OVG Manchester:

Appendix 7.3 – Engineering Interpretive Report

BUROHAPPOLD ENGINEERING

OVG Manchester Limited

Ground Engineering Interpretive Report

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Executive Summary

Site Setting

The Site is centred at National Grid Reference SJ 86841, 98878, located off Sportcity Way, Manchester M11 3DU. It is located to the north east of Manchester City Centre, approximately 2.1km north east of Manchester Piccadilly Rail Station. It is at approximately +60.6mOD and falls north to +56.8mOD. The Site is approximately 4.46ha and located within Etihad Campus. It is bound by Sportcity Way to the north, Alan Turing Way to the east, Ashton Canal to the south, and Joe Mercer Way to the west, in the ward of Ancoats and Beswick, Manchester.

History

Until the min-1800s, the site and surrounding area was occupied by agricultural land with the River Medlock meandering through the north-west of the Site. The Ashton canal and lock formed the southern boundary and Mill Lane the east. Victoria Gardens were located to the north and in part occupied the north of the site. By 1848, the River Medlock had been straightened and diverted further north, away from the site. Industrial works began to occupy the land south of the Canal during the early 1890s and residential development occupied the eastern part of the site. During the early 1900s the River Medlock was culverted, Forge Lane was constructed running north/south centrally through the site and other residential roads connecting Forge Lane to the residential developments. The largest change at this time was the development of Bradford Road Gas Works, which included tanks, gas holders, tramways and large buildings (some within the site boundary). By the early 1930s, there was further development to these gas works and developments to the industrial works to the south, beyond the Canal. There were no further significant changes to the site and its surroundings until late 1970s whereby the majority of these works were cleared, including buildings associated with Bradford Road Gas Works. Between the late 1980s and late 1990s there were changes to the land use east of Forge Lane within the site boundary and by 1995 Mill Lane developed into Alan Turing Way. By 2002, construction of the Etihad Stadium (formally Manchester Stadium) to the south was underway and road layouts in the surrounding area developed. A temporary BMX track occupied the site in 2009 and by 2010 the site was cleared.

Geological Setting

The ground conditions comprise variable thicknesses of Made Ground (Fill), ranging between 1.3m up to 17.2m thick. Typically, Made Ground was recorded to greater depths in the north and western parts of the site. The variations can be attributed to the development history (e.g. Bradford Road Gas Works), treatment to mine workings and numerous phases of enabling works across the site. Below the Made Ground the natural geological sequence is formed of Alluvium and/or River Terrace Deposits (<0.5m to 3.0m thick) to the west and north; Glacial Till (0.9m to 12.0m thick) to the east and south; the Pennine Upper, Middle and Lower Coal Measures (base not proven). The Coal Measures comprise interbedded layers of predominantly mudstone, with sandstone, siltstone and coal. Faulting has been recorded within the area, the nature and extent of the faulting is not known.,

There are potentially seven coal seams that have been recorded on site based on the recent site investigation and the investigations carried out in 2009 by May Gurney. The main worked seams include Bradford ¾ and Bradford Four Foot. These seams were subject to treatment in 2004 and 2011. There are also two shafts that have been located on site and have either been plugged or capped, these correspond to shaft 386398-003 and shaft 386398-010 from the Coal Authority records.

Site Investigation

An intrusive site investigation was carried out by Structural Soils Ltd between 9th September 2019 and 31st October 2019. Following the main intrusive works, a programme of groundwater and ground gas monitoring was carried out and completed on 6th December 2019. The site investigation included a total of 18 boreholes to depths between 10 and 60m BGL, these boreholes were either cable percussion with rotary follow on or rotary cored for the full depth; 8 boreholes to a depth of 16m BGL (to the base of the Made ground), all using cable percussion method; a total of 14 trial pits to 4.5m BGL to inspect the Made ground; and 3 structural observation pits to inspect Joe Mercer Way crib wall. An additional two days of trial pitting was carried out to investigate possible obstructions

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Contamination Risk Assessment

The risk assessment undertaken indicates the risks to construction workers from on-site contaminants is Moderate. It is considered that the potential risks to construction workers can be mitigated through good construction practice and adoption of suitable construction methodologies. The potential risks to occupiers and users of neighbouring land is assessed as Moderate / Low. It is considered the potential risks to these users during excavation, earthworks and construction can be mitigated through standard good practice and adoption of suitable construction methodologies e.g. dust suppression measures. The potential risks to future site users is assessed Moderate / Low reflecting the potential for exposure in limited areas of soft landscaping. The potential risks to future site users can be mitigated by the incorporation of an appropriate thickness of subsoil and topsoil materials in these limited landscaped areas. The risks to future site users and occupiers/users of neighbouring land from ground gas has been assessed as Moderate and Moderate / Low reflecting the nature of the ground gas regime (elevated concentrations of CH4, C02 and depleted oxygen) and the nature of the proposed development. Implementation of suitable remediation measures during the proposed development will mitigate this risk. The site has been classified as CS2.

Geotechnical Considerations

The results of the ground investigation show a large variation in the thickness of the Made Ground as well as its constituents. Alluvium and River Terrace Gravels are present to the west of the site, where in places the Glacial Till is absent. The Glacial Till is present across the majority of the site overlying the Coal Measures which is predominantly Mudstone. Several coal seams have been identified. Perched groundwater is present in the Made Ground however there does not appear to be a continuous perched water table. The groundwater level in the Coal Measures is relatively level and a design level of 41mOD has been adopted.

Piles taking their capacity from rock sockets are the adopted foundation solution. An indicative chart of rock socket length is provided however this does not take into account the presence of the coal seams. Piles will need to found either 10 x seam thickness above or punch through any seam.

A large excavation is required to reach formation level and therefore retaining walls will be necessary. The Engineer's reference design is for contiguous piles walls and indicative construction sequences are provided.

Geoenvironmental Conclusions and Recommendations

In accordance with the relevant British Standard, the gas protection score required for buildings on a site classified as CS2 is 1.5. It may be possible to achieve this score through the existing building design without the need for any specific gas protection measures. The building substructure will (by default) provide protection against hazardous gas ingress. A reinforced waterproofed basement slab with minimal penetrations and cracking control (waterproofing additive / membrane within Grade 2 and Grade 3 areas) merits 2-2.5 points. The presence of basements will further contribute to the protection against gas ingress. If these basements are ventilated to meet Building Regulations requirements for dealing with car exhaust fumes then a further 4 points can be warranted.

The assessment indicates the majority of the Made Ground arisings (2/3s) would be classified as Non-Hazardous Waste, but with a portion (1/3) of the material classified as Hazardous Waste. The underlying natural soil would likely be classified as Inert (unless exhibiting visual / olfactory evidence of contamination). It is the enabling / earthworks contractor's responsibility, in association with the operator and/or operator of the landfill to classify the materials appropriately and ensure disposal and / or re-use in accordance with the relevant regulations.

This assessment indicates that polyethylene (PE), poly-vinyl chloride (PVC) and copper pipes may not be appropriate for potable water supply in the redevelopment of the site within the Made Ground due to the elevated concentrations of TPHs and total SVOCs. If Made Ground remains in-situ and the pipes are laid within the Made Ground, barrier pipe materials are likely to be required unless otherwise agreed with the utility company.

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Geotechnical Conclusions and Recommendations	Due to the varying geology across the site and the possible presence obstructions, rotary bored piles are recommended, however there may be opportunities to use CFA piling techniques where there is a reduced risk of obstructions. There may be an option to found the retractable seats on shallow foundations, however a detailed review of allowable differential movements is required. An assessment is required of the long term creep of the Made Ground once the formation levels are finalised. There are still some laboratory test results outstanding, including the groundwater chemical test results. A full assessment of the design concrete class will be undertaken once these have been received.

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1 Introduction

1.1 Background and commission

This report provides the available factual information at time of issue and is based on the current design status.

This report presents the results of a Ground Engineering Interpretive Assessment for the OVG Manchester Limited Site prepared by BuroHappold The purpose of this Study is to present a combined Geotechnical Interpretive Report (EC7, [1]) and Geoenvironmental Generic Quantitative Risk Assessment (CLR 11, [2]). The report will establish the environmental, geological, hydrological and hydrogeological conditions present at the Site that may result in potential ground engineering and contamination risks for the proposed future use.

OVG Manchester forms part of the larger Eastlands Regeneration Framework Area. The Site is located within Manchester City Council's (MCC) remit and is currently a vacant site occasionally used for car parking. OVG Manchester covers some 2.7ha at Sportcity Way, Manchester, M11 3DU, National Grid Reference SJ 86841 98878.

1.2 Aims and objectives

The aim of the ground investigation was to assess the geological, geotechnical and geoenvironmental conditions for the Site. This report details only the ground engineering aspects of the investigation and aims to provide a site conceptual model and an assessment of geotechnical and contamination related risks for current and future site usage.

1.3 Scope of works

To achieve the above aims, the objectives of the investigation at the Site are to provide an assessment of the following conditions:

- Ground model and groundwater regime;
- Preliminary geotechnical parameters of the relevant strata;
- Location, nature and extent of contamination within the Made Ground and underlying natural strata;
- Nature and extent of contamination within controlled waters;
- Ground gas and vapour regime to enable an outline assessment of the potential risks associated with hazardous gases and vapours;

This report has the following objectives:

- To identify any constraints associated with the ground and/or below ground infrastructure on the basis of available general information;
- To assess potential risks to people and the environment (natural and built) associated with ground contamination (solid, liquid or gas) during construction and for future site use; and
- To provide recommendations and outline scope, if necessary, for further works such as intrusive ground investigation and / or remedial action or design.

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This report also provides information relevant for future use of the Site in accordance with the requirements of the National Planning Policy Framework (NPPF) [3] and also with respect to potential liability under Part 2a of the Environmental Protection Act 1990. The work was carried out in general accordance with the Environment Agency (EA) / Department for Environment, Food and Rural Affairs (Defra) Model Procedures for the management of Contaminated Land [2] , the relevant British Standards (BS) [4] and [5] the EA Guiding Principles for Land Contamination [6], Groundwater Protection Policy [7] and other current good practice guidance.

1.4 Information sources

The principal sources of historic information were taken from the BuroHappold desk study [8] and other reports detailed in Section 2.1. This report is based upon information obtained these third party sources, together with observations from the Site walkover survey and data from the recent intrusive ground investigation. The recent intrusive site investigation began on the 9th September 2019 with main works finishing on 31st October 2019. The post fieldwork monitoring was completed 6th December 2019.

The third party data has been accepted at face value and has not been independently verified. BuroHappold can therefore give no warranty, representation or assurance as to the accuracy or completeness of such information.

1.5 Competencies

The work reported here was carried out by an appropriately qualified geoenvironmental scientist and geotechnical engineers with relevant qualifications, training and experience. The work has been overseen by a Technical Director with experience in the assessment of land affected by contamination who is a Chartered Geologist and a registered SiLC (Specialist in Land Contamination) and SQP (Suitably Qualified Person).

1.6 Limitations

The scope and design of the site investigation has reflected the known history of site use, the results of previous studies and the limited scope requested by the Client. On this basis the spacing of the exploratory holes and the sampling and analysis plan for this investigation are considered to have provided a reasonable level of certainty about the ground conditions.

No investigation, however comprehensive, can be expected to determine absolutely the nature and variation of all the geology or contamination which could be present on any site. There will always be an element of uncertainty about the ground conditions including contamination. This potential for currently undetected contamination or variations in geology must therefore be taken into account not only in the risk assessment presented here but also in consideration of future development activities, for example, health and safety planning, financial planning and risk management and in the implementation of the below ground works during construction.

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2 Site Setting

2.1 Information sources

The site setting has been informed from various sources of information listed below, it is recommended that the reader is fully cognisant with the original reports.

- 2019 BuroHappold Geoenvironmental and Geotechnical Desk Study [8]
- 2011 BWB grout treatment works and remediation [9], [10], [11], [12]
- 2011 Buckingham remediation validation report [13]
- 2009 May Gurney site investigation report [14]
- 1986 Ward Ashcroft and Parkman report on location of mine shafts and shallow mine workings [15]
- 1986 Norwest Holst Soil Engineering site investigation report [16]

2.2 Site location

The Site is centred at National Grid Reference SJ 86841, 98878, located off Sportcity Way, Manchester M11 3DU. It is located to the north east of Manchester City Centre, approximately 2.1km north east of Manchester Piccadilly Rail Station. It is at approximately +60.6mOD and falls north to +56.8mOD. The Site is approximately 4.46ha and located within Etihad Campus. It is bound by Sportcity Way to the north, Alan Turing Way to the east, Ashton Canal to the south, and Joe Mercer Way to the west, in the ward of Ancoats and Beswick, Manchester. Its boundary is shown in Figure 2—1.

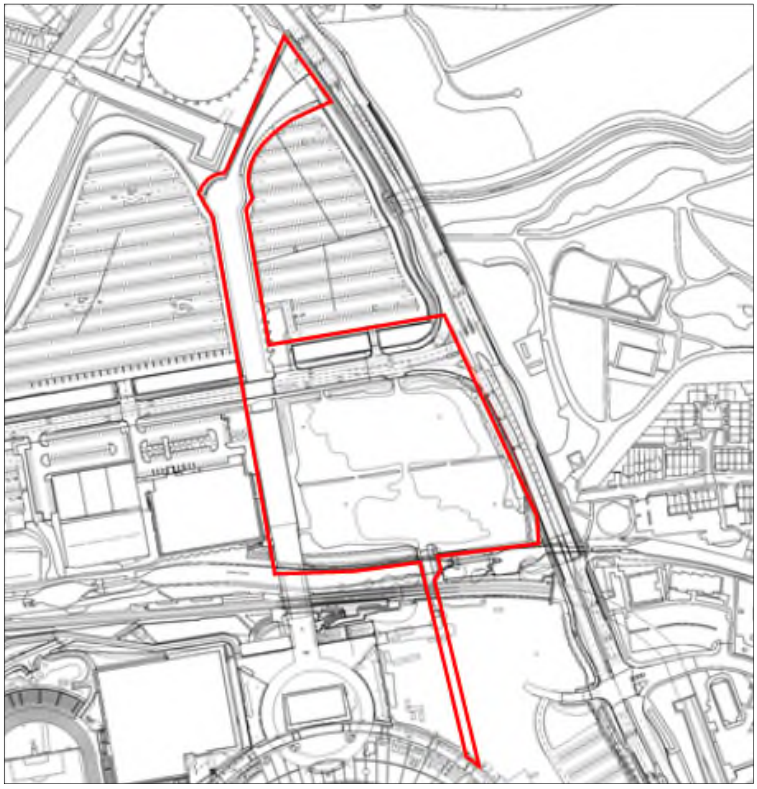


Figure 2—1 Red line boundary

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2.3 Current site use

The Site is currently used as an over-spill surface level car park for those attending events associated with the Etihad Stadium, it is estimated to have capacity for 500 car parking spaces. The perimeter of the Site is populated with informal, dense shrubbery and trees and secured with tall mesh fence. There are no existing buildings on the Site.

2.4 Site history

The following summary of the site history has been derived from the previous desk study report [8]. Appropriate cross reference should be made to these reports for the detailed information.

Until the min-1800s, the site and surrounding area was occupied by agricultural land with the River Medlock meandering through the north-west of the Site. The Ashton canal and lock formed the southern boundary and Mill Lane the east. Victoria Gardens were located to the north and in part occupied the north of the site. By 1848, the River Medlock had been straightened and diverted further north, away from the site. Industrial works began to occupy the land south of the Canal during the early 1890s and residential development occupied the eastern part of the site. During the early 1900s the River Medlock was culverted, Forge Lane was constructed running north/south centrally through the site and other residential roads connecting Forge Lane to the residential developments. The largest change at this time was the development of Bradford Road Gas Works, which included tanks, gas holders, tramways and large buildings (some within the site boundary). By the early 1930s, there was further development to these gas works and developments to the industrial works to the south, beyond the Canal. There were no further significant changes to the site and its surroundings until late 1970s whereby the majority of these works were cleared, including buildings associated with Bradford Road Gas Works. Between the late 1980s and late 1990s there were changes to the land use east of Forge Lane within the site boundary and by 1995 Mill Lane developed into Alan Turing Way. By 2002, construction of the Etihad Stadium (formally Manchester Stadium) to the south was underway and road layouts in the surrounding area developed. A temporary BMX track occupied the site in 2009 and by 2010 the site was cleared.

2.5 Proposed development

The proposed redevelopment is for a new multi-use indoor arena, together with supporting retail and leisure facilities, back of house and support functions, public realm, cycle parking, access and associated works. As proposed, the footprint of the arena will take up the majority of the Site. The current scheme requires significant earthworks operations to level the Site and retaining solutions will be required around the majority of the perimeter.

2.6 Anticipated ground model

2.6.1 Geology

The 1:50 000 geological map Sheet 85 [17] and 1:10 000 geological map Sheet SJ89NE [18] together with BGS borehole records indicate the geology to be the Pennine Upper Coal Measures of the Upper Carboniferous, overlain by Quaternary deposits. The map shows the site to be underlain by the following:

- Made Ground
- Alluvium and River Terrace Deposits (north-western area) – Soft grey clay and unconsolidated orange-brown clayey sands and gravels.
- Glacial Till – Firm becoming very stiff reddish-brown clay and silty clay with gravels and pebbles.

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- Pennine Upper and Middle Coal Measures – Mudstones, siltstones and sandstones with beds of coal, fireclay and ironstone within the upper parts.

The maps indicate four coal seam horizons to sub-crop across the site. These include the Bradford Four Foot, Bradford Three Quarters and Charlotte Mine. A further 2 seams, the Yard Mine (NE) and the 18 Inch seam sub-crop to the north east, up dip of the site, and these seams are anticipated to be present beneath the site due to the dip orientation of the seam (all seams generally dip south-west). The maps indicate that the strata dips between 20° (inclined strata measured underground) and 25° (inclined strata) SW.

