %	✓	
39	4-nitrophenol; p-nitrophenol 609-015-00-2 202-811-7 100-02-7				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
40	hexachlorobutadiene	201-765-5	87-68-3		0.01 mg/kg		0.01 mg/kg	0.000001 %	✓	
41	1,1,2,2-tetrachloroethane	201-197-8	79-34-5		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
42	1,2,3-trichloropropane	202-486-1	96-18-4		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
43	barium { barium oxide }	215-127-9	1304-28-5		340 mg/kg	1.117	379.612 mg/kg	0.038 %	✓	
Total:								0.177 %		

Key

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

Classification of sample: WS101

 **Hazardous Waste**
 Classified as **17 05 03 ***
 in the List of Waste

Sample details

Sample Name:	LoW Code:
WS101	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry: 17 05 03 * (Soil and stones containing hazardous substances)
0.2 m	

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1A; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

lead compounds with the exception of those specified elsewhere in this Annex (worst case): (Note 1 conc.: 1%)

HP 10: Toxic for reproduction "waste which has adverse effects on sexual function and fertility in adult males and females, as well as developmental toxicity in the offspring"

Hazard Statements hit:

Repr. 1A; H360Df "May damage the unborn child. Suspected of damaging fertility."

Because of determinand:

lead compounds with the exception of those specified elsewhere in this Annex (worst case): (Note 1 conc.: 1%)

HP 14: Ecotoxic "waste which presents or may present immediate or delayed risks for one or more sectors of the environment"

Hazard Statements hit:

Aquatic Chronic 1; H410 "Very toxic to aquatic life with long lasting effects."

Because of determinand:

lead compounds with the exception of those specified elsewhere in this Annex (worst case): (Note 1 conc.: 1%)

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				85 mg/kg	1.32	112.228 mg/kg	0.0112 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				1.3 mg/kg	2.775	3.608 mg/kg	0.000361 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				1.3 mg/kg	3.22	4.186 mg/kg	0.000419 %	✓	
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide }				51 mg/kg	1.462	74.539 mg/kg	0.00745 %	✓	
		215-160-9	1308-38-9							

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	1	<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %	<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		150	mg/kg	1.126	168.883	mg/kg	0.0169 %	✓
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	10000	mg/kg		10000	mg/kg	1%	✓
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.9	mg/kg	1.353	1.218	mg/kg	0.000122 %	✓
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		53	mg/kg	2.976	157.742	mg/kg	0.0158 %	✓
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1.7	mg/kg	2.554	4.341	mg/kg	0.000434 %	✓
12	TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %	<LOD
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				0.2	mg/kg	1.884	0.377	mg/kg	0.0000377 %	✓
14	pH			PH		7.4	pH		7.4	pH	7.4 pH	
15	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
16	acenaphthylene		205-917-1	208-96-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
17	acenaphthene		201-469-6	83-32-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
18	fluorene		201-695-5	86-73-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
19	phenanthrene		201-581-5	85-01-8		0.2	mg/kg		0.2	mg/kg	0.00002 %	✓
20	anthracene		204-371-1	120-12-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
21	fluoranthene		205-912-4	206-44-0		0.1	mg/kg		0.1	mg/kg	0.00001 %	✓
22	pyrene		204-927-3	129-00-0		0.1	mg/kg		0.1	mg/kg	0.00001 %	✓
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
24	chrysene	601-048-00-0	205-923-4	218-01-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
28	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
29	dibenzo[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
30	benzo[ghi]perylene		205-883-8	191-24-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
31	phenol	604-001-00-2	203-632-7	108-95-2		<0.3	mg/kg		<0.3	mg/kg	<0.00003 %	<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
32	phenmedipham (ISO); methyl 3-(3-methylcarbaniloxy)carbanilate				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	616-106-00-0	237-199-0	13684-63-4							
33	barium { ■ barium oxide }				98 mg/kg	1.117	109.418 mg/kg	0.0109 %	✓	
		215-127-9	1304-28-5							
Total:								1.065 %		

Key

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

Classification of sample: WS101[2]

Hazardous Waste
 Classified as **17 05 03 ***
 in the List of Waste

Sample details

Sample Name:	LoW Code:	
WS101[2]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 03 * (Soil and stones containing hazardous substances)
1 m		

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1A; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

lead compounds with the exception of those specified elsewhere in this Annex (worst case): (Note 1 conc.: 0.14%)

HP 14: Ecotoxic "waste which presents or may present immediate or delayed risks for one or more sectors of the environment"

Hazard Statements hit:

Aquatic Chronic 1; H410 "Very toxic to aquatic life with long lasting effects."

Because of determinands:

lead compounds with the exception of those specified elsewhere in this Annex (worst case): (Note 1 conc.: 0.14%)
 zinc sulphate: (compound conc.: 1.259%)

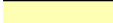




Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				29	mg/kg	1.32	38.289	mg/kg	0.00383 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	beryllium { beryllium oxide }				6.1	mg/kg	2.775	16.93	mg/kg	0.00169 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
3	boron { diboron trioxide; boric oxide }				6.1	mg/kg	3.22	19.641	mg/kg	0.00196 %	✓	
	005-008-00-8	215-125-8	1303-86-2									
4	cadmium { cadmium oxide }				<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0									
5	chromium in chromium(III) compounds { chromium(III) oxide }				11	mg/kg	1.462	16.077	mg/kg	0.00161 %	✓	
		215-160-9	1308-38-9									
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0									
7	copper { dicopper oxide; copper (I) oxide }				38	mg/kg	1.126	42.784	mg/kg	0.00428 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	1400	mg/kg		1400	mg/kg	0.14 %	✓	
	082-001-00-6											

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
9	mercury { mercury dichloride }				0.15	mg/kg	1.353	0.203	mg/kg	0.0000203 %	✓	
	080-010-00-X	231-299-8	7487-94-7									
10	nickel { nickel chromate }				64	mg/kg	2.976	190.481	mg/kg	0.019 %	✓	
	028-035-00-7	238-766-5	14721-18-7									
11	selenium { selenium compounds with the exception of cadmium selenoselenide and those specified elsewhere in this Annex }				0.7	mg/kg	2.554	1.788	mg/kg	0.000179 %	✓	
	034-002-00-8											
12	zinc { zinc sulphate }				5100	mg/kg	2.469	12593.412	mg/kg	1.259 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
13	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				0.1	mg/kg	1.884	0.188	mg/kg	0.0000188 %	✓	
	006-007-00-5											
15	pH				7.1	pH		7.1	pH	7.1 pH		
			PH									
16	naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
17	acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8									
18	acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9									
19	fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7									
20	phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8									
21	anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7									
22	fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0									
23	pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0									
24	benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3									
25	chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9									
26	benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2									
27	benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9									
28	benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8									
29	indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5									
30	dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
31	benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2									
32	phenol				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
33	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
	616-106-00-0	237-199-0	13684-63-4									
34	barium { barium oxide }				120	mg/kg	1.117	133.981	mg/kg	0.0134 %	✓	
		215-127-9	1304-28-5									
Total:										1.447 %		

Key

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

Classification of sample: WS102

 **Hazardous Waste**
 Classified as **17 05 03 ***
 in the List of Waste

Sample details

Sample Name:	LoW Code:
WS102	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:
0.5 m	17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1A; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

lead compounds with the exception of those specified elsewhere in this Annex (worst case): (Note 1 conc.: 0.53%)

HP 10: Toxic for reproduction "waste which has adverse effects on sexual function and fertility in adult males and females, as well as developmental toxicity in the offspring"

Hazard Statements hit:

Repr. 1A; H360Df "May damage the unborn child. Suspected of damaging fertility."

Because of determinand:

lead compounds with the exception of those specified elsewhere in this Annex (worst case): (Note 1 conc.: 0.53%)

HP 14: Ecotoxic "waste which presents or may present immediate or delayed risks for one or more sectors of the environment"

Hazard Statements hit:

Aquatic Chronic 1; H410 "Very toxic to aquatic life with long lasting effects."