Table 2—1 Summary of anticipated geology

Strata	Description	Top of Deposit		Thickness Range [m]
		Depth (Strata Top) [mbgl]	Elevation [mAOD]	
Made Ground	Typically granular clayey, silty or gravelly SAND. Soft black clayey ash encountered. Gravel is mudstone, sandstone, limestone, slate, quartzite, pottery, wire, tiles, metal, brick, concrete, plastic, asphalt, ash, coal, coke, clinker, and glass. Post earthworks, top 2m of MG is Class 1A/1B with a portion of Class 2C. A 300mm capping layer of 6F1 material was placed across the site. Buried obstructions removed to 5mbgl.	GL	~+60.0	2.0 - 16.0
Alluvium*	Soft grey CLAY / Firm orange-brown grey and brown mottled sandy CLAY	3.5 to 14.1	+56.5 to +45.9	0.5 – 5.0
River Terrace Gravels*	Medium dense orange-brown mottled clayey SAND	6.8 to 11.7	+53.2 to +48.3	1.3 - 2.5
Glacial Till [including Boulder Clay]	Firm becoming very stiff at depth, brown and grey, thinly laminated fissured CLAY with fine to coarse gravel. Described as slightly sandy to sandy, slightly gravelly clay from Arup's 2010 Geotechnical Report based on May Gurneys investigation.	6.1 to 12.0	+53.9 to +48.0	1.0 - 8.7
Carboniferous Coal Measures	Very weak becoming weak grey thinly laminated very silty MUDSTONE. Weathering variable throughout deposit and expected to be completely weathered around coal workings. Contained siltstones and sandstones.	6.7 to 16.0	+53.3 to +46.0	Underside of deposit not proven

2.6.2 Hydrogeology

The superficial deposits have been classified as Secondary (undifferentiated) Aquifer. Secondary (undifferentiated) Aquifer is assigned where it is not possible to attribute either category A or B to the rock type. In general, these layers have previously been designated as both minor and non-aquifer in different locations due to the variable characteristics of the rock type. In this instance reflective of the variable nature of the Glacial Till.

The Coal Measures are classified as Secondary (A) Aquifer, defined as permeable layers capable of supporting water supplies at a local rather than strategic scale and in some cases forming an important source of base flow to rivers.

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There are five active groundwater abstraction located within 1km of the site. However, the site is not within a groundwater source protection zone. The abstractions are relating to the following:

- Borehole at Norton Street, Miles Platting, Manchester (611m north)
- Two boreholes at Openshaw, West Ashton, Manchester (971m south-east)

Two boreholes at Premises at Croft Street, Clayton, Manchester (982m east

2.6.3 Hydrology

The Ashton Canal is located along the southern boundary of the site (8m south). The canal climbs for 10.8km through 18 locks toward Ashton-under-Lyne. Lock No.9 is located adjacent to the site resulting in approximately 3.5m ground level change. According to the topographical survey the east side of Lock No. 9 (SE of the site) is at approximately +60.4mOD and west of the lock (SW of the site) the ground drops to +56.7mOD. a steep embankment up to the site is present on the west side with the site at approximately +59.0mOD.

The River Medlock is located 24m to the north-west of the site and flows south and west toward the River Irwell in Manchester city centre. The course of the River Medlock meandered through the north-western part of the site during the late 1840s. By the early 1890s it had been diverted away from the main site area and straightened. By 1905, the River was contained within a 600m-long culvert below the former Bradford Road Gas Works, north of the main site area.

2.7 Constraints to site investigation

Free access to the majority of the site was available throughout the ground investigation works, however the drainage trench along the western boundary with its vegetation was a hindrance to the structural investigation of the Joe Mercer Way crib wall.

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3 Preliminary Risk Assessment

The following provides a summary of the risks identified as part of the desk study. A summary of the approach is presented in Section 11.1.

3.1 Preliminary Conceptual Site Model

Potential contamination sources from former uses of the site have been identified following a review of site setting and desk study information. The sources are various elevated concentrations of contaminants in the soils (metals, inorganics, organics, asbestos) and the potential for ground gas generation (methane, carbon dioxide and vapours).

Following the recommendations in the desk study report, BAE Systems were commissioned to undertake a detailed Unexploded Ordnance (UXO) risk assessment for the site. The findings of the report are presented in [19]. The assessment concluded a moderate probability of encountering UXO during the Project but that the mitigation measures were not deemed necessary in relation to the ground investigation phase of works due to the negligible quantity of soil being disturbed.

The receptors are human health (future site users, construction workers, site neighbours), flora and fauna and the built environment.

Table 3—1 Preliminary risk assessment based on Desk Study [8]

Hazard to Receptor [bold text] / Pathway [normal text]	**Risk Assessment (following CIRIA C552)**			**Comment on hazard realisation [normal text] and mitigation measures [bold text]**
	Consequence	**Probability**	**Risk**	
Description of source: The Bradford Rd Gas Works occupied the west of the Site from 1906 through to 1979. Residential development present within the east from early 1890s to 1979. During 1930s significant development to Bradford Rd Gas Works took place including construction of several tramlines. Alterations and development to the road layout took place during 1990s. An electricity substation was developed in the late 1940s within the south of the Site, and two tanks developed in 1979 nearby. By the early 1990s these were removed. A large BMX track (forming mounds and ditches) was created in 2009. These activities will have resulted in the presence of varying Made Ground. Historical site investigations indicate Made Ground extends to depth of 16m in some areas of the Site. Historical geochemical analysis has taken place, indicating elevated concentrations of TPH, some heavy metals and some PAHs (namely benzo(a)pyrene). Elevated concentrations of sulphates were also recorded. Spent oxide was recorded encountered during the 2011 earthworks remediation, this was removed however there is potential for similar contamination to be located in areas near to the former gas works. Contamination has been assessed across the site, with several areas 'hotspots' of Made Ground removed for off-site disposal. A large cut and fill exercise was undertaken in 2010 whereby 2m of Made Ground was excavated and re-used and a 300mm capping layer placed (though the capping material was later found to have high concentrations of TPH). Boundary areas were not subjected to this cut/fill exercise due to vegetation. Further assessment was recommended as the ground was prepared solely for commercial use and creating a suitable formation platform.				
Human health impacts to construction / maintenance workers and future site users Direct contact and dermal uptake, soil and dust ingestion and inhalation during construction and / or occupation	Severe (asbestos,) Medium (chemical contaminants)	Unlikely (limited exposure)	Moderate / Low Low	Potential to pose a risk to construction or maintenance workers. Although, exposure time will be relatively limited reducing the long term (chronic) effects, the material which may remain on site could pose an acute risk to human health, such as rashes, with direct contact and vomiting if ingested. Final development is predominately hardstanding with any landscaping likely to be at podium level, isolated from the below ground soils. Limited soft landscaping at ground level and so limited potential for exposure.

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Hazard to Receptor [bold text] / Pathway [normal text]	Risk Assessment (following CIRIA C552)			Comment on hazard realisation [normal text] and mitigation measures [bold text]
	Consequence	**Probability**	**Risk**	
Site neighbours Inhalation / ingestion of dust during construction	Severe (asbestos and ground gas) Medium (chemical contaminants)	Unlikely	Moderate / Low	Potential for generation of contaminated dusts during earthworks. Residential neighbours and Tennis and Football Centre adjacent to construction.
Controlled Waters – River Medlock and Ashton Canal	Medium	Low	Moderate / Low	Potential for increased infiltration and promotion of leaching through permeable strata and/or surface water run-off during the development earthworks.
Secondary Aquifer – Coal Measures Degradation of water quality	Mild	Low	Low	Potential for increased infiltration and promotion of leaching during development earthworks.
Flora and Fauna Migration via surface water run-off and via drainage.	Minor	Low	Very Low	Vegetation currently on site of low ecological value. Proposed development includes podium level planting and street side landscaping. Likely that suitable topsoil material will be imported as required.
Built environment Direct contact	Medium	Low	Moderate / Low	Potential for direct contact with contamination in shallow soils

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4 Ground Investigation Works

4.1 Objectives

The scope of the geoenvironmental and geotechnical intrusive ground investigation was designed to meet the aims and objectives set out in Section 1.3. Geoenvironmental and geotechnical investigation contractor services were provided by Structural Soils on behalf of BuroHappold, with part-time supervision provided by a BuroHappold Ground Engineer. Full details of the investigations carried out including in situ and laboratory test results are contained in the factual report by Structural Soils Ltd At the time of writing a final draft version of the report was available.

4.2 Investigation scope

The scope of the ground investigation works was as follows:

- 18 No. boreholes to depths between 10 and 60m BGL. Boreholes to be either cable percussion with rotary follow on or rotary coring for the full depth;
- 8 No. boreholes to depths up to16m BGL (to base of Made Ground). Boreholes to be cable percussion for the full depth;
- 14 No. trial pits to 4.5m bgl;
- 3 No. structural observation pits to 2m bgl;
- 9 No. standpipe piezometer installations;
- Standard Penetration Testing;
- In situ California Bearing Testing;
- Ground penetrating radar survey of the entire site and some of the surrounding roads;
- 2 No. days trial pitting to investigate obstructions (locations to be instructed on site by the Engineer)
- 6 No. slip trenches 3m by 2m to 2m bgl, locations TBC
- Geotechnical and Geoenvironmental Laboratory Testing; and
- Post Fieldwork groundwater and ground gas monitoring.

Ground gas monitoring

Ground gas monitoring of 11 gas monitoring wells (BH19/06, BH19/10, BH19/14, BH19/19-BH19/26) was undertaken on six separate occasions between 6th November and 6th December 2019.

During each round of gas and vapour monitoring the gas and vapour concentrations and groundwater level for each borehole were recorded in accordance with CIRIA C665 [19]. An infrared gas meter was used to measure concentrations of carbon dioxide (CO_2), methane (CH_4) and oxygen (O_2) in percentage volume while carbon monoxide (CO) and hydrogen sulphide (H_2S) were recorded in parts per million (ppm). Initial and steady state conditions were recorded. An integral flow meter was used to measure gas flow rates (initial and steady state) in litres per hour. In addition the atmospheric pressure before and during the monitoring together with the weather conditions were noted.

Groundwater sampling

Groundwater levels were monitored on six separate occasions between the 6th November and 6th December 2019. All readings were taken using a hand-held dip-meter and interface probe.

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Groundwater sampling method

A total of 21 groundwater monitoring installations were developed either during the fieldwork or during the first round of monitoring (6th November) by removing at least three well volumes of water (where possible) from each well to enable sampling of fresh formation groundwater.

Two rounds of groundwater sampling (26th November and 5th December) were undertaken in ten boreholes across the Site (BH19/02a x2, BH19/04, BH19/05, BH19/07c, BH19/09, BH19/11, BH19/13, BH19/14, BH19/15). The well locations were selected to provide representative groundwater samples based on the groundwater monitoring information and site history. Both BH19/04 and BH19/14 were found to be dry during the sampling round. BH19/09 and BH19/11 did not contain sufficient water within the installations therefore only a partial sample was taking without purging.

Groundwater samples were retrieved using a bailer dedicated to each monitoring location, to minimise the risk of cross contamination of water samples. Groundwater temperature, pH and conductivity values were measured at the time of sampling.

4.3 Ground Conditions

In general the ground conditions encountered on the Site were as expected and are summarised in Table 4—1.

Table 4—1: Ground conditions encountered during 2019 investigation

Strata	Description	Top of Strata *(average)*		Thickness *(average)* (m)
		m bgl	m OD	
Made Ground	Soft to firm brown black sandy gravelly CLAY. Locally sandy clayey GRAVEL and occasionally fine to coarse SAND. Constituents include ash, coal, clinker, brick, sandstone, limestone, pottery, concrete, rootlets, wood, plastic, rebar.	0 *(0)*	60.8 – 56.9 *(59.1)*	1.3 – 17.2 *(8.1)*
Alluvium	Soft to firm orangish brown slightly gravelly sand CLAY	7.4 – 12.6 *(9.8)*	52.8 – 44.8 *(49.0)*	0.3 – 2.0 *(1.3)*
River Terrace Gravels	Medium dense to very dense orangish brown slightly gravelly to gravelly clayey fine to coarse SAND	9.0 – 13.9 *(10.8)*	51.4 – 43.5 *(48.4)*	0.6 – 3.0 *(1.7)*
Glacial Till	Soft to very stiff brown gravelly CLAY	1.3 – 14.5 *(7.8)*	59.2 – 42.9 *(51.6)*	0.9 – 12.0 *(5.6)*

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Strata	Description	Top of Strata *(average)*		Thickness *(average)* (m)
		m bgl	m OD	
Coal Measures (interbedded layers of predominantly mudstone, with sandstone, siltstone and coal)	Very weak to weak grey MUDSTONE with locally thin to thickly laminations of light grey siltstone and/or fine grained sandstone Discontinuities are extremely closely to closely spaced planar smooth or undulating rough clean locally polished or clay smeared. SEATEARTH generally found below coal seams and consists of extremely weak grey MUDSTONE with gravel-sized fragments of black organic matter/fossilised plant remains and gravel-sized ironstone nodules. Very weak to moderately weak light grey fine to medium grained SANDSTONE with localised thin laminations of mudstone and/or siltstone. Discontinuities are extremely closely to medium spaced undulating rough clean. Very weak to weak grey SILTSTONE with localised thin to thick laminations of mudstone and/or sandstone. Discontinuities are very closely to medium spaced planar smooth or undulating rough clean or stained. Very weak black COAL.	11.5 – 18.0 *(13.8)*	48.5 – 39.9 *(45.0)*	Base not proven

4.3.1 Made Ground

As was anticipated the thickness of the Made Ground varied dramatically across the site with the minimum occurring in the south east, and the maximum beneath the footprint of the former gas works in the north-west corner. The stratum was highly variable with its constituents varying from location to location. It was noted on site that pockets of coal were encountered, ostensibly dumped, which it may be possible to segregate for disposal.

The particle size distribution test results (Figure 4—1) reflect the description of Made Ground given in borehole logs that is a mix of cohesive and granular materials. The constituents of Made Ground are 1-44% of Clay and Silt, 14-79% of Sand, 18-77% Gravel and 0-47% Cobbles.

4.3.2 Alluvium and River Terrace Gravels

The Alluvium and River Terrace Gravels were encountered predominantly in the north-west corner of the site, but also further to the south-west than had been anticipated.

The particle size distribution test results (Figure 4—2) reflect the description of Alluvium and River Terrace Gravels given in borehole logs. The constituents of Alluvium and River Terrace Gravels are:

- Alluvium: 17-25% Clay, 14-30% Silt, 32-58% Sand, and 0-37% Gravel;
- River Terrace Gravels: 6-10% Clay and Silt, 13-89% Sand, 1-51% Gravel, and 0-30% Cobbles.

4.3.3 Glacial Till

The top of the Glacial Till was shallowest in the south-east corner of the site, where the thickness of Made Ground was a minimum. The thickness of the material varied considerably across the site and was not present at all in BH19/09 where it is assumed that the superficial deposits have been removed and replaced with Made Ground.

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A review of the SPT N results shows pattern of low results at the interface between the Made Ground and Glacial Till in boreholes BH19/03, BH19/04, BH19/06, BH19/16, BH19/19, BH19/22, BH19/23 and BH19/26. This weak zone may have been caused by groundwater running along that boundary and target groundwater monitoring wells have been installed to investigate this.

The particle size distribution test results (Figure 4—3) reflect the description of Glacial Till given in borehole logs showing firm to very stiff Clay. The constituents of Glacial Till are 14-23% Clay, 33-48% Silt, 31-43% Sand, and 6-14% Gravel.

4.3.4 Coal Measures

The top level of the Coal Measures is deepest in the north-west corner of the site, and shallowest in the south-east corner (where the Made Ground and Glacial Till were minimal). There is a relatively thin layer of weathered coal measures at the surface (up to 1.7m), although this was not encountered at every location. The weathered material generally consists of weathered mudstone, although in two locations it was a weathered sandstone. The boundary between the River Terrace Gravels, Glacial Tills and Coal Measures is not obvious in some locations, and in places the material may be weathered rock instead of the superficial strata.

The coal measures comprise of interlaminated layers of mudstone, sandstone, siltstone and coal, although it is predominantly mudstone. Around the base of the coal seams there were records of Seatearth material, which is an extremely weak mudstone with the presence of organic remains and ironstone nodules.

The mudstone and sandstone samples from the coal measures have the following constituents:

- Mudstone: 89% Clay and Silt, 5% Sand and 6% Gravel;
- Sandstone: 5% Clay and Silt, 34% Sand and 61% Gravel.

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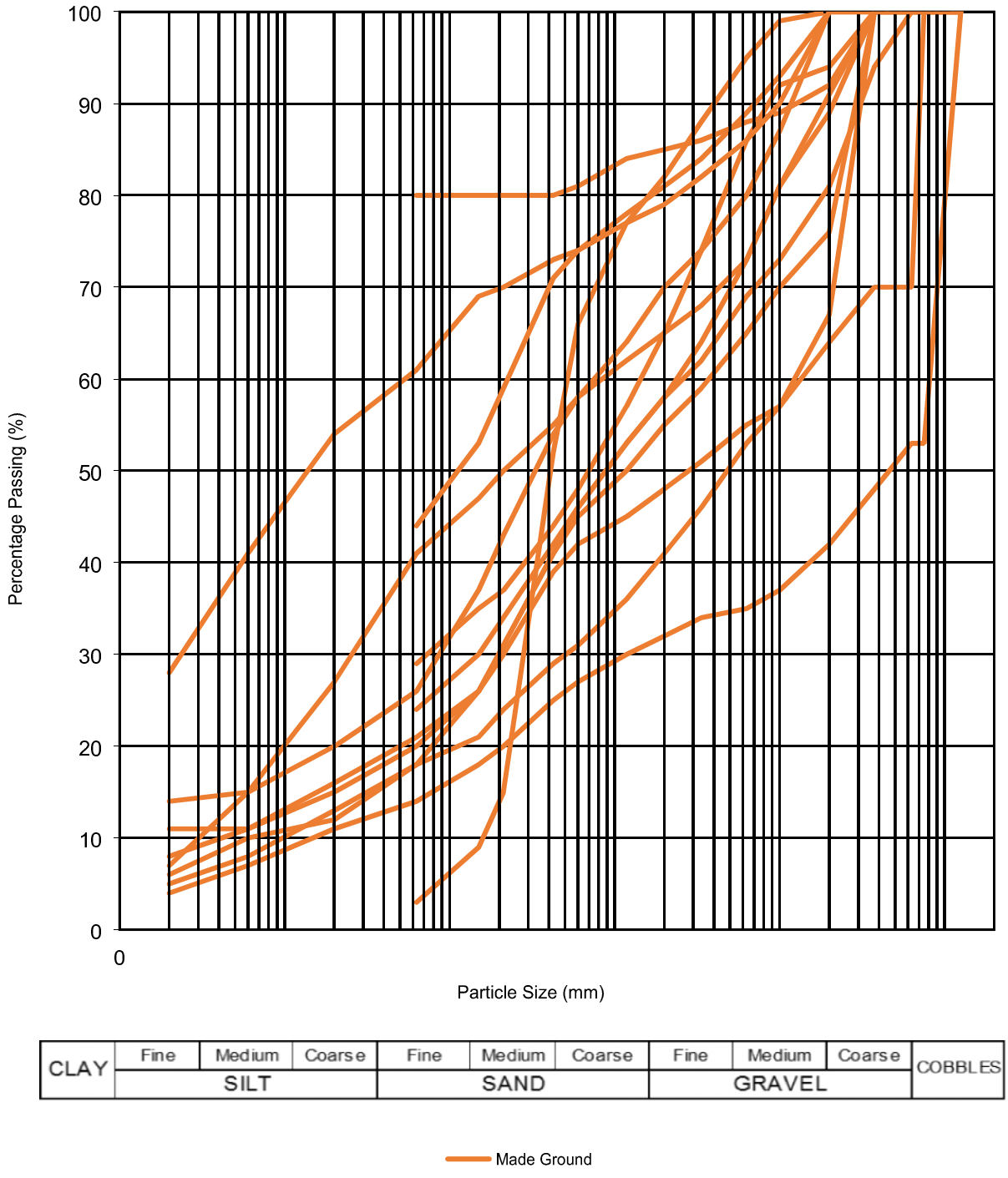


Figure 4—1: Particle Size Distribution Graph of Made Ground

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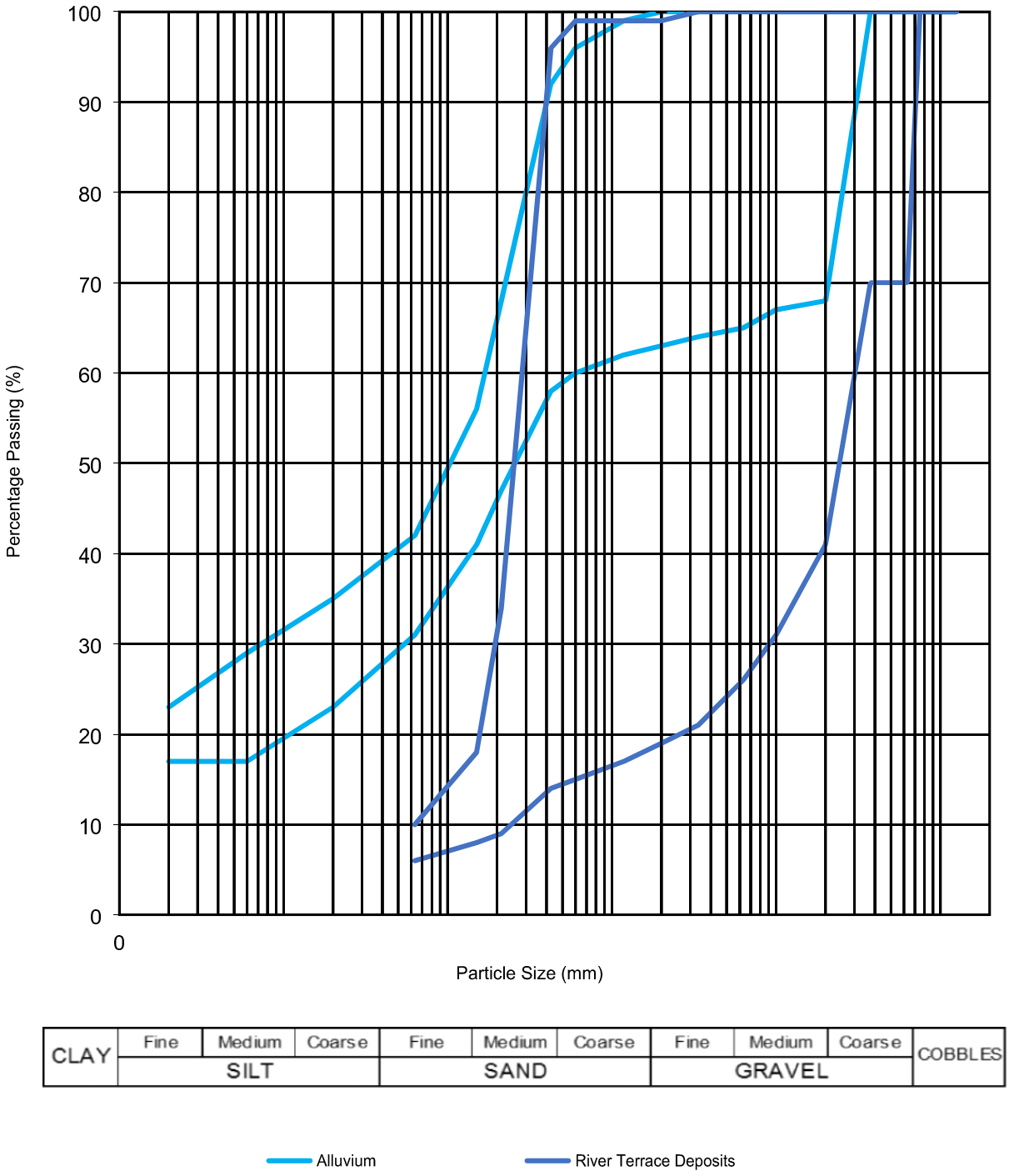


Figure 4—2: Particle Size Distribution Graph of Alluvium and River Terrace Deposits

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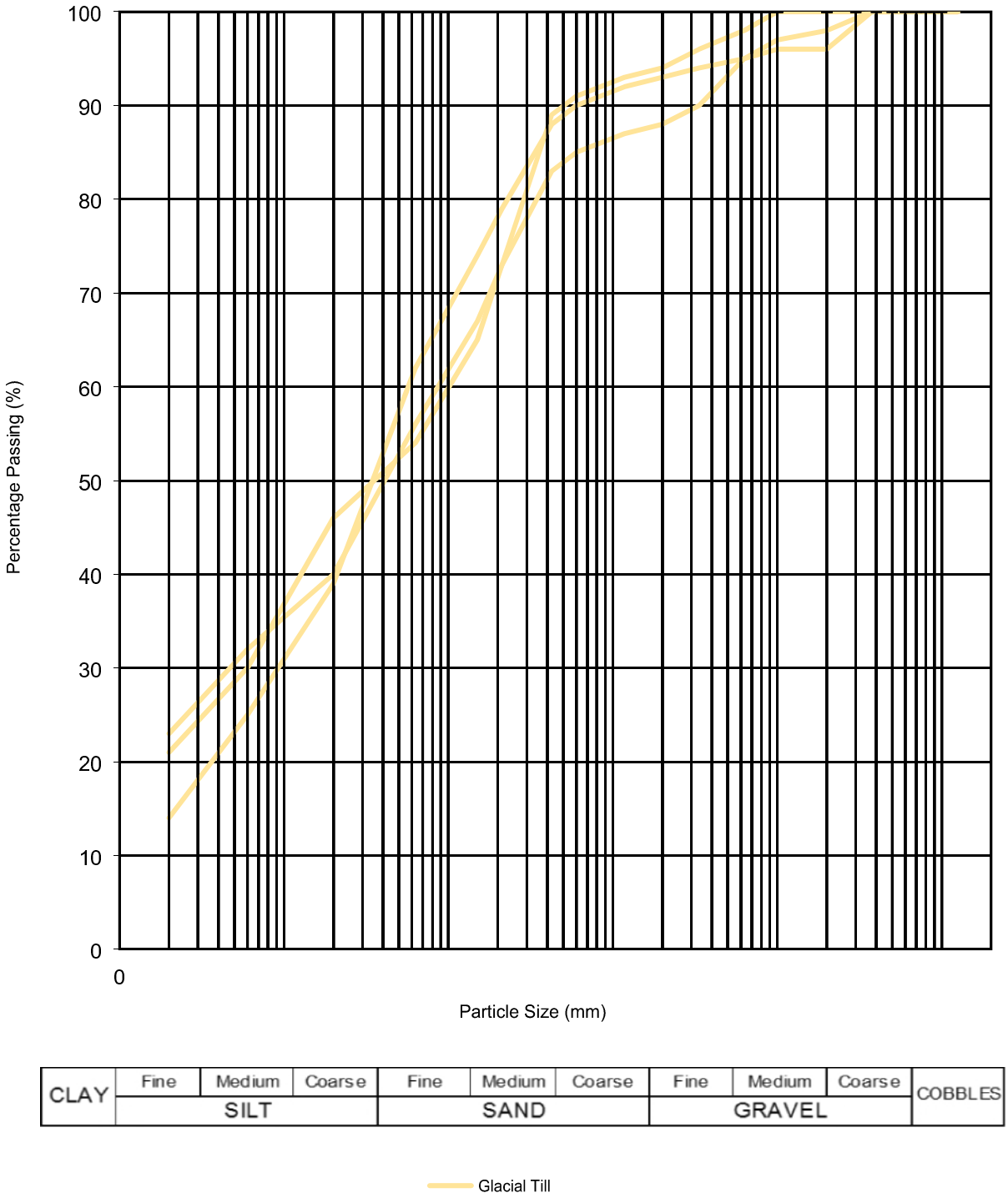


Figure 4—3: Particle Size Distribution Graph of Glacial Till

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4.3.5 Groundwater

The ground water monitoring data is evaluated in detail in Section 9.1 and a summary presented in Figure 4—4 below.

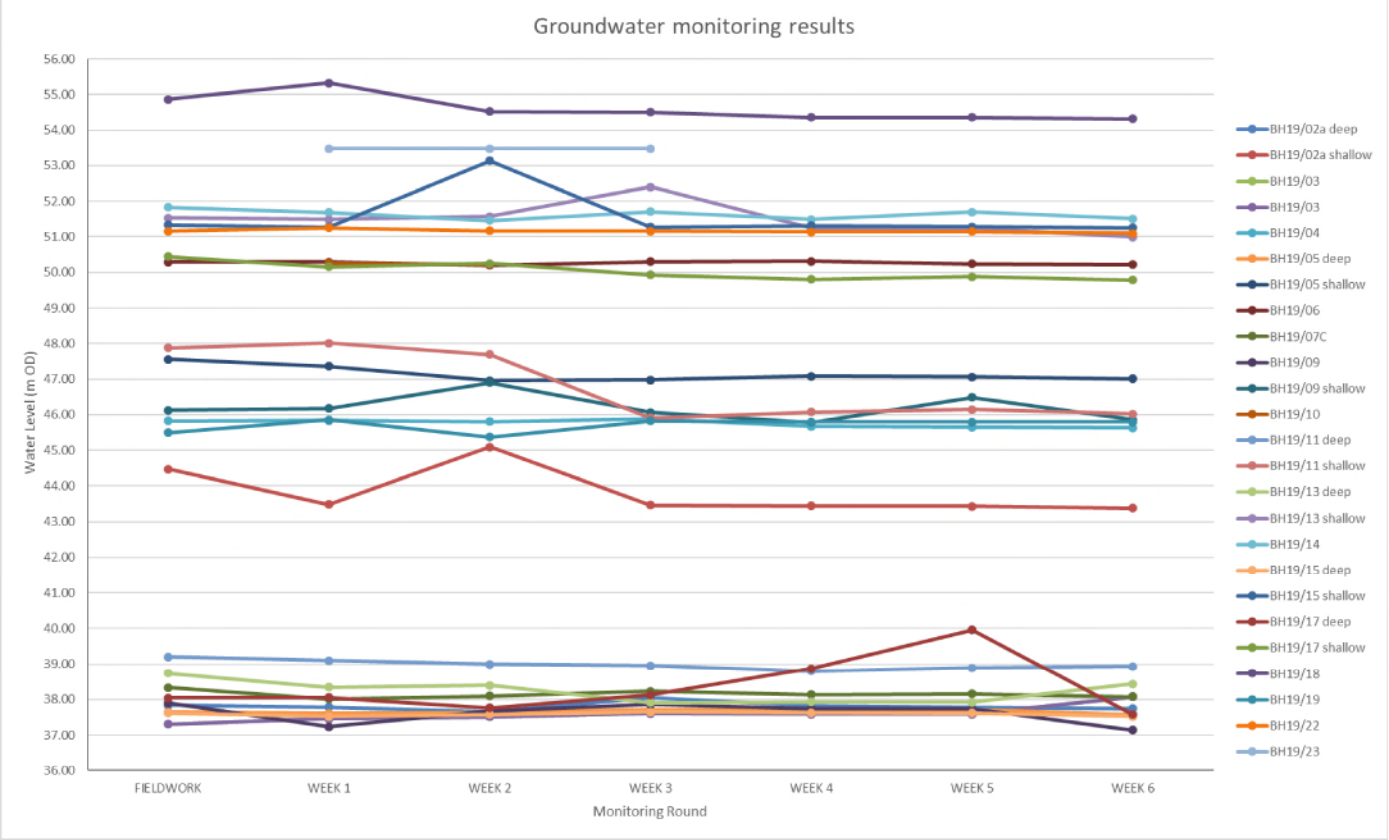


Figure 4—4: Groundwater Monitoring Data

From a review of the data set as a whole there does not appear to be a continuous body of water within the superficial deposits. For design a groundwater level of 41mOD will be adopted.

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5 Geotechnical Parameters

5.1 Ground Model

Table 5—1 provides the design stratigraphic sequence for the different zones of the Site, based on the zones shown in Figure 5—1.

Table 5—1: Design ground model for different zones

Strata	Zone 1 Level Top		Zone 2 Level Top		Zone 3 Level Top		Zone 4 Level Top		Zone 5 Level Top	
	mbgl	mOD	mbgl	mOD	mbgl	mOD	mbgl	mOD	mbgl	mOD
Made Ground / Fill	GL	57.7	GL	59.0	GL	59.5	GL	60.2	GL	60.0
Alluvium	10.8*	46.9*	-	-	9.0	50.5	7.4	52.8	-	-
River Terrace Deposits			-	-	10.5	49.0	-	-	-	-
Glacial Till	12.3	45.4	9.0	50.0	11.0	48.5	8.2	52.0	4.0	56.0
Coal Measures	17.7	40.0	12.5	46.5	13.5	46.0	13.0	47.2	13.0	47.0

*predominantly Alluvium. River Terrace Deposit is not always present in Zone 1. Where present, the thickness of River Terrace Deposit is thin, approx 0.6m.

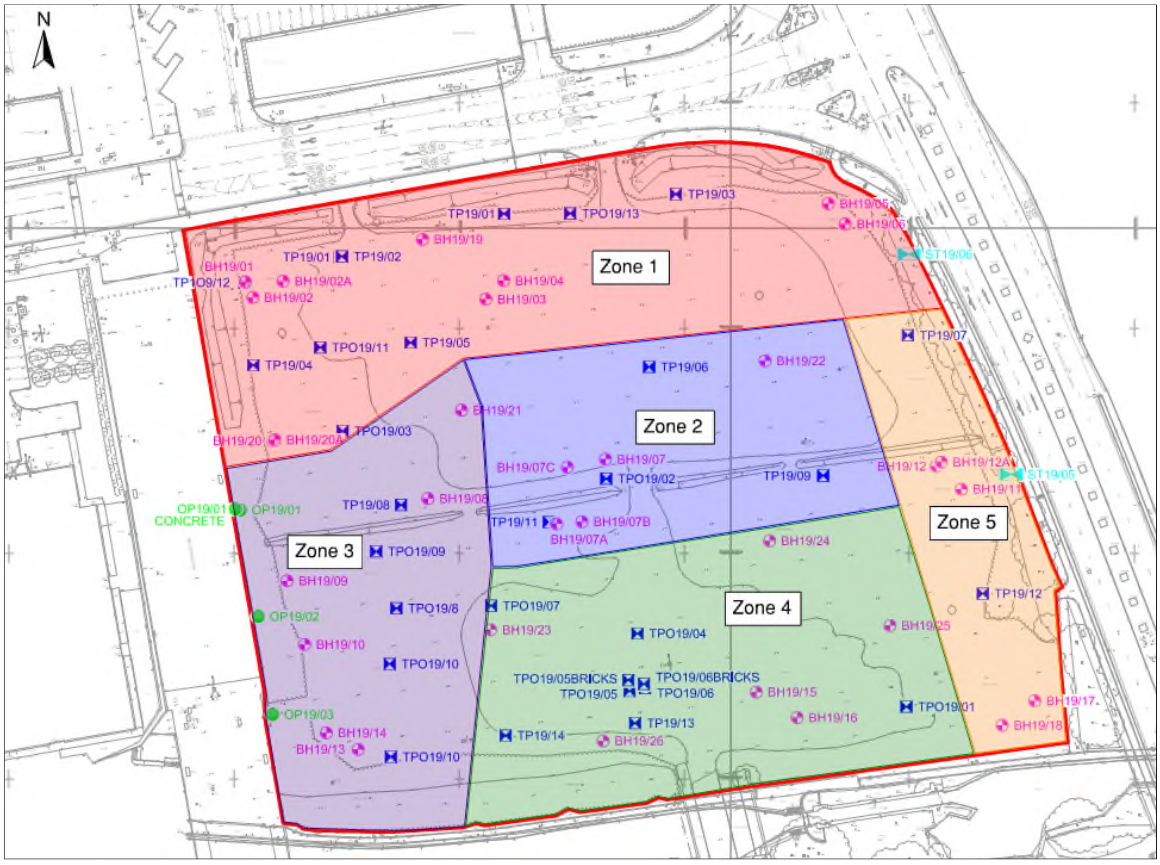


Figure 5—1: Site zone plan

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5.2 Parameter Assessment

Geotechnical design parameters have been derived from the in situ and laboratory testing carried out as part of the recent ground investigation. The derivation of the parameters for each stratum is presented in the following sections.