Because of determinand:

lead compounds with the exception of those specified elsewhere in this Annex (worst case): (Note 1 conc.: 0.53%)

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				49 mg/kg	1.32	64.696 mg/kg	0.00647 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				2.2 mg/kg	2.775	6.106 mg/kg	0.000611 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				2.2 mg/kg	3.22	7.084 mg/kg	0.000708 %	✓	
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide }				30 mg/kg	1.462	43.847 mg/kg	0.00438 %	✓	
		215-160-9	1308-38-9							

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	1	<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %	<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		87	mg/kg	1.126	97.952	mg/kg	0.0098 %	✓
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	5300	mg/kg		5300	mg/kg	0.53 %	✓
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.72	mg/kg	1.353	0.975	mg/kg	0.0000975 %	✓
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		34	mg/kg	2.976	101.193	mg/kg	0.0101 %	✓
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1.3	mg/kg	2.554	3.32	mg/kg	0.000332 %	✓
12	TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %	<LOD
13	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %	<LOD
14	benzene	601-020-00-8	200-753-7	71-43-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %	<LOD
15	toluene	601-021-00-3	203-625-9	108-88-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %	<LOD
16	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %	<LOD
17	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %	<LOD
18	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				0.2	mg/kg	1.884	0.377	mg/kg	0.0000377 %	✓
19	pH			PH		7.4	pH		7.4	pH	7.4 pH	
20	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
21	acenaphthylene		205-917-1	208-96-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
22	acenaphthene		201-469-6	83-32-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
23	fluorene		201-695-5	86-73-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
24	phenanthrene		201-581-5	85-01-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
25	anthracene		204-371-1	120-12-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
26	fluoranthene		205-912-4	206-44-0		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
27	pyrene		204-927-3	129-00-0		0.1	mg/kg		0.1	mg/kg	0.00001 %	✓
28	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
29	chrysene	601-048-00-0	205-923-4	218-01-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
30	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
31	benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9									
32	benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8									
33	indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5									
34	dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
35	benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2									
36	phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
37	phenmedipham (ISO); methyl 3-(3-methylcarbaniloxy)carbanilate				<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
	616-106-00-0	237-199-0	13684-63-4									
38	4-nitrophenol; p-nitrophenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	609-015-00-2	202-811-7	100-02-7									
39	hexachlorobutadiene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		201-765-5	87-68-3									
40	1,1,2,2-tetrachloroethane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	602-015-00-3	201-197-8	79-34-5									
41	1,2,3-trichloropropane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	602-062-00-X	202-486-1	96-18-4									
42	barium { barium oxide }				350	mg/kg	1.117	390.777	mg/kg	0.0391 %	✓	
		215-127-9	1304-28-5									
Total:										0.603 %		

Key

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

Classification of sample: WS102[2]

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

Sample details

Sample Name:	LoW Code:	
WS102[2]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

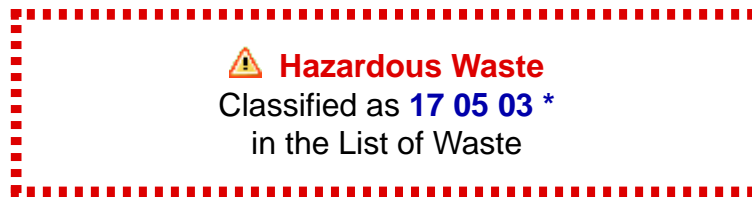
#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				37 mg/kg	1.32	48.852 mg/kg	0.00489 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				3.8 mg/kg	2.775	10.546 mg/kg	0.00105 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				3.8 mg/kg	3.22	12.236 mg/kg	0.00122 %	✓	
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				0.3 mg/kg	1.142	0.343 mg/kg	0.0000343 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide }				14 mg/kg	1.462	20.462 mg/kg	0.00205 %	✓	
		215-160-9	1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
7	copper { dicopper oxide; copper (I) oxide }				35 mg/kg	1.126	39.406 mg/kg	0.00394 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	850 mg/kg		850 mg/kg	0.085 %	✓	
	082-001-00-6									
9	mercury { mercury dichloride }				0.31 mg/kg	1.353	0.42 mg/kg	0.000042 %	✓	
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel chromate }				32 mg/kg	2.976	95.24 mg/kg	0.00952 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				0.7 mg/kg	2.554	1.788 mg/kg	0.000179 %	✓	
	034-002-00-8									
12	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				0.1 mg/kg	1.884	0.188 mg/kg	0.0000188 %	✓	
	006-007-00-5									

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
14	• pH		PH		7.1	pH		7.1	pH	7.1 pH		
15	naphthalene	601-052-00-2	202-049-5	91-20-3	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
16	• acenaphthylene		205-917-1	208-96-8	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
17	• acenaphthene		201-469-6	83-32-9	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
18	• fluorene		201-695-5	86-73-7	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
19	• phenanthrene		201-581-5	85-01-8	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
20	• anthracene		204-371-1	120-12-7	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
21	• fluoranthene		205-912-4	206-44-0	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
22	• pyrene		204-927-3	129-00-0	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
24	chrysene	601-048-00-0	205-923-4	218-01-9	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
28	• indeno[123-cd]pyrene		205-893-2	193-39-5	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
30	• benzo[ghi]perylene		205-883-8	191-24-2	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
31	phenol	604-001-00-2	203-632-7	108-95-2	<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
32	phenmedipham (ISO); methyl 3-(3-methylcarbaniloxy)carbanilate	616-106-00-0	237-199-0	13684-63-4	<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
33	• barium { • barium oxide }		215-127-9	1304-28-5	71	mg/kg	1.117	79.272	mg/kg	0.00793 %	✓	
Total:										0.117 %		

Key

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

Classification of sample: WS103



Sample details

Sample Name:	LoW Code:	
WS103	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 03 * (Soil and stones containing hazardous substances)
0.5 m		

Hazard properties

HP 14: Ecotoxic "waste which presents or may present immediate or delayed risks for one or more sectors of the environment"

Hazard Statements hit:

Aquatic Chronic 1; H410 "Very toxic to aquatic life with long lasting effects."

Because of determinand:

zinc sulphate: (compound conc.: 0.469%)

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				12	mg/kg	1.32	15.844	mg/kg	0.00158 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	beryllium { beryllium oxide }				1.8	mg/kg	2.775	4.996	mg/kg	0.0005 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
3	boron { diboron trioxide; boric oxide }				1.8	mg/kg	3.22	5.796	mg/kg	0.00058 %	✓	
	005-008-00-8	215-125-8	1303-86-2									
4	cadmium { cadmium oxide }				<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0									
5	chromium in chromium(III) compounds { chromium(III) oxide }				4.9	mg/kg	1.462	7.162	mg/kg	0.000716 %	✓	
		215-160-9	1308-38-9									
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0									
7	copper { dicopper oxide; copper (I) oxide }				27	mg/kg	1.126	30.399	mg/kg	0.00304 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	890	mg/kg		890	mg/kg	0.089 %	✓	
	082-001-00-6											
9	mercury { mercury dichloride }				0.11	mg/kg	1.353	0.149	mg/kg	0.0000149 %	✓	
	080-010-00-X	231-299-8	7487-94-7									
10	nickel { nickel chromate }				20	mg/kg	2.976	59.525	mg/kg	0.00595 %	✓	
	028-035-00-7	238-766-5	14721-18-7									
11	selenium { selenium compounds with the exception of cadmium selenide and those specified elsewhere in this Annex }				<0.5	mg/kg	2.554	<1.277	mg/kg	<0.000128 %		<LOD
	034-002-00-8											

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
12	zinc { zinc sulphate }				1900	mg/kg	2.469	4691.663	mg/kg	0.469 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
13	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									
15	benzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
16	toluene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
17	ethylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
18	xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
19	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				0.1	mg/kg	1.884	0.188	mg/kg	0.0000188 %	✓	
	006-007-00-5											
20	pH				6.1	pH		6.1	pH	6.1 pH		
			PH									
21	naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
22	acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8									
23	acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9									
24	fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7									
25	phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8									
26	anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7									
27	fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0									
28	pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0									
29	benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3									
30	chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9									
31	benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2									
32	benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9									
33	benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8									
34	indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5									
35	dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
36	benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2									
37	phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
38	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	616-106-00-0	237-199-0	13684-63-4							
39	4-nitrophenol; p-nitrophenol				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	609-015-00-2	202-811-7	100-02-7							
40	hexachlorobutadiene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
		201-765-5	87-68-3							
41	1,1,2,2-tetrachloroethane				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	602-015-00-3	201-197-8	79-34-5							
42	1,2,3-trichloropropane				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	602-062-00-X	202-486-1	96-18-4							
43	barium { barium oxide }				210 mg/kg	1.117	234.466 mg/kg	0.0234 %	✓	
		215-127-9	1304-28-5							
Total:								0.596 %		

Key

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

Classification of sample: WS104

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

Sample details

Sample Name:	LoW Code:	
WS104	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				13 mg/kg	1.32	17.164 mg/kg	0.00172 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				3.2 mg/kg	2.775	8.881 mg/kg	0.000888 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				3.2 mg/kg	3.22	10.304 mg/kg	0.00103 %	✓	
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				0.2 mg/kg	1.142	0.228 mg/kg	0.0000228 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide }				1 mg/kg	1.462	1.462 mg/kg	0.000146 %	✓	
		215-160-9	1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
7	copper { dicopper oxide; copper (I) oxide }				24 mg/kg	1.126	27.021 mg/kg	0.0027 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	160 mg/kg		160 mg/kg	0.016 %	✓	
	082-001-00-6									
9	mercury { mercury dichloride }				<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.0000677 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel chromate }				18 mg/kg	2.976	53.573 mg/kg	0.00536 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				<0.5 mg/kg	2.554	<1.277 mg/kg	<0.000128 %		<LOD
	034-002-00-8									
12	zinc { zinc sulphate }				350 mg/kg	2.469	864.254 mg/kg	0.0864 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
13	TPH (C6 to C40) petroleum group		TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, }				<0.1 mg/kg	1.884	<0.188 mg/kg	<0.0000188 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
	ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }									
	006-007-00-5									
15	pH				5.1 pH		5.1 pH	5.1 pH		
			PH							
16	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
17	acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8							
18	acenaphthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9							
19	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7							
20	phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8							
21	anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7							
22	fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0							
23	pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0							
24	benzo[a]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
25	chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
26	benzo[b]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
27	benzo[k]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
28	benzo[a]pyrene; benzo[def]chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
29	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5							
30	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
31	benzo[ghi]perylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2							
32	phenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
33	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	616-106-00-0	237-199-0	13684-63-4							
34	barium { barium oxide }				130 mg/kg	1.117	145.146 mg/kg	0.0145 %	✓	
		215-127-9	1304-28-5							
Total:								0.13 %		

Key

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

Classification of sample: WS105

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

Sample details

Sample Name:	LoW Code:	
WS105	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.5 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				15	mg/kg	1.32	19.805	mg/kg	0.00198 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	beryllium { beryllium oxide }				2.1	mg/kg	2.775	5.828	mg/kg	0.000583 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
3	boron { diboron trioxide; boric oxide }				2.1	mg/kg	3.22	6.762	mg/kg	0.000676 %	✓	
	005-008-00-8	215-125-8	1303-86-2									
4	cadmium { cadmium oxide }				<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0									
5	chromium in chromium(III) compounds { chromium(III) oxide }				0.8	mg/kg	1.462	1.169	mg/kg	0.000117 %	✓	
		215-160-9	1308-38-9									
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0									
7	copper { dicopper oxide; copper (I) oxide }				21	mg/kg	1.126	23.644	mg/kg	0.00236 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	550	mg/kg		550	mg/kg	0.055 %	✓	
	082-001-00-6											
9	mercury { mercury dichloride }				<0.05	mg/kg	1.353	<0.0677	mg/kg	<0.0000677 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
10	nickel { nickel chromate }				25	mg/kg	2.976	74.407	mg/kg	0.00744 %	✓	
	028-035-00-7	238-766-5	14721-18-7									
11	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				<0.5	mg/kg	2.554	<1.277	mg/kg	<0.000128 %		<LOD
	034-002-00-8											
12	zinc { zinc sulphate }				360	mg/kg	2.469	888.947	mg/kg	0.0889 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
13	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,				<0.1	mg/kg	1.884	<0.188	mg/kg	<0.0000188 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
	ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }									
	006-007-00-5									
15	pH				6.5 pH		6.5 pH	6.5 pH		
			PH							
16	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
17	acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8							
18	acenaphthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9							
19	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7							
20	phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8							
21	anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7							
22	fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0							
23	pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0							
24	benzo[a]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
25	chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
26	benzo[b]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
27	benzo[k]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
28	benzo[a]pyrene; benzo[def]chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
29	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5							
30	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
31	benzo[ghi]perylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2							
32	phenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
33	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	616-106-00-0	237-199-0	13684-63-4							
34	barium { barium oxide }				160 mg/kg	1.117	178.641 mg/kg	0.0179 %	✓	
		215-127-9	1304-28-5							
Total:								0.177 %		

Key

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

Classification of sample: WS106

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

Sample details

Sample Name:	LoW Code:	
WS106	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				8.6 mg/kg	1.32	11.355 mg/kg	0.00114 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				2.1 mg/kg	2.775	5.828 mg/kg	0.000583 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				2.1 mg/kg	3.22	6.762 mg/kg	0.000676 %	✓	
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				0.3 mg/kg	1.142	0.343 mg/kg	0.0000343 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide }				0.5 mg/kg	1.462	0.731 mg/kg	0.0000731 %	✓	
		215-160-9	1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
7	copper { dicopper oxide; copper (I) oxide }				24 mg/kg	1.126	27.021 mg/kg	0.0027 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	68 mg/kg		68 mg/kg	0.0068 %	✓	
	082-001-00-6									
9	mercury { mercury dichloride }				<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.0000677 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel chromate }				27 mg/kg	2.976	80.359 mg/kg	0.00804 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				<0.5 mg/kg	2.554	<1.277 mg/kg	<0.000128 %		<LOD
	034-002-00-8									
12	zinc { zinc sulphate }				280 mg/kg	2.469	691.403 mg/kg	0.0691 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
13	TPH (C6 to C40) petroleum group		TPH		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,				<0.1 mg/kg	1.884	<0.188 mg/kg	<0.0000188 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
	ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }									
	006-007-00-5									
15	pH				5.6 pH		5.6 pH	5.6 pH		
			PH							
16	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
17	acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8							
18	acenaphthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9							
19	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7							
20	phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8							
21	anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7							
22	fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0							
23	pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0							
24	benzo[a]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
25	chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
26	benzo[b]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
27	benzo[k]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
28	benzo[a]pyrene; benzo[def]chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
29	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5							
30	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
31	benzo[ghi]perylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2							
32	phenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
33	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	616-106-00-0	237-199-0	13684-63-4							
34	barium { barium oxide }				290 mg/kg	1.117	323.787 mg/kg	0.0324 %	✓	
		215-127-9	1304-28-5							
Total:								0.123 %		

Key

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

Classification of sample: WS107

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

Sample details

Sample Name:	WS107	LoW Code:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	0.5 m	Chapter:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
		Entry:	

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }				11	mg/kg	1.32	14.524	mg/kg	0.00145 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
2	beryllium { beryllium oxide }				1.5	mg/kg	2.775	4.163	mg/kg	0.000416 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
3	boron { diboron trioxide; boric oxide }				1.5	mg/kg	3.22	4.83	mg/kg	0.000483 %	✓	
	005-008-00-8	215-125-8	1303-86-2									
4	cadmium { cadmium oxide }				0.2	mg/kg	1.142	0.228	mg/kg	0.0000228 %	✓	
	048-002-00-0	215-146-2	1306-19-0									
5	chromium in chromium(III) compounds { chromium(III) oxide }				0.4	mg/kg	1.462	0.585	mg/kg	0.0000585 %	✓	
		215-160-9	1308-38-9									
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0									
7	copper { dicopper oxide; copper (I) oxide }				18	mg/kg	1.126	20.266	mg/kg	0.00203 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	230	mg/kg		230	mg/kg	0.023 %	✓	
	082-001-00-6											
9	mercury { mercury dichloride }				<0.05	mg/kg	1.353	<0.0677	mg/kg	<0.00000677 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
10	nickel { nickel chromate }				22	mg/kg	2.976	65.478	mg/kg	0.00655 %	✓	
	028-035-00-7	238-766-5	14721-18-7									
11	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				1.1	mg/kg	2.554	2.809	mg/kg	0.000281 %	✓	
	034-002-00-8											
12	zinc { zinc sulphate }				180	mg/kg	2.469	444.473	mg/kg	0.0444 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
13	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,				<0.1	mg/kg	1.884	<0.188	mg/kg	<0.0000188 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
	ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }									
	006-007-00-5									
15	pH				5.7 pH		5.7 pH	5.7 pH		
			PH							
16	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
17	acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8							
18	acenaphthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9							
19	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7							
20	phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8							
21	anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7							
22	fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0							
23	pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0							
24	benzo[a]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
25	chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
26	benzo[b]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
27	benzo[k]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
28	benzo[a]pyrene; benzo[def]chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
29	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5							
30	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
31	benzo[ghi]perylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2							
32	phenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
33	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	616-106-00-0	237-199-0	13684-63-4							
34	barium { barium oxide }				530 mg/kg	1.117	591.748 mg/kg	0.0592 %	✓	
		215-127-9	1304-28-5							
Total:								0.139 %		

Key

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

Classification of sample: WS108

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

Sample details

Sample Name:	WS108	LoW Code:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	0.5 m	Chapter:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
		Entry:	