5.2.1 Made Ground

Description

The Made Ground comprises soft to firm brown black sandy gravelly clay. Locally sandy clayey gravel and occasionally fine to coarse sand. Constituents include ash, coal, clinker, brick, sandstone, limestone, pottery, concrete, rootlets, wood, plastic, rebar. In some areas the Made Ground comprises engineered fill with evidence of lime/cement stabilisation. The Made Ground thickness is variable across the site, and in some cases, it extends to the top of the coal measures.

No bulk density measurements were taken within the Made Ground. A **bulk unit weight of 18kN/m^3** is recommended for design.

Strength

The strength is evaluated in this section for the use in the design of the pile foundations and retaining walls. Figure 5—2 shows the extrapolated SPT N_{60} values for the Made Ground. This data shows that the Made Ground is highly variable with the N_{60} values ranging from 1 to >50. Values that are >50 are likely due to the number of obstructions within the Made Ground.

Overall, a moderately conservative choice of design SPT value is **N_{60} = 10**, which takes into account the variable nature of the material.

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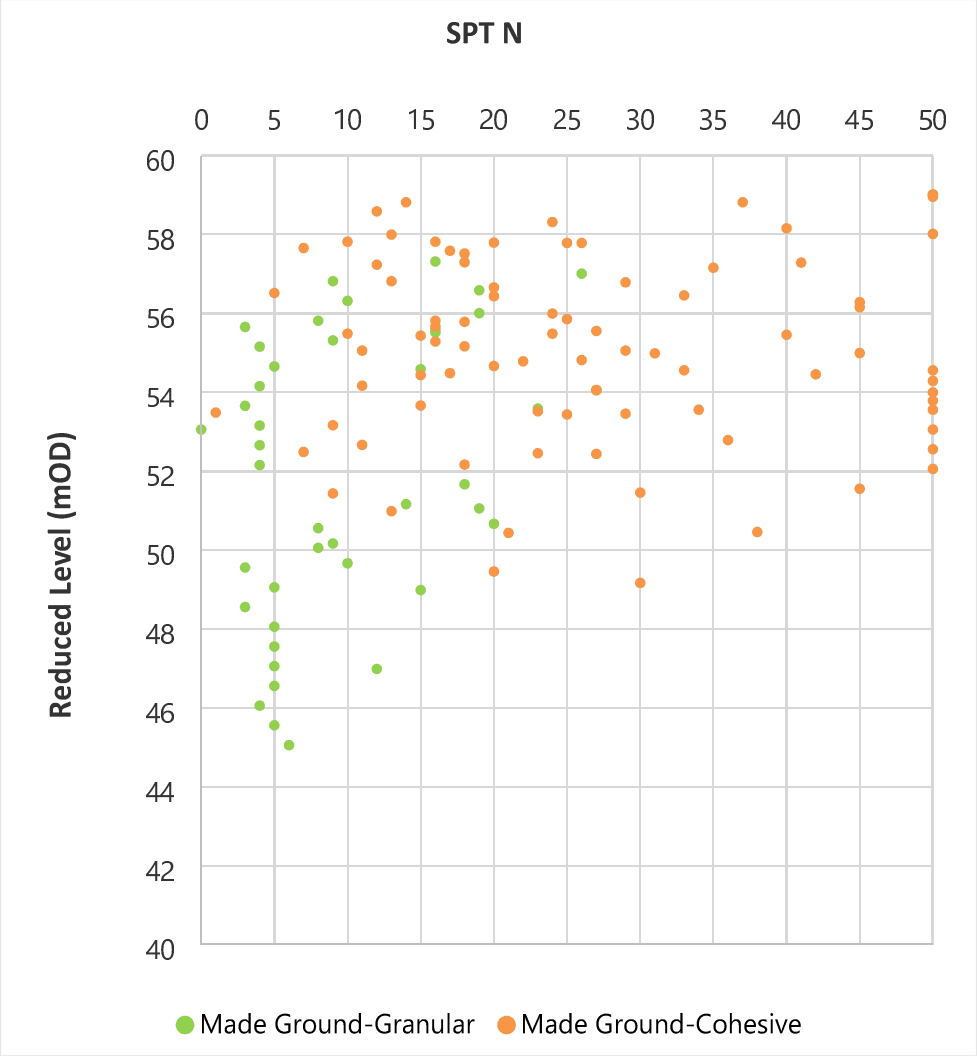


Figure 5—2: SPT N_{60} values Vs depth for Made Ground

Thirteen Atterberg limit tests were undertaken on Clay samples from Made Ground. The Atterberg Limits graphs are given in Figure 5—3. The summary of the results is:

- Liquid Limit : 35-55%;
- Plastic Limit : 17-40%;
- Plasticity Index :14-31%

The Liquid Limit vs Plasticity Index graph (Figure 5—4) shows that the Made Ground results are all above the A-line. The results indicate Made Ground to have a medium to high plasticity with a low to medium volume change potential.

Using the guidance in BS 8002:2015, the characteristic critical state effective angle of shearing resistance and the peak effective of shearing resistance can be determined.

- $\phi'_{cv,k} = 30 + \phi'_{ang} + \phi'_{PSD}$ for granular material
- $\phi'_{cv,k} = (42 - 12.5\log_{10} PI)$ for cohesive material
- $\phi'_{pk,k} = \phi'_{cv,k} + \phi'_{dil}$ for cohesive and granular material

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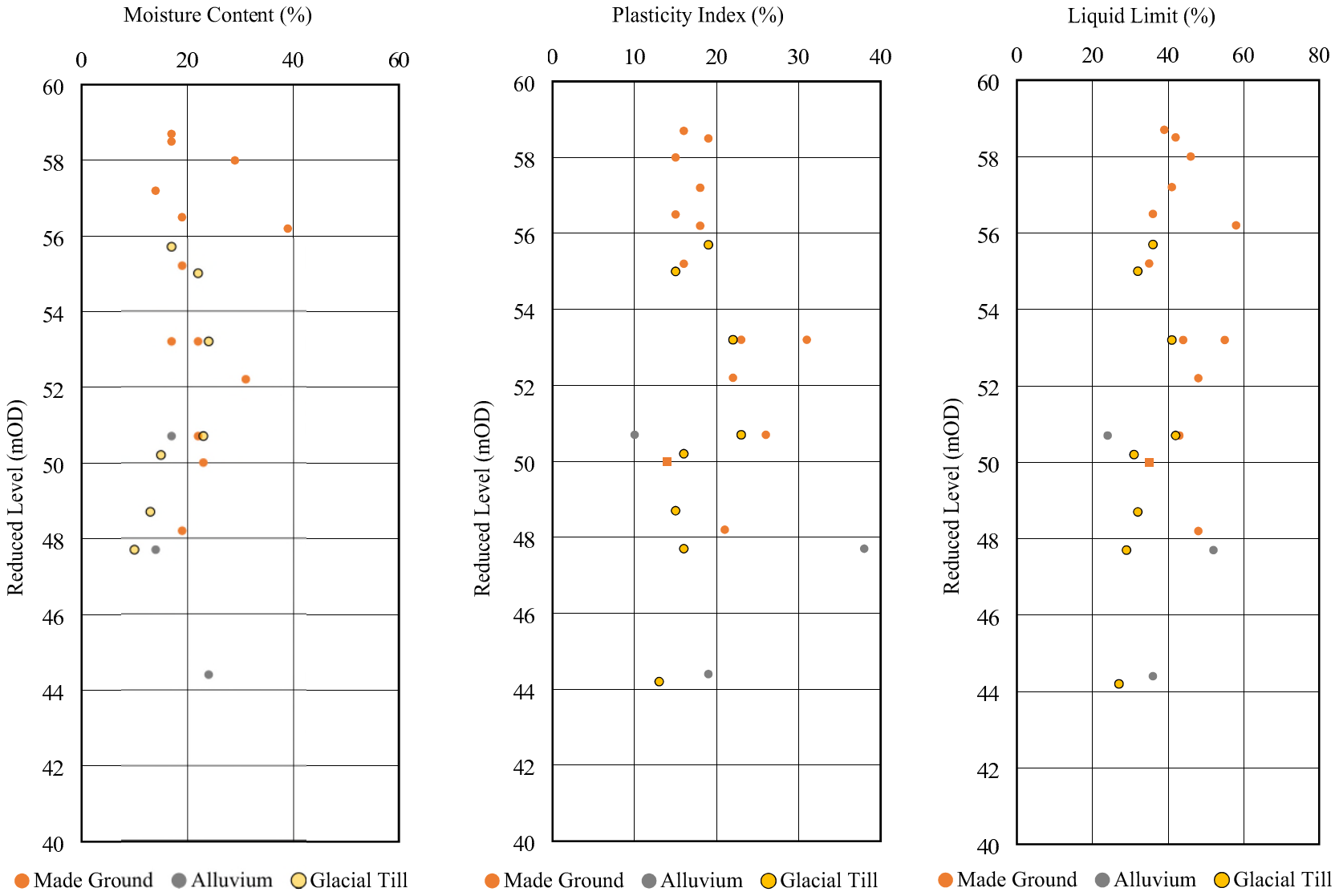


Figure 5—3: Atterberg Limit Graphs

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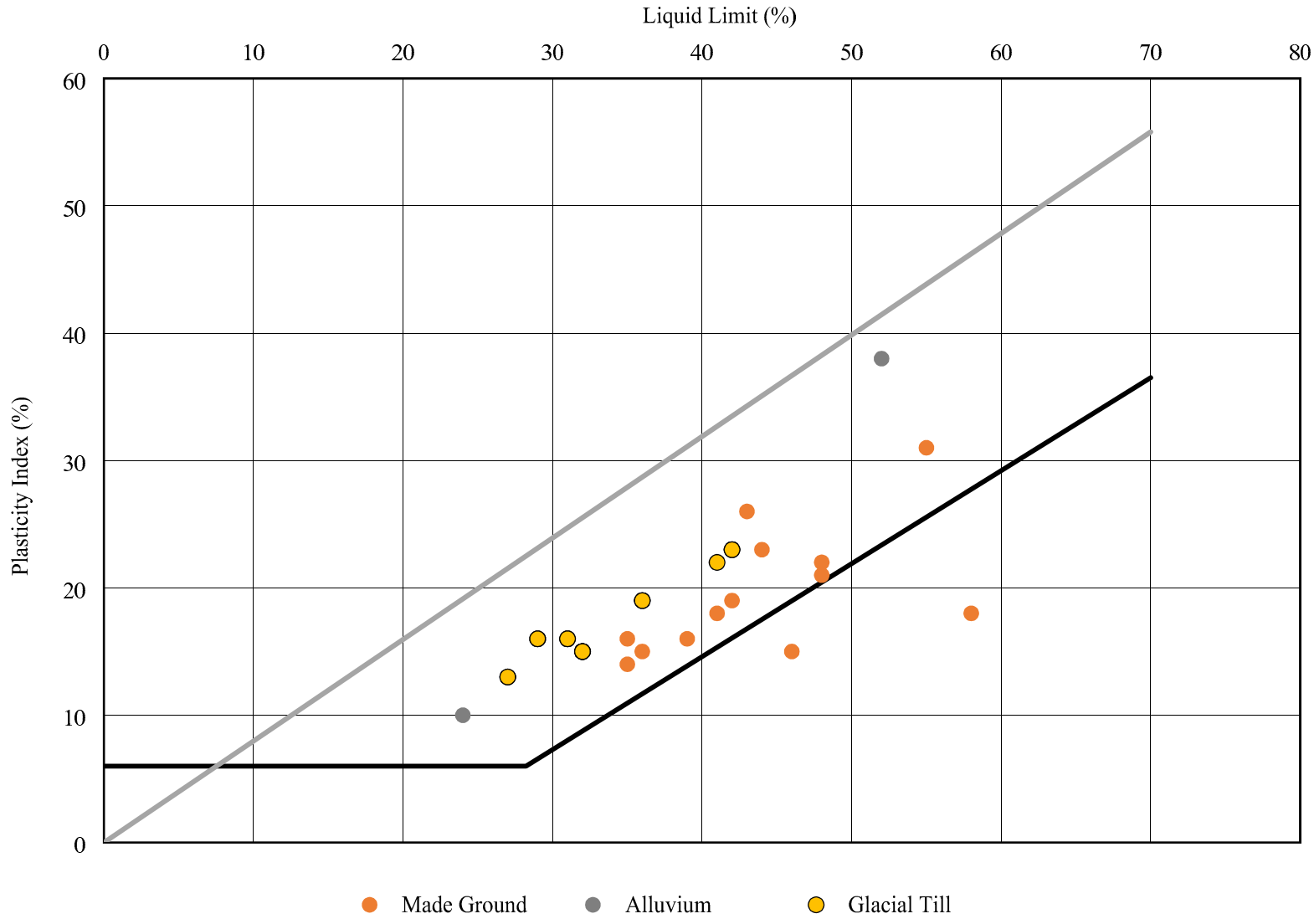


Figure 5—4: Liquid Limit vs Plasticity Index Graph

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Granular

ϕ'_{ang} is given in Table 1 of BS 8002:2015 as 2° to 4° as the Made Ground is classified as sub-angular to angular. The majority of Made Ground samples have uniformity coefficients (Cu) of 0 which is gap graded, hence, the ϕ'_{PSD} is taken as 0°. Therefore, ϕ'cv,k granular = 33°.

The density index, ID for SPT N = 10 is between 35% and 65% (Table F.1 in BS EN 1997-2:2007 Annex F). This results in having ϕ'dil ranges between 0° and 3° (BS 8004:2015 Table 1). Therefore, $\phi'_{pk,k}$ = 34.5°.

Cohesive

For PI of 22.5%, the angle of resistance $\phi'_{cv,k}$ = 26°. The peak angle of resistance ($\phi'_{pk,k}$) is considered equal to $\phi'_{cv,k}$, owing to no guidance values of ϕ'_{dil} given for fine soils in BS 8004:2015.

In conclusion, due to the mix of granular and cohesive material within the Made Ground, the design **ϕ' = 26°.**

The undrained shear strength (S_u) for the cohesive material in Made Ground based on material description and laboratory test results is given in Table 5—2.

Table 5—2: Undrained Shear Strength of Made Ground

Source	S_u (kPa)
Material Description (BS 8004-2015)	20 to 75
Liquidity Index, LI = 0.0 to 22 Average LI = 15 Su = 1.7 x $100^{(1-LI)}$ (Worth and Wood, 1978)	85
Quick Undrained Triaxial	480
Design S_u	**40**

Stiffness

The Made Ground comprises of both cohesive and non-cohesive materials. Due to its variability it will be assigned approximate and conservative parameters. Stroud (1989) indicates the correlation between stiffness and SPT N values for granular soils (E′= N_{60}). For fine soils, E_u/S_u = 300 (Simons and Menzeis, 1975) and E′=0.8E_u MPa (CIRIA 143) shall be adopted to derive the stiffness modulus.

Based on the design N60 value of 10, the stiffness modulus for Made Ground are:

- Granular, E′ = 10 MPa;
- Cohesive, E_u= 12 MPa and E′ = 9.6 MPa

For design purposes, the lowest value of stiffness is adopted i.e. E_u = 12 MPa and E′= 9.6 MPa. The vertical and lateral stiffness are assumed to be equal.

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5.2.2 Alluvium and River Terrace Gravels

The Alluvium comprises a soft to firm orangish brown slightly gravelly sandy clay. The River Terrace Deposits comprise a medium dense to very dense orangish brown slightly gravelly to gravelly clayey fine to coarse sand. Neither of these deposits are present across the whole site, and are typically found in Zone 3 in the south-west/west part of the site.

A bulk unit weight of **16kN/m³ for the Alluvium** and **18kN/m³ for the River Terrace Deposits** are recommended for the design.

Strength

Figure 5—5 resents the extrapolated SPT N_{60} values for the Alluvium and River Terrace Deposits.

- *Alluvium*

  For the Alluvium, 4no. SPT tests were undertaken, with the SPT N_{60} values between 33 to >50, with an average value of 43. These are unusually high SPT values given the description of soft to firm, and are not considered to be representative of the range of this material.

  Three Atterberg limit tests were undertaken on Alluvium. The Atterberg Limits graphs are given in Figure 5—3. The summary of the results is:

  - Liquid Limit : 14-24%;
  - Plastic Limit : 14-17%;
  - Plasticity Index : 10-38%

  The Liquid Limit vs Plasticity Index graph (Figure 5—4) shows that the Made Ground is all above the A-line. The results indicate Made Ground to have a low to high plasticity with a low to medium volume change potential.

  Using the guidance in BS 8002:2015, the characteristic critical state effective angle of shearing resistance and the peak effective of shearing resistance of Alluvium with an average PI of 24° are $\boldsymbol{\phi'_{cv,k} = \phi'_{pk,k} = 25°}$.

  The undrained shear strength (S_u) for the cohesive material in Made Ground based on material description and laboratory test results is given in Table 5—3.

Table 5—3: Undrained Shear Strength of Alluvium

Source	Su (kPa)
Material Description (BS 8004-2015)	20 to 50
Liquidity Index, LI = 0.0 to 37 Average LI = 22 Su = 1.7 x $100^{(1-LI)}$ (Worth and Wood, 1978)	60
Quick Undrained Triaxial	240
Design Su	**30**

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- *River Terrace Deposits*

  For the River Terrace Deposits, SPT N_{60} values were generally between 19 to >50, with an average value of 49. This corresponds with a dense to very dense material. Based on this a moderately conservative choice of design N_{60} value of 45 is recommended.

  Using the guidance in BS 8002:2015, the characteristic critical state effective angle of shearing resistance and the peak effective of shearing resistance of the River Terrace Deposits can be determined.