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				2.6 mg/kg	1.32	3.433 mg/kg	0.000343 %	✔	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				0.5 mg/kg	2.775	1.388 mg/kg	0.000139 %	✔	
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				0.5 mg/kg	3.22	1.61 mg/kg	0.000161 %	✔	
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide }				0.4 mg/kg	1.462	0.585 mg/kg	0.0000585 %	✔	
		215-160-9	1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
7	copper { dicopper oxide; copper (I) oxide }				7.1 mg/kg	1.126	7.994 mg/kg	0.000799 %	✔	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	130 mg/kg		130 mg/kg	0.013 %	✔	
	082-001-00-6									
9	mercury { mercury dichloride }				<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.0000677 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel chromate }				9 mg/kg	2.976	26.786 mg/kg	0.00268 %	✔	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium selenosulfide and those specified elsewhere in this Annex }				<0.5 mg/kg	2.554	<1.277 mg/kg	<0.000128 %		<LOD
	034-002-00-8									
12	zinc { zinc sulphate }				100 mg/kg	2.469	246.93 mg/kg	0.0247 %	✔	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
13	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X 216-653-1 1634-04-4				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
15	benzene 601-020-00-8 200-753-7 71-43-2				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
16	toluene 601-021-00-3 203-625-9 108-88-3				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
17	ethylbenzene 601-023-00-4 202-849-4 100-41-4				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
18	xylene 601-022-00-9 202-422-2 [1] 95-47-6 [1] 203-396-5 [2] 106-42-3 [2] 203-576-3 [3] 108-38-3 [3] 215-535-7 [4] 1330-20-7 [4]				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
19	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex } 006-007-00-5				0.1 mg/kg	1.884	0.188 mg/kg	0.0000188 %	✓	
20	pH PH				5.4 pH		5.4 pH	5.4 pH		
21	naphthalene 601-052-00-2 202-049-5 91-20-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
22	acenaphthylene 205-917-1 208-96-8				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
23	acenaphthene 201-469-6 83-32-9				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
24	fluorene 201-695-5 86-73-7				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
25	phenanthrene 201-581-5 85-01-8				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
26	anthracene 204-371-1 120-12-7				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
27	fluoranthene 205-912-4 206-44-0				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
28	pyrene 204-927-3 129-00-0				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
29	benzo[a]anthracene 601-033-00-9 200-280-6 56-55-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
30	chrysene 601-048-00-0 205-923-4 218-01-9				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
31	benzo[b]fluoranthene 601-034-00-4 205-911-9 205-99-2				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
32	benzo[k]fluoranthene 601-036-00-5 205-916-6 207-08-9				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
33	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3 200-028-5 50-32-8				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
34	indeno[123-cd]pyrene 205-893-2 193-39-5				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
35	dibenz[a,h]anthracene 601-041-00-2 200-181-8 53-70-3				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
36	benzo[ghi]perylene 205-883-8 191-24-2				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
37	phenol 604-001-00-2 203-632-7 108-95-2				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
38	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate 616-106-00-0 237-199-0 13684-63-4				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
39	4-nitrophenol; p-nitrophenol 609-015-00-2 202-811-7 100-02-7				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
40	hexachlorobutadiene				0.01 mg/kg		0.01 mg/kg	0.000001 %	✓		
		201-765-5	87-68-3								
41	1,1,2,2-tetrachloroethane				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD	
	602-015-00-3	201-197-8	79-34-5								
42	1,2,3-trichloropropane				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD	
	602-062-00-X	202-486-1	96-18-4								
43	barium { barium oxide }				130 mg/kg	1.117	145.146 mg/kg	0.0145 %	✓		
		215-127-9	1304-28-5								
Total:								0.058 %			

Key

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

Classification of sample: WS108[2]

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

Sample details

Sample Name:	LoW Code:	
WS108[2]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				7.6 mg/kg	1.32	10.034 mg/kg	0.001 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				1.9 mg/kg	2.775	5.273 mg/kg	0.000527 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				1.9 mg/kg	3.22	6.118 mg/kg	0.000612 %	✓	
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				0.3 mg/kg	1.142	0.343 mg/kg	0.0000343 %	✓	
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide }				0.2 mg/kg	1.462	0.292 mg/kg	0.0000292 %	✓	
		215-160-9	1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
7	copper { dicopper oxide; copper (I) oxide }				21 mg/kg	1.126	23.644 mg/kg	0.00236 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	130 mg/kg		130 mg/kg	0.013 %	✓	
	082-001-00-6									
9	mercury { mercury dichloride }				<0.05 mg/kg	1.353	<0.0677 mg/kg	<0.0000677 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel chromate }				28 mg/kg	2.976	83.335 mg/kg	0.00833 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<0.5 mg/kg	2.554	<1.277 mg/kg	<0.000128 %		<LOD
	034-002-00-8									
12	zinc { zinc sulphate }				160 mg/kg	2.469	395.087 mg/kg	0.0395 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
13	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,				0.1 mg/kg	1.884	0.188 mg/kg	0.0000188 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
	ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }									
	006-007-00-5									
15	• pH		PH		5.6 pH		5.6 pH	5.6 pH		
16	naphthalene	601-052-00-2	202-049-5	91-20-3	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
17	• acenaphthylene		205-917-1	208-96-8	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
18	• acenaphthene		201-469-6	83-32-9	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
19	• fluorene		201-695-5	86-73-7	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
20	• phenanthrene		201-581-5	85-01-8	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
21	• anthracene		204-371-1	120-12-7	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
22	• fluoranthene		205-912-4	206-44-0	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
23	• pyrene		204-927-3	129-00-0	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
24	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
25	chrysene	601-048-00-0	205-923-4	218-01-9	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
26	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
27	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
28	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
29	• indeno[123-cd]pyrene		205-893-2	193-39-5	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
30	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
31	• benzo[ghi]perylene		205-883-8	191-24-2	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
32	phenol	604-001-00-2	203-632-7	108-95-2	<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
33	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate	616-106-00-0	237-199-0	13684-63-4	<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
34	• barium { • barium oxide }		215-127-9	1304-28-5	450 mg/kg	1.117	502.428 mg/kg	0.0502 %	✓	
Total:								0.117 %		

Key

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

Classification of sample: WS109

Hazardous Waste
 Classified as **17 05 03 ***
 in the List of Waste

Sample details

Sample Name:	LoW Code:	
WS109	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 03 * (Soil and stones containing hazardous substances)
0.2 m		

Hazard properties

HP 14: Ecotoxic "waste which presents or may present immediate or delayed risks for one or more sectors of the environment"

Hazard Statements hit:

Aquatic Chronic 1; H410 "Very toxic to aquatic life with long lasting effects."

Because of determinand:

zinc sulphate: (compound conc.: 1.161%)

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide } 033-003-00-0 215-481-4 1327-53-3				54	mg/kg	1.32	71.298	mg/kg	0.00713 %	✓	
2	beryllium { beryllium oxide } 004-003-00-8 215-133-1 1304-56-9				3.1	mg/kg	2.775	8.604	mg/kg	0.00086 %	✓	
3	boron { diboron trioxide; boric oxide } 005-008-00-8 215-125-8 1303-86-2				3.1	mg/kg	3.22	9.982	mg/kg	0.000998 %	✓	
4	cadmium { cadmium oxide } 048-002-00-0 215-146-2 1306-19-0				<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
5	chromium in chromium(III) compounds { chromium(III) oxide } 215-160-9 1308-38-9				18	mg/kg	1.462	26.308	mg/kg	0.00263 %	✓	
6	chromium in chromium(VI) compounds { chromium(VI) oxide } 024-001-00-0 215-607-8 1333-82-0				<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %		<LOD
7	copper { dicopper oxide; copper (I) oxide } 029-002-00-X 215-270-7 1317-39-1				14	mg/kg	1.126	15.762	mg/kg	0.00158 %	✓	
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) } 082-001-00-6			1	970	mg/kg		970	mg/kg	0.097 %	✓	
9	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				0.2	mg/kg	1.353	0.271	mg/kg	0.0000271 %	✓	
10	nickel { nickel chromate } 028-035-00-7 238-766-5 14721-18-7				42	mg/kg	2.976	125.003	mg/kg	0.0125 %	✓	
11	selenium { selenium compounds with the exception of cadmium selenide and those specified elsewhere in this Annex } 034-002-00-8				2.4	mg/kg	2.554	6.129	mg/kg	0.000613 %	✓	

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
12	zinc { zinc sulphate }				4700	mg/kg	2.469	11605.693	mg/kg	1.161 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
13	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4									
15	benzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2									
16	toluene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3									
17	ethylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4									
18	xylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
19	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				0.2	mg/kg	1.884	0.377	mg/kg	0.0000377 %	✓	
	006-007-00-5											
20	pH				6.8	pH		6.8	pH	6.8 pH		
			PH									
21	naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
22	acenaphthylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8									
23	acenaphthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9									
24	fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7									
25	phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8									
26	anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7									
27	fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0									
28	pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0									
29	benzo[a]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3									
30	chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9									
31	benzo[b]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2									
32	benzo[k]fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9									
33	benzo[a]pyrene; benzo[def]chrysene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8									
34	indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5									
35	dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
36	benzo[ghi]perylene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2									
37	phenol				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
38	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %			<LOD
	616-106-00-0	237-199-0	13684-63-4								
39	4-nitrophenol; p-nitrophenol				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
	609-015-00-2	202-811-7	100-02-7								
40	hexachlorobutadiene				0.01 mg/kg		0.01 mg/kg	0.000001 %	✓		
		201-765-5	87-68-3								
41	1,1,2,2-tetrachloroethane				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	602-015-00-3	201-197-8	79-34-5								
42	1,2,3-trichloropropane				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %			<LOD
	602-062-00-X	202-486-1	96-18-4								
43	barium { barium oxide }				930 mg/kg	1.117	1038.35 mg/kg	0.104 %	✓		
		215-127-9	1304-28-5								
Total:									1.389 %		

Key

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

Classification of sample: WSBH101R

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

Sample details

Sample Name:	LoW Code:	
WSBH101R	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.1 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	● pH				7.8 pH		7.8 pH	7.8 pH		
Total:								0%		

Key

- User supplied data
- Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: WSBH101R[2]

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

Sample details

Sample Name:	LoW Code:	
WSBH101R[2]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.2 m		

Hazard properties

None identified

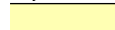



Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide } 033-003-00-0 215-481-4 1327-53-3				97 mg/kg	1.32	128.072 mg/kg	0.0128 %	✓	
2	beryllium { beryllium oxide } 004-003-00-8 215-133-1 1304-56-9				1.1 mg/kg	2.775	3.053 mg/kg	0.000305 %	✓	
3	boron { diboron trioxide; boric oxide } 005-008-00-8 215-125-8 1303-86-2				1.1 mg/kg	3.22	3.542 mg/kg	0.000354 %	✓	
4	cadmium { cadmium oxide } 048-002-00-0 215-146-2 1306-19-0				<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
5	chromium in chromium(VI) compounds { chromium(VI) oxide } 024-001-00-0 215-607-8 1333-82-0				<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
6	copper { dicopper oxide; copper (I) oxide } 029-002-00-X 215-270-7 1317-39-1				60 mg/kg	1.126	67.553 mg/kg	0.00676 %	✓	
7	mercury { mercury dichloride } 080-010-00-X 231-299-8 7487-94-7				1 mg/kg	1.353	1.353 mg/kg	0.000135 %	✓	
8	nickel { nickel chromate } 028-035-00-7 238-766-5 14721-18-7				54 mg/kg	2.976	160.718 mg/kg	0.0161 %	✓	
9	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex } 034-002-00-8				3 mg/kg	2.554	7.661 mg/kg	0.000766 %	✓	
10	TPH (C6 to C40) petroleum group TPH				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
11	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X 216-653-1 1634-04-4				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
12	benzene 601-020-00-8 200-753-7 71-43-2				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
13	toluene 601-021-00-3 203-625-9 108-88-3				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
14	ethylbenzene 601-023-00-4 202-849-4 100-41-4				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
15	xylene 601-022-00-9 202-422-2 [1] 95-47-6 [1] 203-396-5 [2] 106-42-3 [2]				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
		203-576-3 [3] 215-535-7 [4]	108-38-3 [3] 1330-20-7 [4]									
16		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }			0.1	mg/kg	1.884	0.188	mg/kg	0.0000188 %	✓	
		006-007-00-5										
17			pH		7.5	pH		7.5	pH	7.5 pH		
18		naphthalene			<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-052-00-2	202-049-5	91-20-3								
19		acenaphthylene			<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8								
20		acenaphthene			<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9								
21		fluorene			<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7								
22		phenanthrene			0.3	mg/kg		0.3	mg/kg	0.00003 %	✓	
			201-581-5	85-01-8								
23		anthracene			<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7								
24		fluoranthene			0.3	mg/kg		0.3	mg/kg	0.00003 %	✓	
			205-912-4	206-44-0								
25		pyrene			0.3	mg/kg		0.3	mg/kg	0.00003 %	✓	
			204-927-3	129-00-0								
26		benzo[a]anthracene			0.1	mg/kg		0.1	mg/kg	0.00001 %	✓	
			601-033-00-9	200-280-6	56-55-3							
27		chrysene			0.1	mg/kg		0.1	mg/kg	0.00001 %	✓	
			601-048-00-0	205-923-4	218-01-9							
28		benzo[b]fluoranthene			0.1	mg/kg		0.1	mg/kg	0.00001 %	✓	
			601-034-00-4	205-911-9	205-99-2							
29		benzo[k]fluoranthene			<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			601-036-00-5	205-916-6	207-08-9							
30		benzo[a]pyrene; benzo[def]chrysene			0.2	mg/kg		0.2	mg/kg	0.00002 %	✓	
			601-032-00-3	200-028-5	50-32-8							
31		indeno[123-cd]pyrene			<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5								
32		dibenz[a,h]anthracene			<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			601-041-00-2	200-181-8	53-70-3							
33		benzo[ghi]perylene			<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2								
34		phenol			<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			604-001-00-2	203-632-7	108-95-2							
35		phenmedipham (ISO); methyl 3-(3-methylcarbaniloxy)carbanilate			<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
			616-106-00-0	237-199-0	13684-63-4							
36		4-nitrophenol; p-nitrophenol			<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			609-015-00-2	202-811-7	100-02-7							
37		hexachlorobutadiene			<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			201-765-5	87-68-3								
38		1,1,2,2-tetrachloroethane			<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			602-015-00-3	201-197-8	79-34-5							
39		1,2,3-trichloropropane			<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			602-062-00-X	202-486-1	96-18-4							
40		barium { barium oxide }			130	mg/kg	1.117	145.146	mg/kg	0.0145 %	✓	
			215-127-9	1304-28-5								
Total:										0.0532 %		

Key

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

Classification of sample: WSBH101R[3]

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

Sample details

Sample Name: WSBH101R[3]	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth: 0.5 m	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	83	mg/kg	1.32	109.587	mg/kg	0.011 %	✔	
2	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1.3	mg/kg	2.775	3.608	mg/kg	0.000361 %	✔	
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2	1.3	mg/kg	3.22	4.186	mg/kg	0.000419 %	✔	
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0	<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9	54	mg/kg	1.462	78.924	mg/kg	0.00789 %	✔	
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	110	mg/kg	1.126	123.848	mg/kg	0.0124 %	✔	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7	1.9	mg/kg	1.353	2.572	mg/kg	0.000257 %	✔	
9	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7	39	mg/kg	2.976	116.074	mg/kg	0.0116 %	✔	
10	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8			2.6	mg/kg	2.554	6.639	mg/kg	0.000664 %	✔	
11	TPH (C6 to C40) petroleum group			TPH	<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
12	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5			0.1	mg/kg	1.884	0.188	mg/kg	0.0000188 %	✔	
13	pH			PH	7.2	pH		7.2	pH	7.2 pH		

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
14	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
15	acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8							
16	acenaphthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9							
17	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7							
18	phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8							
19	anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7							
20	fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0							
21	pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0							
22	benzo[a]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
23	chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
24	benzo[b]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
25	benzo[k]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
26	benzo[a]pyrene; benzo[def]chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
27	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5							
28	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
29	benzo[ghi]perylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2							
30	phenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
31	phenmedipham (ISO); methyl 3-(3-methylcarbaniloxy)carbanilate				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	616-106-00-0	237-199-0	13684-63-4							
32	barium { barium oxide }				89 mg/kg	1.117	99.369 mg/kg	0.00994 %	✓	
		215-127-9	1304-28-5							
Total:								0.0559 %		

Key

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

Classification of sample: WSBH101R[4]

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

Sample details

Sample Name:	LoW Code:	
WSBH101R[4]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	● pH				7.6 pH		7.6 pH	7.6 pH		
Total:								0%		

Key

- User supplied data
- Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: WSTP101

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

Sample details

Sample Name:	LoW Code:	
WSTP101	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.85 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	●	pH			7.9 pH		7.9 pH	7.9 pH		
			PH							
Total:								0%		

Key

- User supplied data
- Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: WSTP101[2]

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

Sample details

Sample Name:	LoW Code:	
WSTP101[2]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1.2 m		

Hazard properties

None identified

Determinands


Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	● pH				7.7 pH		7.7 pH	7.7 pH		
Total:								0%		

Key

- User supplied data
- Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: WSTP101[3]



Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample Name:	LoW Code:	
WSTP101[3]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 03 * (Soil and stones containing hazardous substances)
1.2-1.56 m		

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1A; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

lead compounds with the exception of those specified elsewhere in this Annex (worst case): (Note 1 conc.: 0.87%)

HP 10: Toxic for reproduction "waste which has adverse effects on sexual function and fertility in adult males and females, as well as developmental toxicity in the offspring"

Hazard Statements hit:

Repr. 1A; H360Df "May damage the unborn child. Suspected of damaging fertility."