  ϕ'_{ang} is given in Table 1 of BS 8002:2015 as 0° to 4° as the River Terrace Gravel is classified as rounded to angular. The majority of River Terrace Deposit samples have uniformity coefficients (C_u) of 1-3 which is evenly graded, hence, the ϕ'_{PSD} is taken as 0° to 2°. Therefore, **$\phi'_{cv,k}$ = 33°.**

  The density index, ID for SPT N = 45 is between 85% and 100% (Table F.1 in BS EN 1997-2:2007 Annex F). This results in having ϕ'_{dil} ranges between 6° and 9° (BS 8004:2015 Table 1). Therefore**, $\phi'_{pk,k}$ = 39°.**

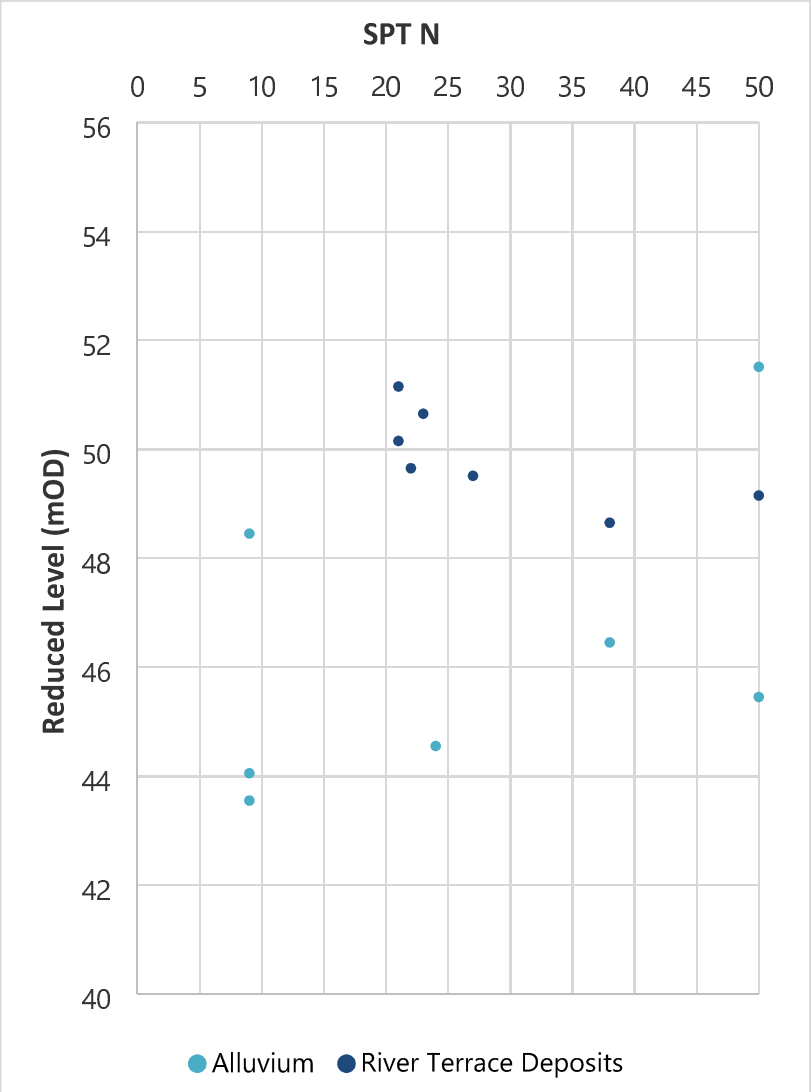


Figure 5—5:SPT N_{60} values Vs depth for Alluvium and River Terrace Deposits

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Stiffness

- Alluvium
  For Alluvium, E_u/S_u = 300 (Simons and Menzeis, 1975) and $E'=0.8E_u$ MPa (CIRIA 143) shall be adopted to derive the stiffness modulus. Based on the design S_u of 30, the undrained and drained stiffness modulus are **E_u=9.0 MPa** and **E' =7.2 MPa** respectively.

- River Terrace Deposits
  For the River Terrace Deposits, based on Stroud, it is appropriate to use $E'_v = 1N_{60}$ for a moderately conservative design approach. Based on the average N_{60} value of 20 a recommended design stiffness of 20MPa. The vertical and lateral stiffness are assumed to be equal.

5.2.3 Glacial Till

Description

The Glacial Till comprises a soft to very stiff brown gravelly clay. The Glacial Till is generally present across the whole site, although there are some localised zones where the Made Ground is directly overlying the Coal Measures. The thickness is also highly variable, the Till is generally at the greatest thickness in Zone 5 to the east of the site.

A **bulk unit weight of 20kN/m³** is recommended for design.

Strength

Figure 5—6 shows the extrapolated SPT N_{60} values for the Glacial Till. From this it can be seen that the strength of the Glacial Tills increases with depth. The N_{60} values vary between 6 to >50, with an average value of 41. A recommended design N_{60} value is between 10 from 2mbgl, increasing to 45 at 15m depth. Based on a relationship of $S_u=4.5N_{60}$ this correlates to **an undrained strength of 45 – 202.5kPa (45+12z; z=depth from 2m).** This will be correlated with the undrained triaxial testing.

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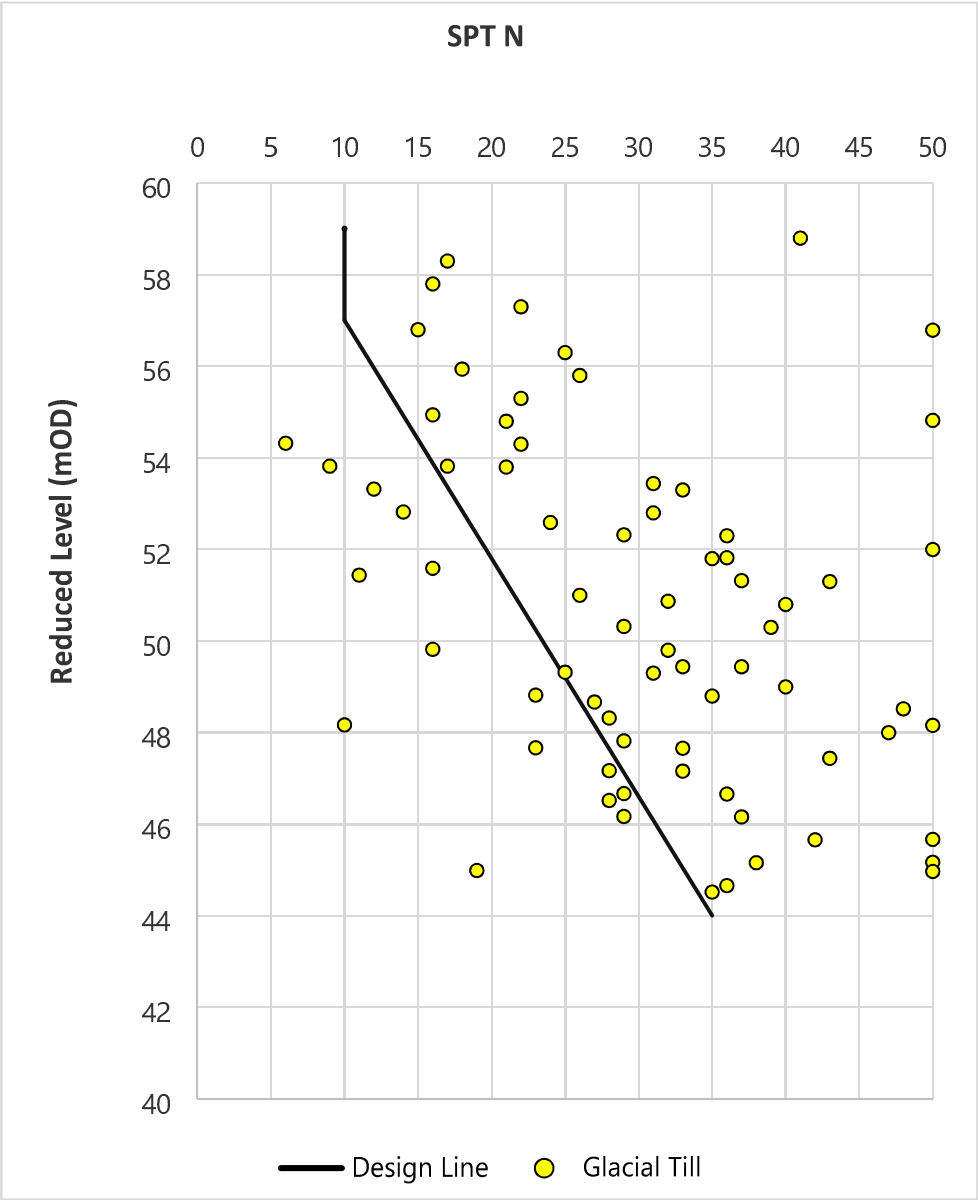


Figure 5—6: SPT N60 values Vs elevation for Glacial Till

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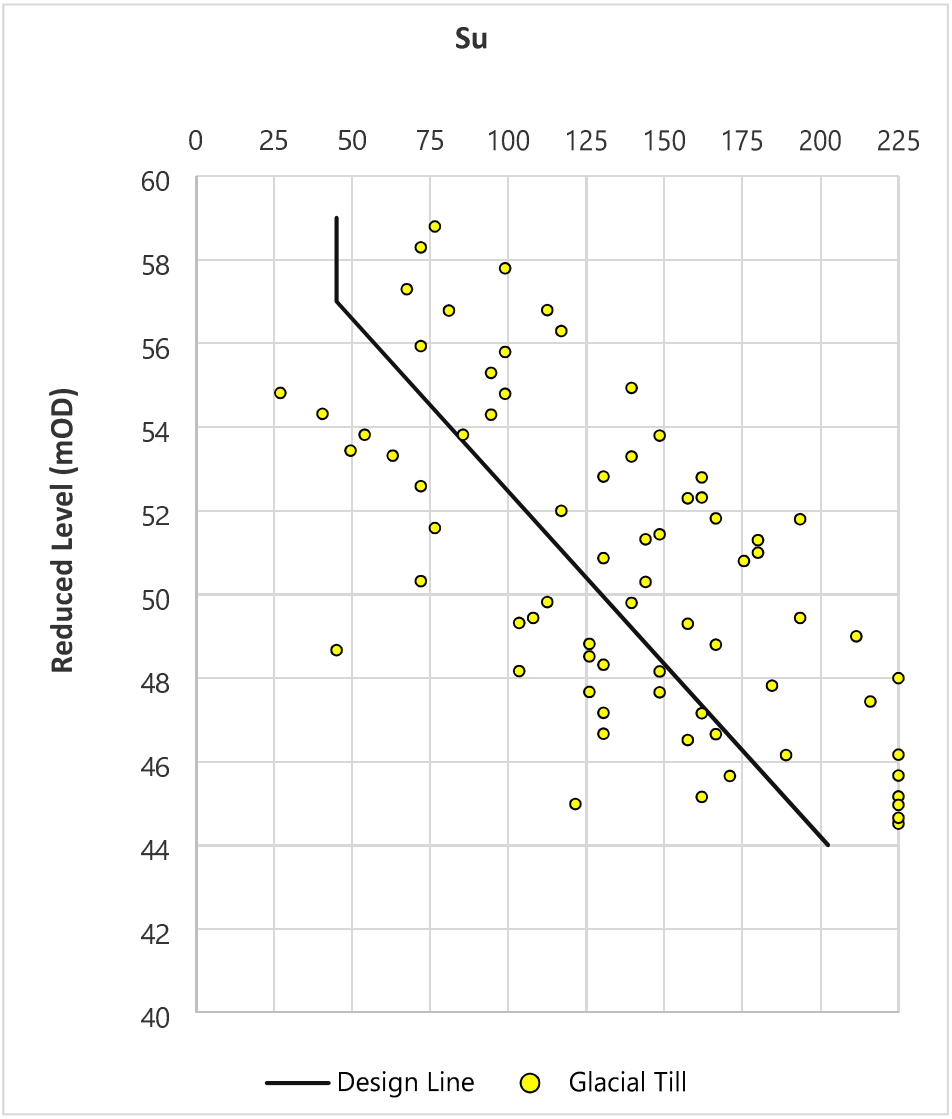


Figure 5—7: Su values vs Elevation for Glacial Till

Eight Atterberg limit tests were undertaken on Glacial Till. The Atterberg Limits graphs are given in Figure 5—3. The summary of the results is:

- Liquid Limit : 13-24%;
- Plastic Limit : 13-19%;
- Plasticity Index : 13-23%

The Liquid Limit vs Plasticity Index graph (Figure 5—4) shows that the Made Ground is all above the A-line. The results indicate Made Ground to have a low to medium plasticity with a low to medium volume change potential.

Using the guidance in BS 8002:2015, the characteristic critical state effective angle of shearing resistance and the peak effective of shearing resistance of Alluvium with an average PI of 18° are **$\phi'_{cv,k} = \phi'_{pk,k} = 27°$.**

Based on Figure 5—8, the design cohesion value of Glacial Till is **$c' = 5$ kPa.**

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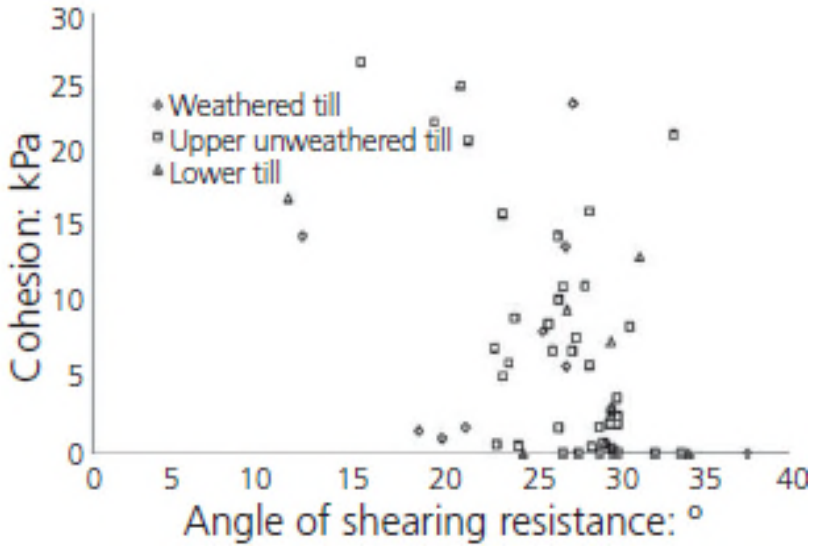


Figure 5—8: c′ versus ɛ′ for Glacial Tills (after Clark, 2017)

Stiffness

Typical correlations between E and C_u have been derived. The recommended vertical stiffness values are for assessing ground movements at formation level, due to heave and settlement:

- $E_{uV} = 450S_u$; $\nu_u = 0.5$
- $E'_V = 360S_u$; $\nu = 0.2$

It is assumed that movements in the Glacial Till will be small and therefore strains relatively low and so an enhanced horizontal stiffness value is recommended.

The recommended horizontal stiffness for the analysis of retaining walls are:

- $E_{uH} = 600\ S_u$; $\nu_u = 0.5$
- $E'_H = 480\ S_u$; $\nu = 0.2$

5.2.4 Coal Measures

Description

The Coal Measures comprise interlaminated layers of Mudstone, Siltstone, Sandstone and very weak black Coal, and mainly consists of Mudstone.

The Mudstone is described as very weak to weak with locally thin to thickly laminations of light grey siltstone and/or fine grained sandstone. Discontinuities are extremely closely to closely spaced planar smooth or undulating rough clean locally polished or clay smeared.

The Sandstone is described as very weak to moderately weak fine to medium grained with localised thin laminations of mudstone and/or siltstone. Discontinuities are extremely closely to medium spaced undulating rough clean.

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The Siltstone is described as very weak to weak with localised thin to thick laminations of mudstone and/or sandstone. Discontinuities are very closely to medium spaced planar smooth or undulating rough clean or stained.

The Rock Quality Designation (RQD) values represent the consistency of the rock, and as shown in Figure 5—9 are highly variable and reflects the variable nature and quality of the material.

The Bulk and Dry Densities were measured as part of the UCS tests. The results range from 2420kg/m^3 and 2790kg/m^3 for bulk density and 2170kg/m^3 and 2720kg/m^3 for dry density. A **bulk density of 24kN/m^3** and a **dry density of 22kN/m^3** are recommended for design.

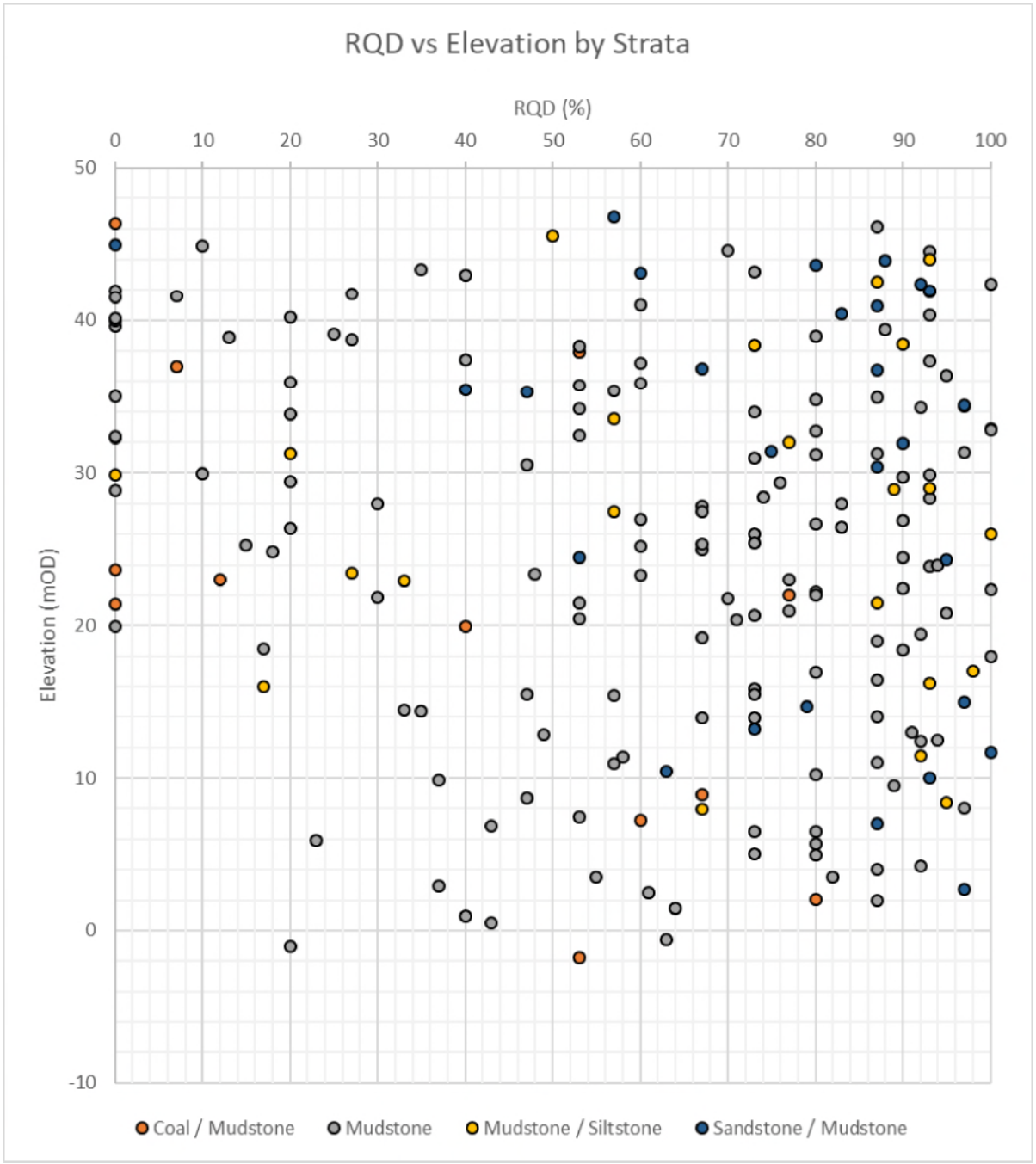


Figure 5—9 RQD Vs depth for Coal Measures by rock type

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Strength

In situ SPT testing has been carried out alongside laboratory Unconfined Compressive Strength (UCS) and Point Load tests to determine the strength of the rockThe results are plotted in Figure 5—10 to Figure 5—12. The logs show that the coal measures are predominantly comprised of Mudstone, therefore the parameters have been derived for the Mudstone as this is typically the weakest strata and will govern the foundation design.

The SPT N_{60} values are all greater than 50, so have been extrapolated based on the depth of penetration in the test. The N_{60} values for the Mudstone range between 89 and 1700, with an average value of 405. The Point Load Is_{50} values are between 20 to 6710kPa, with an average value of 711kPa. The range of UCS values tests are between 0.3 and 33.3MPa.

CIRIA C143 states that the correlation between SPT N_{60} value and UCS is $10xN_{60}$. This correlation has been utilised to add to the data set of UCS values.

Wylie and Mah state that on average, the uniaxial compression strength is about 20-25 times the point load strength index, although it is highly variable. A site specific correlation between Is_{50} and UCS has been assessed to be 16 and similarly to the SPT information, this has been added to the UCS data set (Figure 5—13).

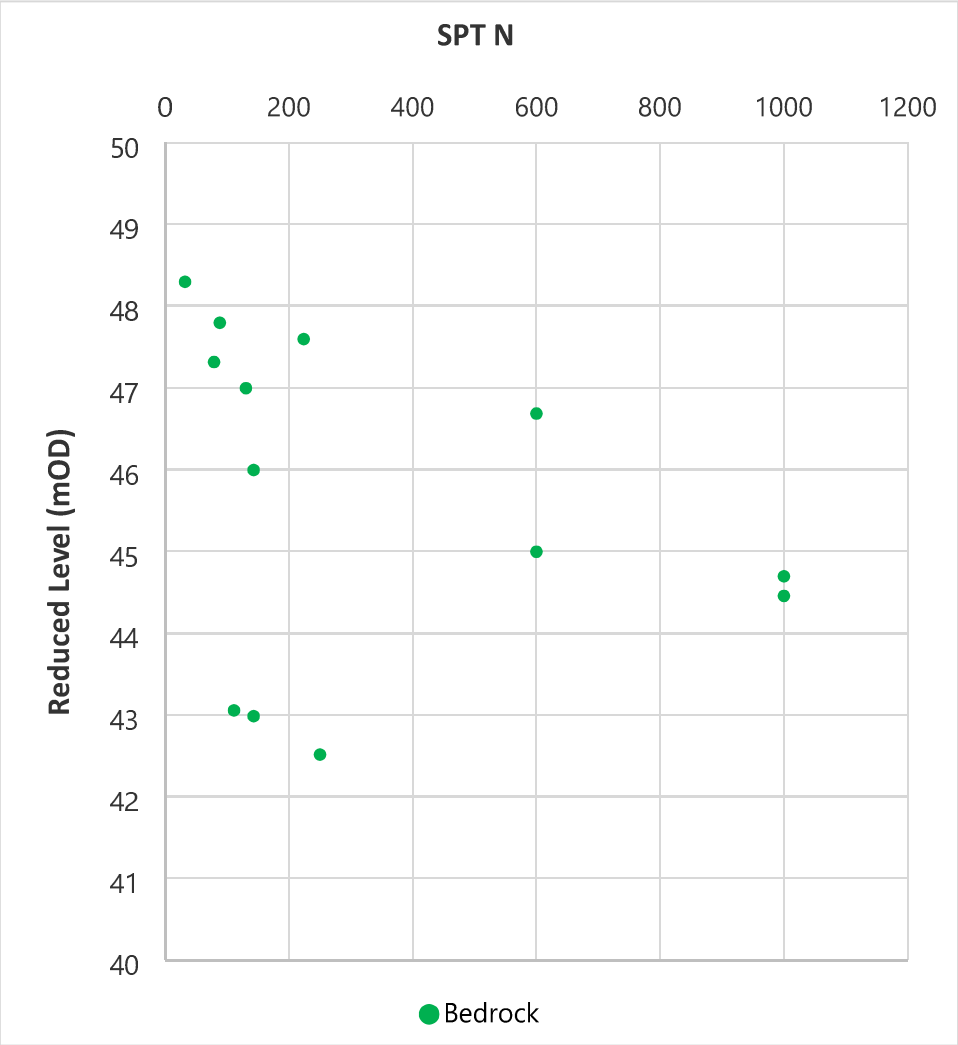


Figure 5—10:SPT N_{60} values Vs depth for Coal Measures *(note all values extrapolated)*

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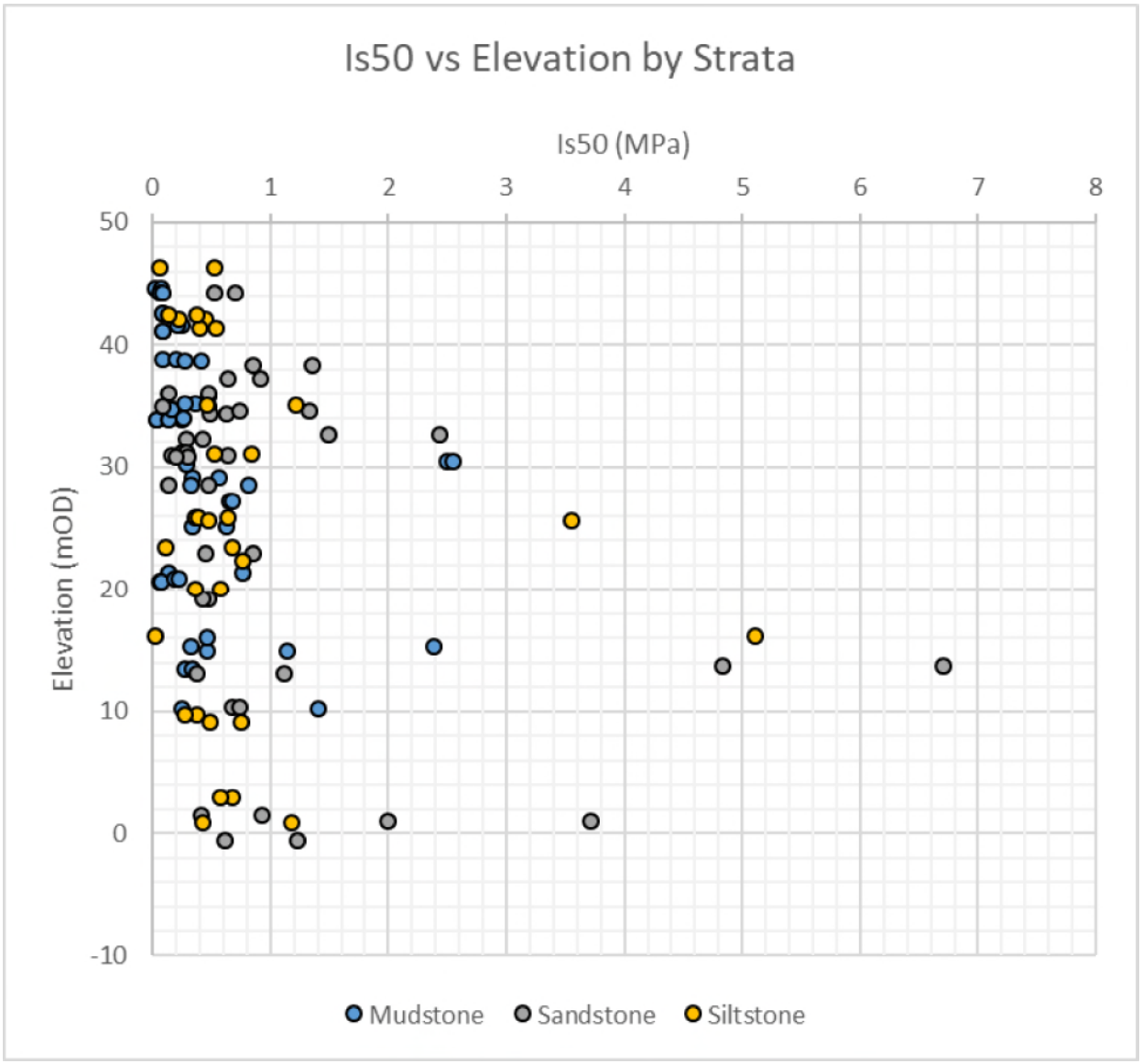


Figure 5—11 Point load strength tests Vs depth for Coal Measures

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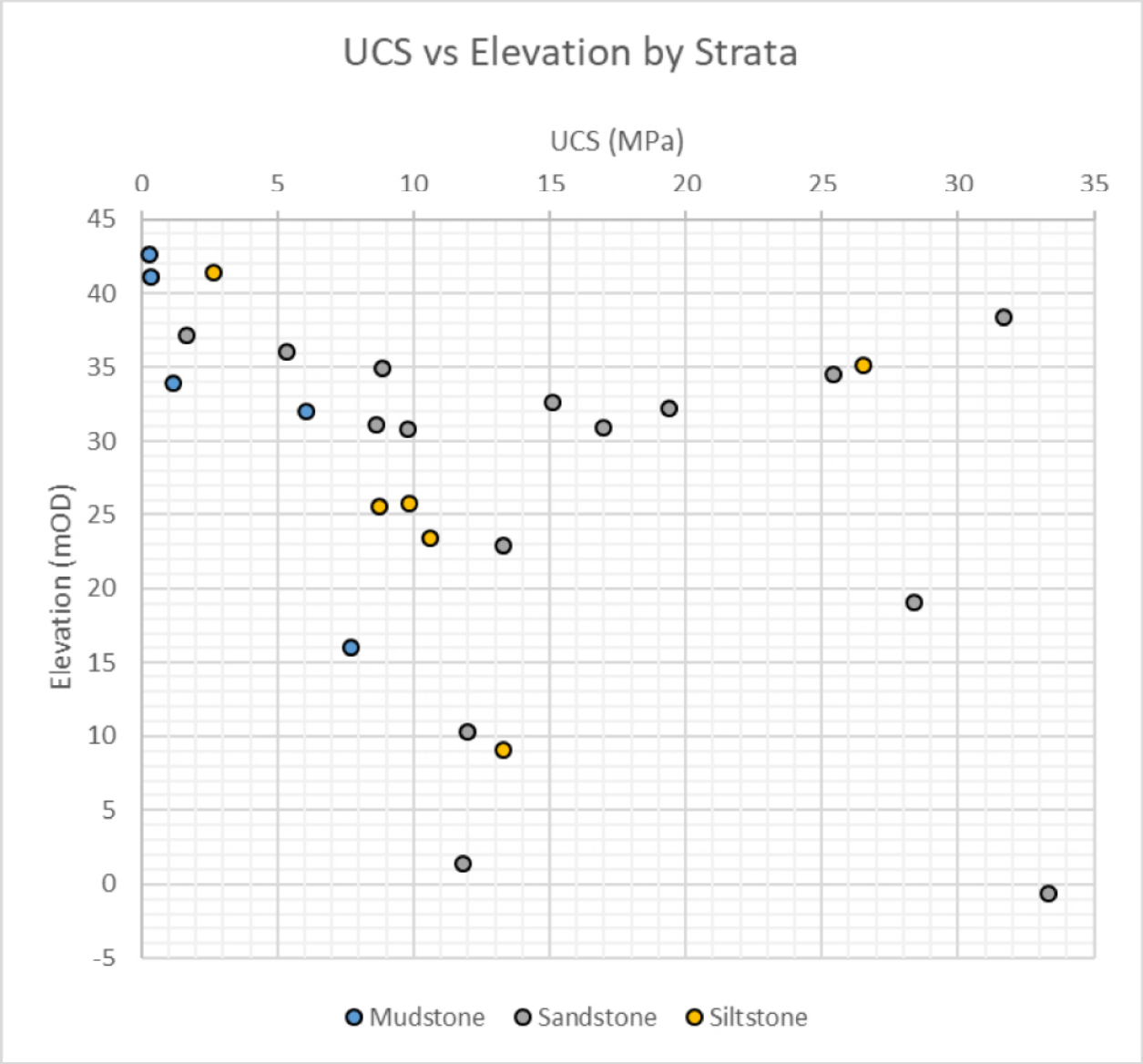


Figure 5—12 UCS test Vs depth for Coal Measures

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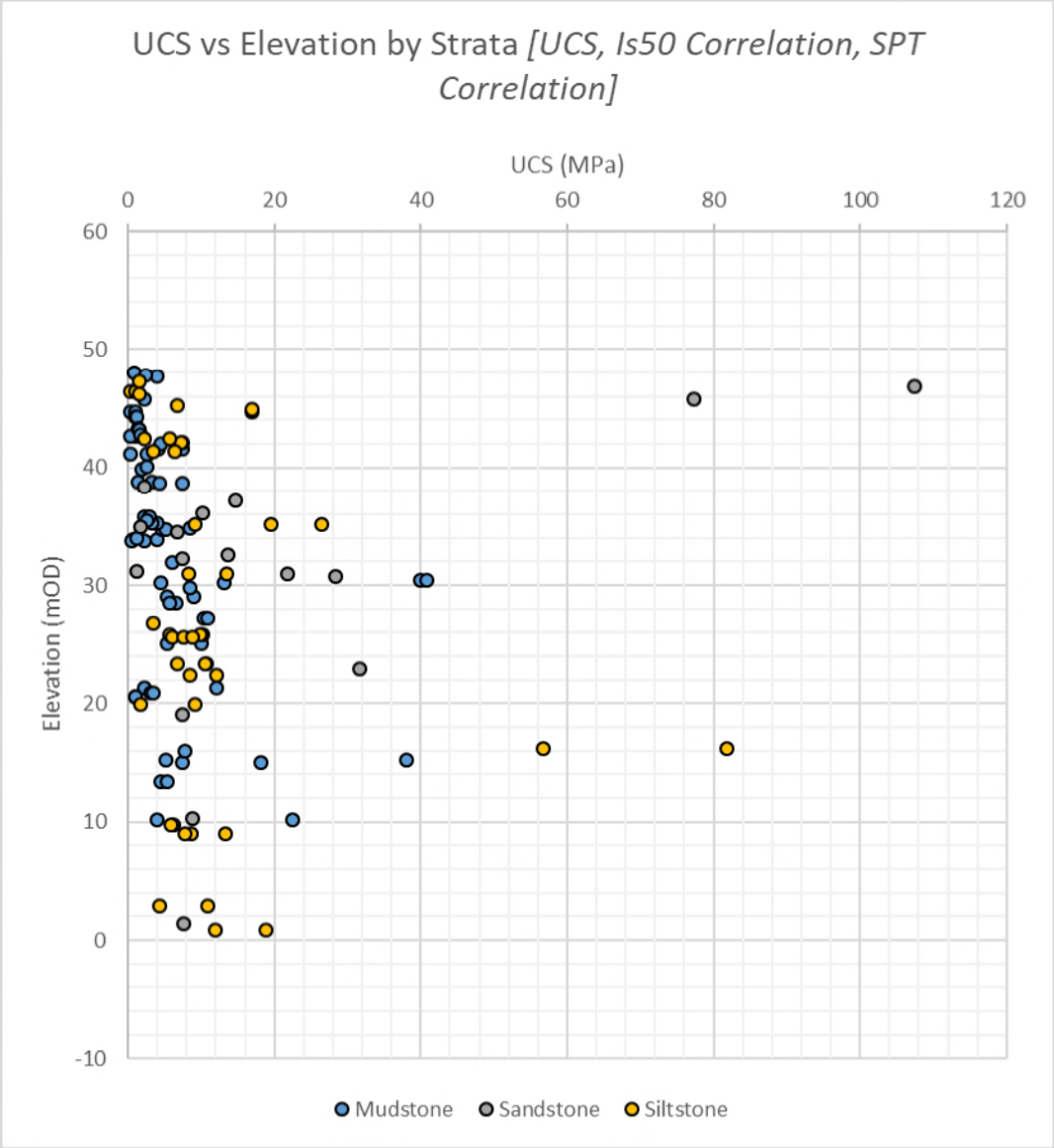


Figure 5—13: All interpreted UCS data for Coal Measures

Although there is a good proportion of the data set showing a relatively high UCS value this is not felt to be representative of the rock mass overall as per the borehole descriptions and as witnessed on site. Figure 5—14 shows the number of low values of UCS in the top 10m of rock, which is primarily where the rock socket capacity will be taken from.