Because of determinand:

lead compounds with the exception of those specified elsewhere in this Annex (worst case): (Note 1 conc.: 0.87%)

HP 14: Ecotoxic "waste which presents or may present immediate or delayed risks for one or more sectors of the environment"

Hazard Statements hit:

Aquatic Chronic 1; H410 "Very toxic to aquatic life with long lasting effects."

Because of determinand:

lead compounds with the exception of those specified elsewhere in this Annex (worst case): (Note 1 conc.: 0.87%)

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	arsenic { arsenic trioxide }				250	mg/kg	1.32	330.081 mg/kg	0.033 %	✓	
	033-003-00-0	215-481-4	1327-53-3								
2	beryllium { beryllium oxide }				2.9	mg/kg	2.775	8.048 mg/kg	0.000805 %	✓	
	004-003-00-8	215-133-1	1304-56-9								
3	boron { diboron trioxide; boric oxide }				2.9	mg/kg	3.22	9.338 mg/kg	0.000934 %	✓	
	005-008-00-8	215-125-8	1303-86-2								
4	cadmium { cadmium oxide }				<0.2	mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0								
5	chromium in chromium(III) compounds { chromium(III) oxide }				80	mg/kg	1.462	116.924 mg/kg	0.0117 %	✓	
		215-160-9	1308-38-9								

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used	
	CLP index number	EC Number	CAS Number										
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	1	<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %	✓	<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	1	800	mg/kg	1.126	900.711	mg/kg	0.0901 %	✓	
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	8700	mg/kg		8700	mg/kg	0.87 %	✓	
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7	1	1	mg/kg	1.353	1.353	mg/kg	0.000135 %	✓	
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7	1	120	mg/kg	2.976	357.152	mg/kg	0.0357 %	✓	
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8			1	3.3	mg/kg	2.554	8.427	mg/kg	0.000843 %	✓	
12	TPH (C6 to C40) petroleum group			TPH	1	<10	mg/kg		<10	mg/kg	<0.001 %	✓	<LOD
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5			1	0.1	mg/kg	1.884	0.188	mg/kg	0.0000188 %	✓	
14	pH			PH	1	7.5	pH		7.5	pH	7.5 pH	✓	
15	naphthalene	601-052-00-2	202-049-5	91-20-3	1	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	✓	<LOD
16	acenaphthylene		205-917-1	208-96-8	1	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	✓	<LOD
17	acenaphthene		201-469-6	83-32-9	1	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	✓	<LOD
18	fluorene		201-695-5	86-73-7	1	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	✓	<LOD
19	phenanthrene		201-581-5	85-01-8	1	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	✓	<LOD
20	anthracene		204-371-1	120-12-7	1	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	✓	<LOD
21	fluoranthene		205-912-4	206-44-0	1	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	✓	<LOD
22	pyrene		204-927-3	129-00-0	1	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	✓	<LOD
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	1	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	✓	<LOD
24	chrysene	601-048-00-0	205-923-4	218-01-9	1	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	✓	<LOD
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	1	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	✓	<LOD
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	1	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	✓	<LOD
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	1	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	✓	<LOD
28	indeno[123-cd]pyrene		205-893-2	193-39-5	1	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	✓	<LOD
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	1	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	✓	<LOD
30	benzo[ghi]perylene		205-883-8	191-24-2	1	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	✓	<LOD
31	phenol	604-001-00-2	203-632-7	108-95-2	1	<0.3	mg/kg		<0.3	mg/kg	<0.00003 %	✓	<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
32	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	616-106-00-0	237-199-0	13684-63-4							
33	barium { ■ barium oxide }				130 mg/kg	1.117	145.146 mg/kg	0.0145 %	✓	
		215-127-9	1304-28-5							
Total:								1.059 %		

Key

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

Classification of sample: WSTP102

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

Sample details

Sample Name:	LoW Code:	
WSTP102	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.1 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	● pH				7.8 pH		7.8 pH	7.8 pH		
Total:								0%		

Key

- User supplied data
- Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: WSTP102[2]

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

Sample details

Sample Name:	LoW Code:	
WSTP102[2]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.5 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)


#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	arsenic { arsenic trioxide }				64 mg/kg	1.32	84.501 mg/kg	0.00845 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
2	beryllium { beryllium oxide }				3.3 mg/kg	2.775	9.159 mg/kg	0.000916 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
3	boron { diboron trioxide; boric oxide }				3.3 mg/kg	3.22	10.626 mg/kg	0.00106 %	✓	
	005-008-00-8	215-125-8	1303-86-2							
4	cadmium { cadmium oxide }				<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0							
5	chromium in chromium(III) compounds { chromium(III) oxide }				16 mg/kg	1.462	23.385 mg/kg	0.00234 %	✓	
		215-160-9	1308-38-9							
6	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
7	copper { dicopper oxide; copper (I) oxide }				34 mg/kg	1.126	38.28 mg/kg	0.00383 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }			1	960 mg/kg		960 mg/kg	0.096 %	✓	
	082-001-00-6									
9	mercury { mercury dichloride }				1.2 mg/kg	1.353	1.624 mg/kg	0.000162 %	✓	
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel chromate }				67 mg/kg	2.976	199.41 mg/kg	0.0199 %	✓	
	028-035-00-7	238-766-5	14721-18-7							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				0.8 mg/kg	2.554	2.043 mg/kg	0.000204 %	✓	
	034-002-00-8									
12	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<0.1 mg/kg	1.884	<0.188 mg/kg	<0.0000188 %		<LOD
	006-007-00-5									

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
14	• pH		PH		7.8	pH		7.8	pH	7.8 pH		
15	naphthalene	601-052-00-2	202-049-5	91-20-3	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
16	• acenaphthylene		205-917-1	208-96-8	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
17	• acenaphthene		201-469-6	83-32-9	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
18	• fluorene		201-695-5	86-73-7	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
19	• phenanthrene		201-581-5	85-01-8	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
20	• anthracene		204-371-1	120-12-7	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
21	• fluoranthene		205-912-4	206-44-0	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
22	• pyrene		204-927-3	129-00-0	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
24	chrysene	601-048-00-0	205-923-4	218-01-9	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
28	• indeno[123-cd]pyrene		205-893-2	193-39-5	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
30	• benzo[ghi]perylene		205-883-8	191-24-2	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
31	phenol	604-001-00-2	203-632-7	108-95-2	<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
32	phenmedipham (ISO); methyl 3-(3-methylcarbaniloxy)carbanilate	616-106-00-0	237-199-0	13684-63-4	<0.3	mg/kg		<0.3	mg/kg	<0.00003 %		<LOD
33	• barium { • barium oxide }		215-127-9	1304-28-5	200	mg/kg	1.117	223.301	mg/kg	0.0223 %	✓	
Total:										0.157 %		

Key

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

Classification of sample: WSTP102[3]



Hazardous Waste
Classified as **17 05 03 ***
in the List of Waste

Sample details

Sample Name:	LoW Code:	
WSTP102[3]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 03 * (Soil and stones containing hazardous substances)
1.2-1.56 m		

Hazard properties

HP 7: Carcinogenic "waste which induces cancer or increases its incidence"

Hazard Statements hit:

Carc. 1A; H350 "May cause cancer [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

lead compounds with the exception of those specified elsewhere in this Annex (worst case): (Note 1 conc.: 0.98%)

HP 10: Toxic for reproduction "waste which has adverse effects on sexual function and fertility in adult males and females, as well as developmental toxicity in the offspring"

Hazard Statements hit:

Repr. 1A; H360Df "May damage the unborn child. Suspected of damaging fertility."

Because of determinand:

lead compounds with the exception of those specified elsewhere in this Annex (worst case): (Note 1 conc.: 0.98%)

HP 14: Ecotoxic "waste which presents or may present immediate or delayed risks for one or more sectors of the environment"

Hazard Statements hit:

Aquatic Chronic 1; H410 "Very toxic to aquatic life with long lasting effects."

Because of determinand:

lead compounds with the exception of those specified elsewhere in this Annex (worst case): (Note 1 conc.: 0.98%)

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	arsenic { arsenic trioxide }				110	mg/kg	1.32	145.236 mg/kg	0.0145 %	✓	
	033-003-00-0	215-481-4	1327-53-3								
2	beryllium { beryllium oxide }				1.4	mg/kg	2.775	3.885 mg/kg	0.000389 %	✓	
	004-003-00-8	215-133-1	1304-56-9								
3	boron { diboron trioxide; boric oxide }				1.4	mg/kg	3.22	4.508 mg/kg	0.000451 %	✓	
	005-008-00-8	215-125-8	1303-86-2								
4	cadmium { cadmium oxide }				<0.2	mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0								
5	chromium in chromium(III) compounds { chromium(III) oxide }				12	mg/kg	1.462	17.539 mg/kg	0.00175 %	✓	
		215-160-9	1308-38-9								

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	1	<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %	<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		240	mg/kg	1.126	270.213	mg/kg	0.027 %	✓
8	lead { lead compounds with the exception of those specified elsewhere in this Annex (worst case) }	082-001-00-6			1	9800	mg/kg		9800	mg/kg	0.98 %	✓
9	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		1.2	mg/kg	1.353	1.624	mg/kg	0.000162 %	✓
10	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		68	mg/kg	2.976	202.386	mg/kg	0.0202 %	✓
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				2.5	mg/kg	2.554	6.384	mg/kg	0.000638 %	✓
12	TPH (C6 to C40) petroleum group			TPH		<10	mg/kg		<10	mg/kg	<0.001 %	<LOD
13	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<0.1	mg/kg	1.884	<0.188	mg/kg	<0.0000188 %	<LOD
14	pH			PH		7.7	pH		7.7	pH	7.7 pH	
15	naphthalene	601-052-00-2	202-049-5	91-20-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
16	acenaphthylene		205-917-1	208-96-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
17	acenaphthene		201-469-6	83-32-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
18	fluorene		201-695-5	86-73-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
19	phenanthrene		201-581-5	85-01-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
20	anthracene		204-371-1	120-12-7		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
21	fluoranthene		205-912-4	206-44-0		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
22	pyrene		204-927-3	129-00-0		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
23	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
24	chrysene	601-048-00-0	205-923-4	218-01-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
25	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
26	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
27	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
28	indeno[123-cd]pyrene		205-893-2	193-39-5		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
29	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
30	benzo[ghi]perylene		205-883-8	191-24-2		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %	<LOD
31	phenol	604-001-00-2	203-632-7	108-95-2		<0.3	mg/kg		<0.3	mg/kg	<0.00003 %	<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
32	phenmedipham (ISO); methyl 3-(3-methylcarbaniloxy)carbanilate				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	616-106-00-0	237-199-0	13684-63-4							
33	barium { barium oxide }				80 mg/kg	1.117	89.32 mg/kg	0.00893 %	✓	
		215-127-9	1304-28-5							
Total:								1.056 %		

Key

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

Classification of sample: WSTP103

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

Sample details

Sample Name: WSTP103	LoW Code: Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth: 0.5 m	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	72	mg/kg	1.32	95.063	mg/kg	0.00951 %	✔	
2	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9	1	mg/kg	2.775	2.775	mg/kg	0.000278 %	✔	
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2	1	mg/kg	3.22	3.22	mg/kg	0.000322 %	✔	
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0	<0.2	mg/kg	1.142	<0.228	mg/kg	<0.0000228 %		<LOD
5	chromium in chromium(III) compounds { chromium(III) oxide }		215-160-9	1308-38-9	48	mg/kg	1.462	70.155	mg/kg	0.00702 %	✔	
6	chromium in chromium(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0	<1	mg/kg	1.923	<1.923	mg/kg	<0.000192 %		<LOD
7	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	100	mg/kg	1.126	112.589	mg/kg	0.0113 %	✔	
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7	1.1	mg/kg	1.353	1.489	mg/kg	0.000149 %	✔	
9	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7	33	mg/kg	2.976	98.217	mg/kg	0.00982 %	✔	
10	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8			1.6	mg/kg	2.554	4.086	mg/kg	0.000409 %	✔	
11	TPH (C6 to C40) petroleum group			TPH	<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
12	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5			0.1	mg/kg	1.884	0.188	mg/kg	0.0000188 %	✔	
13	pH			PH	7.9	pH		7.9	pH	7.9 pH		

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
14	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
15	acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8							
16	acenaphthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9							
17	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7							
18	phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8							
19	anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7							
20	fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0							
21	pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0							
22	benzo[a]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
23	chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
24	benzo[b]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
25	benzo[k]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
26	benzo[a]pyrene; benzo[def]chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
27	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5							
28	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
29	benzo[ghi]perylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2							
30	phenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
31	phenmedipham (ISO); methyl 3-(3-methylcarbaniloxy)carbanilate				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	616-106-00-0	237-199-0	13684-63-4							
32	barium { barium oxide }				75 mg/kg	1.117	83.738 mg/kg	0.00837 %	✓	
		215-127-9	1304-28-5							
Total:								0.0486 %		

Key

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

Classification of sample: WSTP103[2]

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

Sample details

Sample Name:	LoW Code:	
WSTP103[2]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	● pH				8 pH		8 pH	8pH		
Total:								0%		

Key

- User supplied data
- Determinand defined or amended by HazWasteOnline (see Appendix A)

Classification of sample: WSTP105

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

Sample details

Sample Name:	LoW Code:	
WSTP105	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.5 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	cadmium { cadmium oxide }				<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0							
2	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
3	mercury { mercury dichloride }				1 mg/kg	1.353	1.353 mg/kg	0.000135 %	✓	
	080-010-00-X	231-299-8	7487-94-7							
4	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
5	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				0.2 mg/kg	1.884	0.377 mg/kg	0.0000377 %	✓	
	006-007-00-5									
6	pH				7.8 pH		7.8 pH	7.8 pH		
			PH							
7	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
8	acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8							
9	acenaphthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9							
10	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7							
11	phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8							
12	anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7							
13	fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0							
14	pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0							
15	benzo[a]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
16	chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
17	benzo[b]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
18	benzo[k]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
19	benzo[a]pyrene; benzo[def]chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
20	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5							
21	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
22	benzo[ghi]perylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2							
23	phenol				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
24	phenmedipham (ISO); methyl 3-(3-methylcarbaniloxy)carbanilate				<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
	616-106-00-0	237-199-0	13684-63-4							
Total:								0.00161 %		

Key

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

Classification of sample: WSTP106

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

Sample details

Sample Name:	LoW Code:	
WSTP106	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.5 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	cadmium { cadmium oxide }				<0.2 mg/kg	1.142	<0.228 mg/kg	<0.0000228 %		<LOD
	048-002-00-0	215-146-2	1306-19-0							
2	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
3	mercury { mercury dichloride }				0.38 mg/kg	1.353	0.514 mg/kg	0.0000514 %	✓	
	080-010-00-X	231-299-8	7487-94-7							
4	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
5	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
6	benzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
7	toluene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
8	ethylbenzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
9	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
10	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				0.2 mg/kg	1.884	0.377 mg/kg	0.0000377 %	✓	
	006-007-00-5									
11	pH				7.9 pH		7.9 pH	7.9 pH		
			PH							
12	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
13	acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
14	● acenaphthene	201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
15	● fluorene	201-695-5	86-73-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
16	● phenanthrene	201-581-5	85-01-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
17	● anthracene	204-371-1	120-12-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
18	● fluoranthene	205-912-4	206-44-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
19	● pyrene	204-927-3	129-00-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
20	benzo[a]anthracene	601-033-00-9	200-280-6		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
21	chrysene	601-048-00-0	205-923-4		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
22	benzo[b]fluoranthene	601-034-00-4	205-911-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
23	benzo[k]fluoranthene	601-036-00-5	205-916-6		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
24	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
25	● indeno[123-cd]pyrene	205-893-2	193-39-5		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
26	dibenz[a,h]anthracene	601-041-00-2	200-181-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
27	● benzo[ghi]perylene	205-883-8	191-24-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
28	phenol	604-001-00-2	203-632-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
29	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate	616-106-00-0	237-199-0		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
30	4-nitrophenol; p-nitrophenol	609-015-00-2	202-811-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
31	● hexachlorobutadiene	201-765-5	87-68-3		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
32	1,1,2,2-tetrachloroethane	602-015-00-3	201-197-8		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
33	1,2,3-trichloropropane	602-062-00-X	202-486-1		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
Total:								0.00152 %		

Key

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

Classification of sample: WSTP107

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

Sample details

Sample Name:	LoW Code:	
WSTP107	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1 m		

Hazard properties

None identified

Determinands

Moisture content: 0% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	cadmium { cadmium oxide }				0.2 mg/kg	1.142	0.228 mg/kg	0.0000228 %	✔	
	048-002-00-0	215-146-2	1306-19-0							
2	chromium in chromium(VI) compounds { chromium(VI) oxide }				<1 mg/kg	1.923	<1.923 mg/kg	<0.000192 %		<LOD
	024-001-00-0	215-607-8	1333-82-0							
3	mercury { mercury dichloride }				1.4 mg/kg	1.353	1.895 mg/kg	0.000189 %	✔	
	080-010-00-X	231-299-8	7487-94-7							
4	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
5	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	603-181-00-X	216-653-1	1634-04-4							
6	benzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
7	toluene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
8	ethylbenzene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
9	xylene				<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
10	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				0.1 mg/kg	1.884	0.188 mg/kg	0.0000188 %	✔	
	006-007-00-5									
11	pH				7.9 pH		7.9 pH	7.9 pH		
			PH							
12	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
13	acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8							