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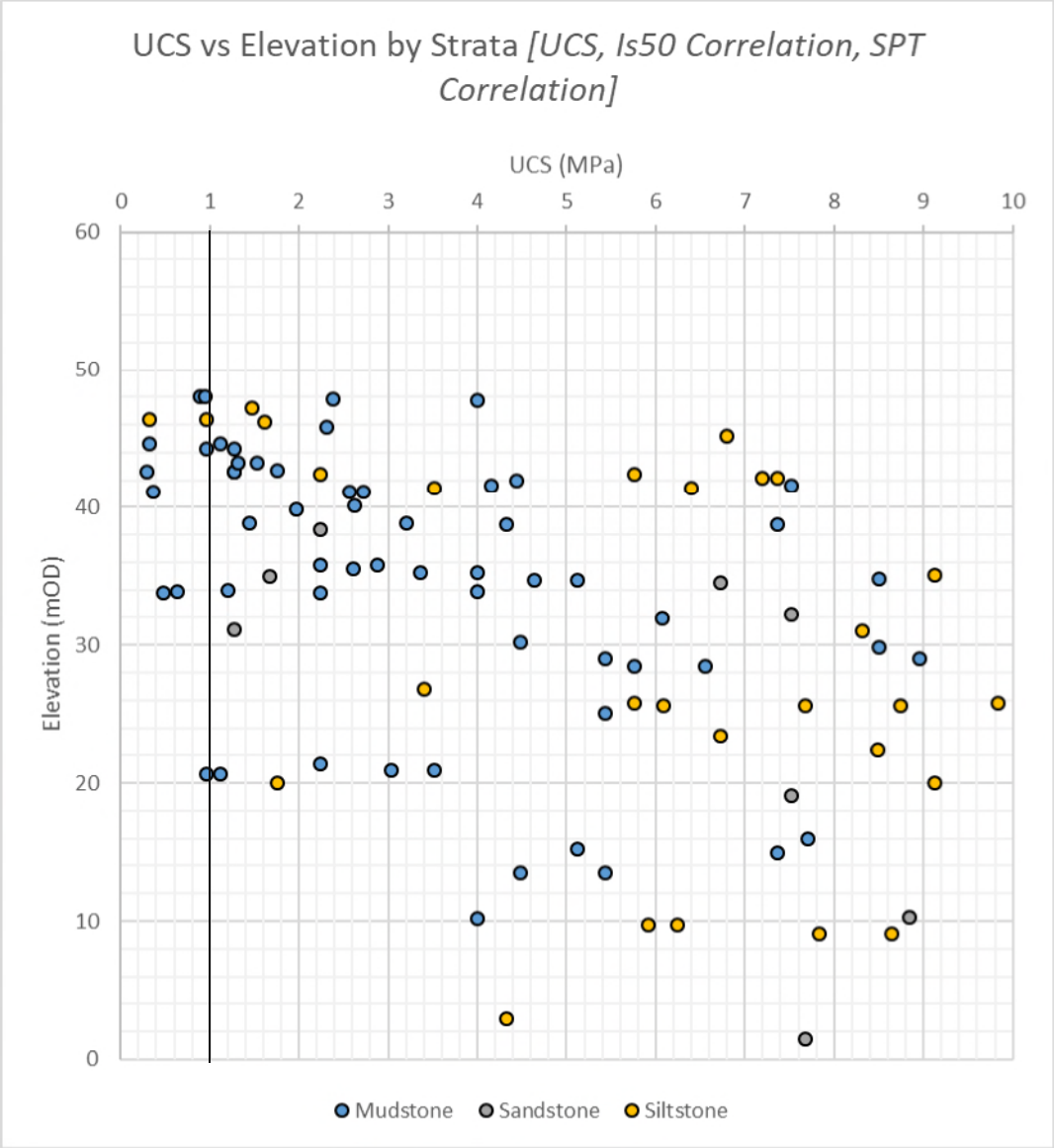


Figure 5—14: All interpreted UCS data for Coal Measures (*maximum UCS value of 10MPa)*

Taking the above into account **a UCS value of 1MPa** has been adopted for design.

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Stiffness correlation

The strain has been measured at the mid-height of the sample during a selection of the UCS tests to provide an indication of the intact rock stiffness. The range of values was 0.07GPa to 8.98GPa. This is a limited data set and represents the intact modulus and so further assessment of the stiffness of the rock mass has been undertaken by analogising the mudstone to a clay to provide a likely lower bound value. A UCS of 1MPa is equivalent to an undrained shear strength of 0.5MPa. using the relationship $E=300C_u$ gives **a stiffness of 150MPa** which is recommended for general design purposes.

5.3 Parameter Summary

Table 5—4 provides a summary of the geotechnical parameters for use in design.

Table 5—4: Design geotechnical parameters

Strata	Unit Weight (kN/m^3) Bulk [Dry]	Undrained Strength, C_u (kPa)	Drained Strength, ϕ' (°) [c′ (kPa)]	UCS (MPa)	Stiffness (MPa) [Undrained] Drained
Made Ground	18	40	$\phi'_{cv,k} = \phi'_{pk,k} = 26$	-	[12] 9.6
Alluvium	16	30	$\phi'_{cv,k} = \phi'_{pk,k} = 25$	-	[9] 7.2
River Terrace Deposits	18	-	$\phi'_{cv,k} = 33$ $\phi'_{pk,k} = 39$	-	20
Glacial Till	20	45 +12z (z =depth from 2mbgl)	$\phi'_{cv,k} = \phi'_{pk,k} = 27$ [c′ = 5]	-	[$450S_u$] $360S_u$
Coal Measures (Mudstone)	24 [22]	-	-	1	150

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6 Design Recommendations

6.1 General

Based on the ground conditions encountered and the parameters described in section 5 the following geotechnical solutions are presented as the Engineer's reference design.

6.2 Shallow Foundations

It may be feasible to found some areas on shallow foundations, for example the retractable seating, given the likely low applied loads. However, the movement tolerance for this type of item is extremely tight and so a detailed analysis of the differential settlement is required. At this stage it is assumed that a mini piles solution will be required in this area to minimise movements. Allowable bearing pressures for footings on Made Ground would generally be limited to less than 50kPa.

6.3 Piled Foundations

The ground investigation data shows that the near surface soils are variable with significant depth of made ground. Therefore apart from very lightly loaded areas building structures should be founded on piles, founded within the Coal Measures. The key constraint with the Coal Measures is the position of the coal seams in relation to the founding level of the piles. It is assumed that the piles will have to be rotary bored due to the presence of obstructions and the strength/competency of the rock and the pile capacities required for the structural loads, however it may be feasible to use CFA techniques in some areas.

Driven piles have been discounted owing to the risk of buried obstructions and the generally high structural loadings. In addition there are gas mains close to the perimeter of the site and the vibration from driven piling works may cause an issue with these.

The pile length across the site will vary based on the depth to rockhead and the presence of coal seams. In some locations piles will have to be extended due to the presence of coal seams. The site has been grouted and so it has been assumed that the majority of voids in the upper two worked seams have been filled, however voids were encountered during the ground investigation and these have been identified on the constraints plan. The guidance given, states voids associated with working will migrate up to 10x the seam thickness. As there is a risk that that there may be some untreated voids associated with previous workings, it is proposed to mitigate this risk by founding the toe of piles, either 10x the seam thickness above the seam, or below a particular seam where there is a risk voids associated with the seam could influence the pile.

Preliminary design compression resistances for Eurocode STR and GEO combinations have been calculated for preliminary costing purposes for a range of diameters up to 25m length. These assume that no capacity is generated from the superficial deposits above the Coal Measures given that these are variable in nature and distribution across the site and the main resistance will be obtained from the underlying bedrock. These are presented in Figure 6—1.

Bridging structures will be required over remediated mine shafts. The risk of an unknown mine shaft remains, and in particular the ghost shaft that has been previously detailed by others to be a duplicate ([8]). A detailed assessment of the grouting pressures has been undertaken as part of the Coal Mining Risk Assessment exercise to establish the residual risk from this previous mineworkings.

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The coordinates of the remediated mine shafts on the site are available, however there is an apparent error in the south west coordinate of one of the caps and so the location of this will have to be proven on site by the Contractor.

Figure 6—1 provides an indication of the rock socket required for different diameter piles. This length takes into account the structural load applied and is not an indication of the length required to avoid issues with previous mine workings.

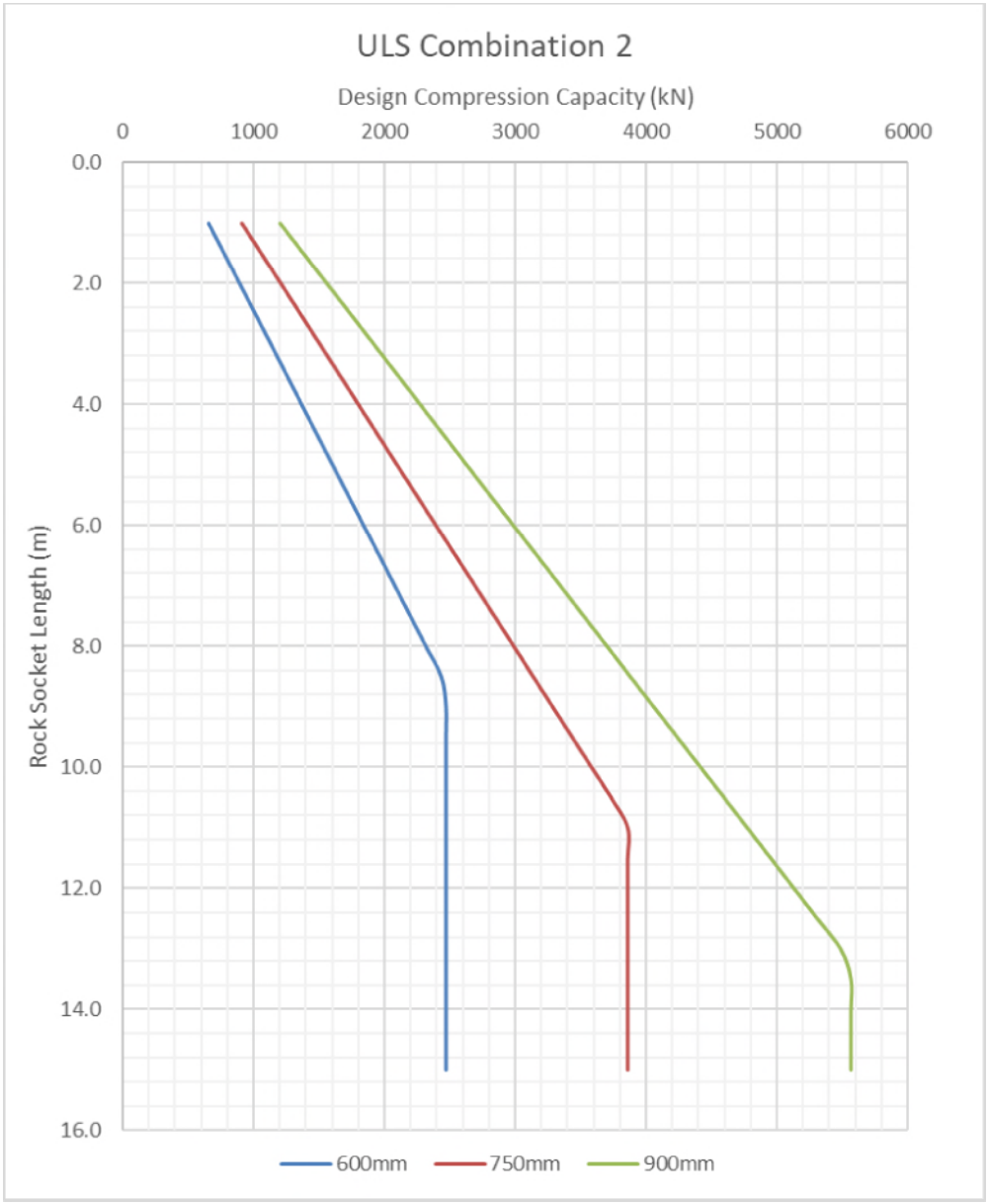


Figure 6—1: Indicative rock socket lengths ***[Note: these are only to be utilised with appropriately factored structural loads]***

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6.4 Earthworks

The site ground level is currently sloping from approximately +60mOD in the south-east to approximately +55.0mOD in the north. The site is proposed to be regraded to a general slab level of +54.0mOD, therefore there will be significant excavation to level the site.

In the area of the proposed seating it may be possible to carry out some ground stabilisation or improvement in order to permit a shallow foundation solution. This will help to minimise the potential settlements of the foundation. A further assessment of this will be undertaken once the outstanding oedometer results have been received.

6.5 Retaining Walls

Due to the significant excavation to regrade the site to a suitable flat level, excavations will be required around the site perimeter. The Engineer's reference design shows a contiguous pile solution to minimise movements and propping required. The following construction sequence is envisaged along the boundary with Alan Turing Way and also where required along the boundary with the canal:

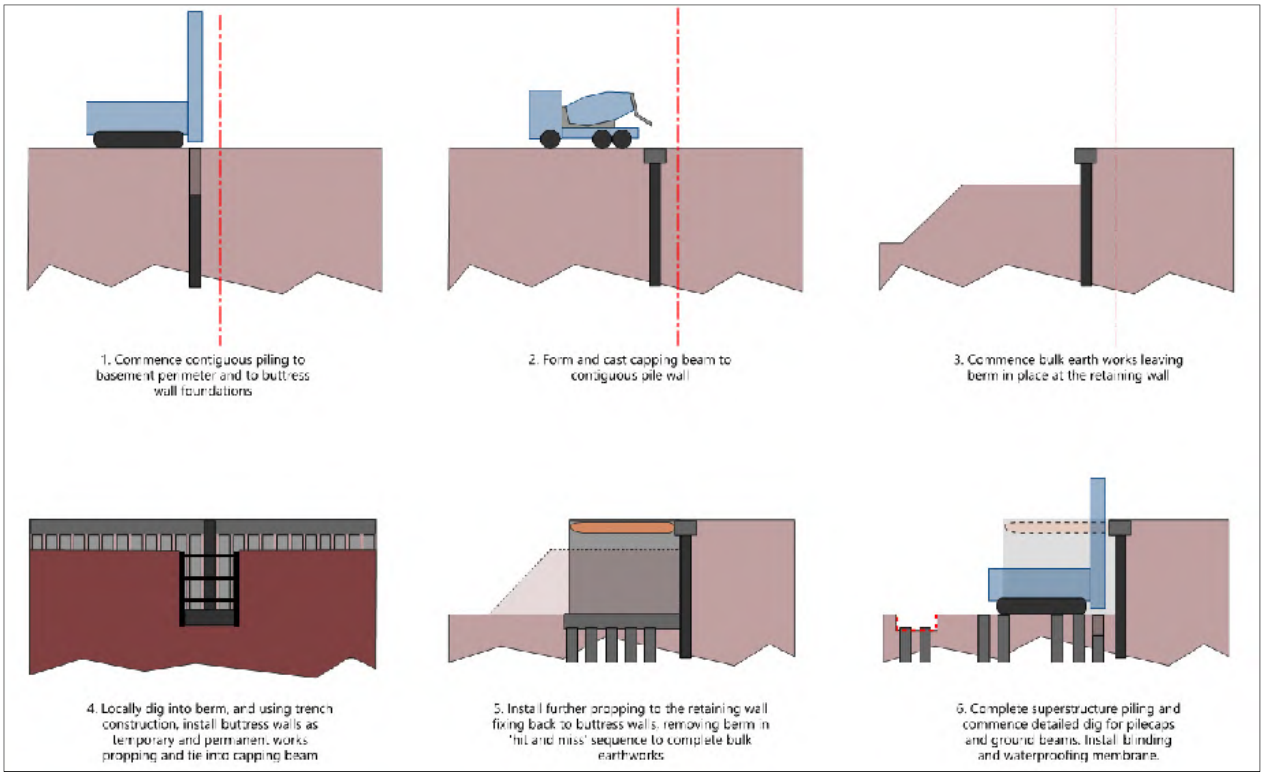


Figure 6—2: Indicative construction sequence along Alan Turing Way and Boundary with Canal

As shown above the buttress walls will form the temporary and permanent props for the embedded retaining walls.

Along the boundary with Joe Mercer Way the following sequence is envisaged:

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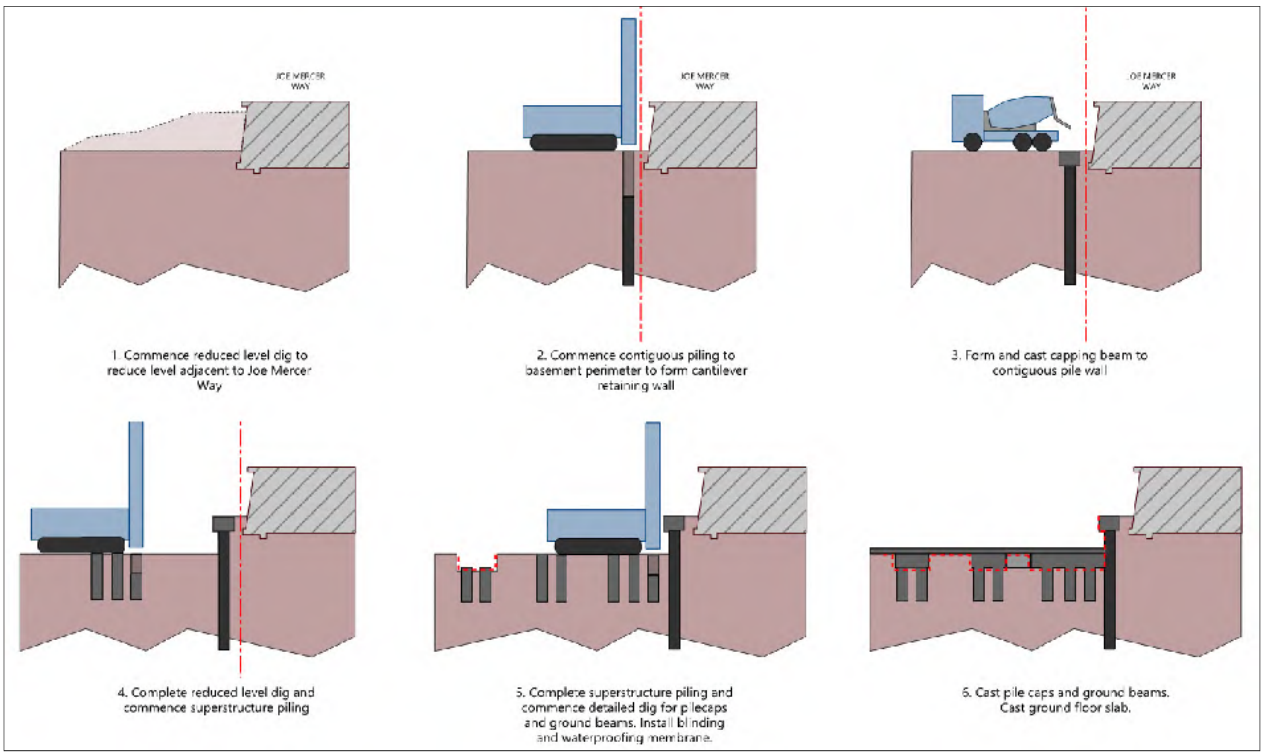


Figure 6—3: Indicative construction sequence along Joe Mercer Way

Although the retained height is small, an embedded wall is utilised due to the large surcharge imposed by the presence of Joe Mercer Way.