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
14	● acenaphthene	201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
15	● fluorene	201-695-5	86-73-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
16	● phenanthrene	201-581-5	85-01-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
17	● anthracene	204-371-1	120-12-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
18	● fluoranthene	205-912-4	206-44-0		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
19	● pyrene	204-927-3	129-00-0		0.2 mg/kg		0.2 mg/kg	0.00002 %	✓	
20	benzo[a]anthracene	601-033-00-9	200-280-6		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
21	chrysene	601-048-00-0	205-923-4		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
22	benzo[b]fluoranthene	601-034-00-4	205-911-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
23	benzo[k]fluoranthene	601-036-00-5	205-916-6		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
24	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
25	● indeno[123-cd]pyrene	205-893-2	193-39-5		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
26	dibenz[a,h]anthracene	601-041-00-2	200-181-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
27	● benzo[ghi]perylene	205-883-8	191-24-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
28	phenol	604-001-00-2	203-632-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
29	phenmedipham (ISO); methyl 3-(3-methylcarbaniloyloxy)carbanilate	616-106-00-0	237-199-0		<0.3 mg/kg		<0.3 mg/kg	<0.00003 %		<LOD
30	4-nitrophenol; p-nitrophenol	609-015-00-2	202-811-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
31	● hexachlorobutadiene	201-765-5	87-68-3		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
32	1,1,2,2-tetrachloroethane	602-015-00-3	201-197-8		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
33	1,2,3-trichloropropane	602-062-00-X	202-486-1		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
Total:								0.00165 %		

Key

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

Appendix A: Classifier defined and non CLP determinands

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

Conversion factor: 1.462

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Repr. 1B H360FD , Skin Sens. 1 H317 , Resp. Sens. 1 H334 , Skin Irrit. 2 H315 , STOT SE 3 H335 , Eye Irrit. 2 H319 , Acute Tox. 4 H302 , Acute Tox. 4 H332

lead compounds with the exception of those specified elsewhere in this Annex (worst case)

CLP index number: 082-001-00-6

Description/Comments: Worst Case: IARC considers lead compounds Group 1; Carcinogenic to humans; Lead REACH Consortium considers some lead compounds Carcinogenic category 1A

Data source: Regulation 1272/2008/EC - Classification, labelling and packaging of substances and mixtures. (CLP)

Additional Hazard Statement(s): Carc. 1A H350

Reason for additional Hazards Statement(s)/Risk Phrase(s):

03 Jun 2015 - Carc. 1A H350 hazard statement sourced from: IARC Group 2A (Sup 7, 87) 2006; Lead REACH Consortium www.reach-lead.eu/substanceinformation.html (worst case lead compounds). Review date 29/09/2015**TPH (C6 to C40) petroleum group** (CAS Number: TPH)

Description/Comments: Hazard statements taken from WM3 1st Edition 2015; Risk phrases: WM2 3rd Edition 2013

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

Hazard Statements: Aquatic Chronic 2 H411 , Repr. 2 H361d , Carc. 1B H350 , Muta. 1B H340 , STOT RE 2 H373 , Asp. Tox. 1 H304 , Flam. Liq. 3 H226

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

CLP index number: 601-023-00-4

Description/Comments:

Data source: Commission Regulation (EU) No 605/2014 – 6th Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP6)

Additional Hazard Statement(s): Carc. 2 H351

Reason for additional Hazards Statement(s)/Risk Phrase(s):

03 Jun 2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2B (77) 2000

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

CLP index number: 006-007-00-5

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

Data source: Commission Regulation (EC) No 790/2009 - 1st Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP1)

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

Reason for additional Hazards Statement(s)/Risk Phrase(s):

14 Dec 2015 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

pH (CAS Number: PH)

Description/Comments: Appendix C4

Data source: WM3 1st Edition 2015

Data source date: 25 May 2015

Hazard Statements: None.

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

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

Hazard Statements: Skin Irrit. 2 H315 , STOT SE 3 H335 , Eye Irrit. 2 H319 , Acute Tox. 1 H310 , Acute Tox. 1 H330 , Acute Tox. 4 H302

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

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17 Jul 2015

Hazard Statements: Aquatic Chronic 2 H411 , Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Skin Irrit. 2 H315 , STOT SE 3 H335 , Eye Irrit. 2 H319

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

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

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

Description/Comments: Data from C&L Inventory Database
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 06 Aug 2015
Hazard Statements: Skin Irrit. 2 H315 , Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Skin Sens. 1 H317 , Carc. 2 H351 , STOT SE 3 H335 , Eye Irrit. 2 H319 , Acute Tox. 4 H302

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

Description/Comments: Data from C&L Inventory Database
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 17 Jul 2015
Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Skin Sens. 1 H317 , Skin Irrit. 2 H315 , STOT SE 3 H335 , Eye Irrit. 2 H319

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

Description/Comments: Data from C&L Inventory Database
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 21 Aug 2015
Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Acute Tox. 4 H302

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

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

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

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

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

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

• **hexachlorobutadiene** (EC Number: 201-765-5, CAS Number: 87-68-3)

Description/Comments: VOC; Data from C&L Inventory Database; IARC considers substance Group 3;
Data source: <https://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 02 Mar 2017
Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , STOT SE 2 H371 , Repr. 2 H361 , Carc. 2 H351 , Acute Tox. 2 H330 , Eye Irrit. 2 H319 , Skin Sens. 1 H317 , Skin Irrit. 2 H315 , Acute Tox. 2 H310 , Acute Tox. 3 H301

• **barium oxide** (EC Number: 215-127-9, CAS Number: 1304-28-5)

Conversion factor: 1.117
Description/Comments: Data from C&L Inventory Database; No entries in Registered Substances Database, IARC or Pesticide Properties Database
Data source: <http://clp-inventory.echa.europa.eu/SummaryOfClassAndLabelling.aspx?SubstanceID=88825&HarmOnly=no?fc=true&lang=en>
Data source date: 02 Jun 2014
Hazard Statements: Skin Irrit. 2 H315 , STOT SE 3 H335 , Eye Irrit. 2 H319 , Skin Corr. 1A H314 , Acute Tox. 3 H301 , Acute Tox. 4 H302 , Acute Tox. 4 H332

Appendix B: Rationale for selection of metal species

arsenic (arsenic trioxide)

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

beryllium {beryllium oxide}

Reasonable case CLP species based on hazard statements/molecular weight. Industrial sources include: most common (non alloy) form, used in ceramics (edit as required)

boron {diboron trioxide; boric oxide}

Reasonable case CLP species based on hazard statements/ molecular weight, physical form and low solubility. Industrial sources include: fluxing agent for glass/enamels; additive for fibre optics, borosilicate glass (edit as required)

cadmium {cadmium oxide}

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

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

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

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

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

copper {dicopper oxide; copper (I) oxide}

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

lead {lead compounds with the exception of those specified elsewhere in this Annex (worst case)}

Downgraded as species unlikely to be lead chromate due to the limited concentration of CrVI recorded on site

mercury {mercury dichloride}

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

nickel {nickel chromate}

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

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

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

zinc {zinc sulphate}

Downgraded as species unlikely to be zinc chromate due to the limited concentration of CrVI recorded on site

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

Harmonised group entry used as most reasonable case as complex cyanides and those specified elsewhere in the annex are not likely to be present in this soil: [Note conversion factor based on a worst case compound: sodium cyanide] (edit as required)

barium {barium oxide}

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

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018
 HazWasteOnline Classification Engine Version: 2019.344.4102.8212 (10 Dec 2019)
 HazWasteOnline Database: 2019.344.4102.8212 (10 Dec 2019)

This classification utilises the following guidance and legislation:

WM3 v1.1 - Waste Classification - 1st Edition v1.1 - May 2018

CLP Regulation - Regulation 1272/2008/EC of 16 December 2008

1st ATP - Regulation 790/2009/EC of 10 August 2009

2nd ATP - Regulation 286/2011/EC of 10 March 2011

3rd ATP - Regulation 618/2012/EU of 10 July 2012

4th ATP - Regulation 487/2013/EU of 8 May 2013

Correction to 1st ATP - Regulation 758/2013/EU of 7 August 2013

5th ATP - Regulation 944/2013/EU of 2 October 2013

6th ATP - Regulation 605/2014/EU of 5 June 2014

WFD Annex III replacement - Regulation 1357/2014/EU of 18 December 2014

Revised List of Wastes 2014 - Decision 2014/955/EU of 18 December 2014

7th ATP - Regulation 2015/1221/EU of 24 July 2015

8th ATP - Regulation (EU) 2016/918 of 19 May 2016

9th ATP - Regulation (EU) 2016/1179 of 19 July 2016

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

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

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

POPs Regulation 2004 - Regulation 850/2004/EC of 29 April 2004

1st ATP to POPs Regulation - Regulation 756/2010/EU of 24 August 2010

2nd ATP to POPs Regulation - Regulation 757/2010/EU of 24 August 2010