6.6 Buried Concrete Design

The Design Sulfate (DS) class will be assessed upon receipt of outstanding laboratory results.

6.7 Groundwater

As shown in Section 0 the groundwater table is within the Coal Measures and a design water level of 41mOD. However, it can be seen from the data, that a significant amount of perched water will be encountered during the construction works and the contractor should make adequate provision for the removal or discharge of this, as appropriate. It is unlikely to be suitable for direct discharge to sewer, refer to Sections 9.3 and 12 and for further information on this.

6.8 Settlement of Made Ground

An assessment of the long term creep of the Made Ground is required as it is likely to have been placed in an uncontrolled manner. Once slab levels are fixed across the site an assessment will be undertaken of the magnitude of creep that can be anticipated beneath the slab and the implications for the slab and pile design.

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7 Geoenvironmental Risk Assessment Criteria

1.1 Soil risk assessment criteria

In order to perform a Generic Quantitative Risk Assessment (GQRA), the soil, groundwater and gas test results will be compared (see Sections 8, 10 and 10 respectively) with available Soil Guideline Values (SGVs), Category 4 Screening Values (C4SLs), and BuroHappold and other industry Generic Assessment Criteria (GAC), the details of which are presented in 0.

1.1.1 Risks to human health

Chronic: For human health risk assessment, soil results will be assessed using GACs, C4SLs and SGVs for the Contaminated Land Exposure Assessment (CLEA) residential with plant uptake ($Resi_1$ scenario), residential without plant uptake ($Resi_2$ scenario) and commercial land use scenarios. The residential and commercial land use scenarios are applied to give context to the data and to provide indicative upper and lower bounds for discussion purposes only. The commercial is considered to be the most appropriate land use scenario against which the data is to be compared to establish suitability for use.

Acute: For acute risks to human health, soil results will be assessed using the SoBRA Acute Generic Assessment Criteria (AGAC) [21]. These AGACs have been derived for seven determinands: arsenic, benzene, cadmium, free cyanide, phenol, trichloroethylene (TCE) and vinyl chloride (VC). Lead was also considered but due to the limited toxicological data available, no threshold was determined. The exposure scenarios modelled are:

- General public exposure (or trespasser) via a single large dose (or potentially sum of several smaller doses over a short duration) of a 1-2 year old female child (averaged across ages of 0-6 years).
- Occupational exposure of female adult commercial/industrial worker exposed to contaminated soil during their work, such as construction, utility, site investigation or remediation worker over the working day.

Acute exposure has been defined and modelled based on an irregular (i.e. not repeated) exposure of up to 24 hours duration based on the assumption lasting for 30 minutes or less.

For determinands other than the 7 modelled by SoBRA, maximum concentrations (not the average concentration which is relevant to chronic / long term risk) were considered. Comparison of maximum concentrations are made with the other GACs and other screening values which provides a conservative benchmark for such short term risks (as the values are based on long term exposure).

1.1.2 Plant health (phytotoxicity)

It is not anticipated that direct planting will take place within the material currently on Site. However, as a conservative approach and in the case of future planting, soil test results indicating phytotoxicity are assessed using the British Standards Specification for Topsoil (BS 3882) [22].

1.1.3 Risks to below ground services

The water industry and several water utility companies have published guidance regarding the construction of new water supply pipework on Brownfield sites [23] but there is no universally accepted guidance (or contaminant thresholds). The most recent guidance published by Water UK [24] has been adopted as best practice but is not mandatory, other guidance includes UK Water Industry Research [25].

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1.2 Controlled waters risk assessment criteria (Section 9)

In order to perform a groundwater generic quantitative risk assessment, the groundwater data is assessed using UK Drinking Water Standards (DWS) [26], the Freshwater EQS [27].

7.1 Ground gas risk assessment criteria (Section 10)

Ground gas data obtained from the Site will be used to assess the risks to the Site with reference to CIRIA report C665 [19], National Housing Building Council (NHBC) guidance [28] and BS 8485 [29]. Consideration to both methane (CH_4) and carbon dioxide (CO_2) concentrations as well as flow rates will be given. The borehole hazardous gas flow rate (Qhg) was then calculated from each monitoring location and each monitoring event. The Gas Screening Value (GSV) is defined as the product of gas concentration multiplied by flow rate. The GSV will then be considered with other parameters to define a Characteristic Situation (CS) which identifies the need for and scope of necessary gas protection measures.

7.1.1 Soil vapour

Soil vapour has not been assessed at the Site as the concentrations of volatile determinands in soil or groundwater (e.g. benzene and naphthalene) were not found to be present in concentrations that may pose a risk to human health at the Site.

7.2 Waste Classification (Section 11)

In order to determine the likely waste classification, soil test results have been assessed using the EA (Environment Agency), (2015) 'Technical Guidance WM3', 'Guidance on the classification and assessment of waste' 1st Edition 2015 [30].

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8 Analytical Results for Soil

8.1 Analytical Scope for Soil

A total of 108 soil samples were collected and tested during the intrusive ground investigation. 101 samples were taken of the Made Ground and 7 from the natural strata just below the Made Ground. Table 8—1 below presents the laboratory testing suites used for soil during the intrusive ground investigation.

Table 8—1 Laboratory testing suites for soil

Suite Reference	Contaminant Analysis Suite
Suite E (based on S1:20:1)	pH, CLEA metals suite, total cyanide, free cyanide, total mercury, speciated PAHs, phenol, EPH, PRO including BTEX, speciated TPHs [CWG], Soil Organic Matter, Total Organic Carbon, Asbestos (and quantification where necessary), VOCs and SVOCs and Loss of Ignition.

The analytical test results for contaminants in soils are presented in full in Appendix C-F. For the purposes of this assessment the Made Ground data has been sub-divided into different zones based on the previous remediation work and the historical uses. During the 2011 remediation works, material was excavated, engineered then re-used across the entire Site therefore a site-wide assessment between ground level and 2.0m BGL has been undertaken. Assessment of the material below 2.0m BGL has been further sub-divided into East and West based on the historical Site uses, residential buildings and Bradford Gas Works, respectively. These zones are shown in Figure 8—1 and comprise:

Zone 1 Ground Level – 2.0m BGL (site-wide)

Zone 2 Over 2.0m BGL West (formerly Bradford Gas Works)

Zone 3 Over 2.0m BGL East (formerly residential use)

Zone 4 Natural Strata (site-wide)

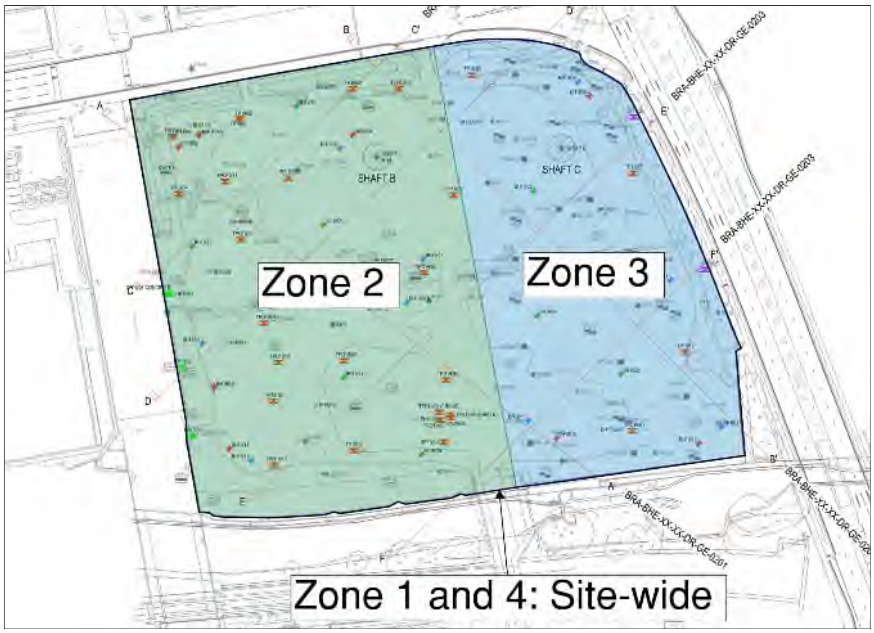


Figure 8—1 Site assessment zone plan

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8.2 Zone 1 - Made Ground (GL-2.0m BGL) – Chronic Risks

8.2.1 Inorganic Determinands

A total of 48 samples of Made Ground (between GL and 2.0m BGL) were analysed for inorganic determinands. All samples recorded inorganic contaminant concentrations below the relevant residential without plant uptake and commercial screening thresholds therefore have not been tabulated. The full screening assessment and factual data is presented in Appendix C and Appendix J, respectively.

8.2.2 Organic determinands

BTEX and PAHs

A total of 21 samples of Made Ground were analysed for BTEX [benzene, toluene, ethyl benzene and xylene] and 48 samples for PAHs. Concentrations were compared with relevant screening values for human health risk assessment. No samples contained elevated concentrations of BTEX above the more conservative residential thresholds therefore have not been tabulated. Table 8—2 presents a summary, with the full screening assessment and factual data in Appendix C and Appendix J, respectively.

Table 8—2 Concentrations of PAHs (mg/kg)

Determinand	No. of Samples	GAC (No. of samples exceeding GAC); SGV; C4SL		Min.	Max.	US95*	Outlier
		Residential without Uptake	Commercial				
Naphthalene	48	2.3 (**10**)	190 (0)	<0.03	10.3	2.8	10.3, 5.2
Acenaphthylene	48	2900 (0)	83000 (0)	<0.01	0.44	-	
Acenaphthene	48	3000 (0)	84000 (0)	0.02	10.3	-	
Fluorene	48	2800 (0)	63000 (0)	0.02	9.97	-	
Phenanthrene	48	1300 (0)	22000 (0)	0.17	63.2	-	
Anthracene	48	31000 (0)	520000 (0)	0.04	14.4	-	
Fluoranthene	48	1500 (0)	23000 (0)	0.24	47.0	-	
Pyrene	48	3700 (0)	54000 (0)	0.22	38.8	-	
Benzo[a]anthracene	48	11 (**2**)	170 (0)	0.12	17.40	6.8	17.4
Chrysene	48	30 (0)	350 (0)	0.12	18.2	-	
Benzo[b]fluoranthene	48	3.9 (**23**)	44 (0)	0.12	14.2	5.8	14.2
Benzo[k]fluoranthene	48	110 (0)	1200 (0)	<0.07	6.07	-	
Benzo[a]pyrene	48	3.2 (**28**)	35 (0)	0.10	10.9	5.1	10.9, 10.1
Indeno[123-cd]pyrene	48	45 (0)	500 (0)	0.08	6.63	-	
Dibenzo[ah]anthracene	48	0.31 (**37**)	3.5 (0)	<0.04	1.35	0.7	1.4
Benzo[ghi]perylene	48	360 (0)	3900 (0)	0.07	5.64	-	

S4UL used where there is no C4SL
*The calculations of the US95 include outliers and were not undertaken where exceedances of the relevant S4UL / C4SL have not been identified

All samples recorded PAH concentrations below the relevant commercial screening thresholds.

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Petroleum Hydrocarbons

A total of 21 samples of Made Ground were analysed for petroleum hydrocarbons. The results are presented in Table 8—3 below, with the full screening assessment and factual data in Appendix C and Appendix J, respectively.

Table 8—3 Concentrations of Petroleum Hydrocarbons (mg/kg)

Determinand	No. of Samples	GAC (No. of samples exceeding GAC); SGV; C4SL		Min.	Max.	US95*
		Residential without Uptake	Commercial			
Aliphatic C5 - C6	21	42 (0)	3200 (0)	<0.01	<0.01	-
Aliphatic C6 - C8	21	100 (0)	7800 (0)	<0.01	<0.01	-
Aliphatic C8 - C10	21	27 (0)	2000 (0)	<1.0	6.0	-
Aliphatic C10 - C12	21	130 (0)	9700 (0)	<1.0	5.0	-
Aliphatic C12 - C16	21	1100 (0)	59000 (0)	<1.0	18.0	-
Aliphatic C16 - C21	21	65000 (0)	1600000 (0)	<1.0	27.0	-
Aliphatic C21 - C35	21	64000 (0)	1600000 (0)	12.0	217.0	-
Aromatic C5 - C7	21	370 (0)	26000 (0)	<0.01	<0.01	-
Aromatic C7 - 8	21	860 (0)	56000 (0)	0.02	0.02	-
Aromatic C8 - C10	21	47 (0)	3500 (0)	<1.0	21.0	-
Aromatic C10 - 12	21	250 (0)	16000 (0)	3.0	17.0	-
Aromatic C12 - C16	21	1800 (0)	36000 (0)	2.0	69.0	-
Aromatic C16 - C21	21	1900 (0)	28000 (0)	4.0	418.0	-
Aromatic C21 - C35	21	1900 (0)	28000 (0)	22.0	474.0	-
Total Aliphatic and Aromatic	21	490 (**12**)	38000 (0)	44.0	1040.0	822.4

S4UL used where there is no C4SL
*The calculations of the US95 average concentrations is not required where exceedances of the relevant S4UL / C4SL have not been identified

Concentrations of all hydrocarbon fractions in all samples are below the relevant commercial screening thresholds.

8.2.3 pH in Made Ground

Measurements of soil pH are typically alkaline with an average pH of 9.9 and a maximum recorded of 11.86. The elevated pH is likely to be related to addition of lime within the top 2m of Made Ground placed in 2011 by BWB.

8.2.4 Asbestos

Suspected Asbestos Containing Materials (ACM) were not observed in the soils encountered in any of the exploratory holes during the site investigation. A total of 48 samples taken from the Made Ground were screened for asbestos. Asbestos (loose fibres of Chrysotile and Amosite and Amosite board) was identified in four different samples at three separate locations (8% of data set). BH19/07c recorded 0.003% concentration of loose Chrysotile fibres at 0.5m BGL; BH19/16 a concentration below the limit of detection (<0.001%) of loose Chrysotile and Amosite fibres at 0.1m BGL; TP19/01 recorded 0.011% of loose Chrysotile fibres at 1.0m BGL and 3.619% of Amosite board at 2.0m BGL.

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8.3 Zone 2 - Made Ground (>2.0m BGL WEST) – Chronic Risks

8.3.1 Inorganic Determinands

A total of 36 samples of Made Ground (over 2.0m BGL, west) were analysed for inorganic determinands (as per Table 8—4). A summary of the results are presented below in Table 8—4 with the full screening assessment and factual data in Appendix D and Appendix J, respectively.

Table 8—4 Concentrations of inorganic determinands (mg/kg)

Determinand	No of samples	GAC (No of samples exceeding GAC). SGV; C4SL		Min.	Max.	US95*	Outliers
		Residential without Uptake	Commercial / Industrial				
Total Cyanide	36	760 (0)	16000 (0)	<1.0	102.0	-	-
Arsenic	36	40 (**5**)	640 (0)	4.0	92.0	37.7	92.0, 84.0, 79.0
Boron	36	11000 (0)	240000 (0)	1.1	23.4	-	-
Cadmium	36	149 (0)	410 (0)	0.5	4.0	-	-
Chromium	36	910 (0)	8600 (0)	10.0	49.0	-	-
Hexavalent Chromium	5	21 (0)	49 (0)	<1.0	<1.0	-	-
Copper	36	7100 (0)	68000 (0)	18.0	786.0	-	-
Lead	36	310 (**4**)	2330 (0)	25.0	439.0	226.9	-
Mercury (inorganic)	36	56 (0)	58 (0)	<0.17	1.01	-	-
Nickel	36	180 (0)	980 (0)	12.0	71.0	-	-
Zinc	36	40000 (0)	730000 (0)	39.0	411.0	-	-

*The calculation of US95 average concentrations is not required for determinands where exceedances of the relevant guidance values have not been identified.

All samples recorded inorganic contaminant concentrations below the relevant commercial screening thresholds.

8.3.2 Organic determinands

BTEX and PAHs

A total of 25 samples of Made Ground (over 2.0m BGL, west) were analysed for BTEX [benzene, toluene, ethyl benzene and xylene] and 36 samples for PAHs. Concentrations were compared with relevant screening values for human health risk assessment. No samples contained elevated concentrations of BTEX above the more conservative residential thresholds therefore have not been tabulated. Table 8—5 presents a summary, with the full screening assessment and factual data in Appendix D and Appendix J, respectively.

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Table 8—5 Concentrations of PAHs (mg/kg)

Determinand	No. of Samples	GAC (No. of samples exceeding GAC); SGV; C4SL		Min.	Max.	US95*	Outlier
		Residential without Uptake	Commercial				
Naphthalene	36	2.3 (**5**)	190 (0)	0.09	8.2	2.7	8.2, 4.8
Acenaphthylene	36	2900 (0)	83000 (0)	<0.01	1.3	-	-
Acenaphthene	36	3000 (0)	84000 (0)	0.05	6.5	-	-
Fluorene	36	2800 (0)	63000 (0)	0.04	5.02	-	-
Phenanthrene	36	1300 (0)	22000 (0)	0.36	45.3	-	-
Anthracene	36	31000 (0)	520000 (0)	0.05	9.7	-	-
Fluoranthene	36	1500 (0)	23000 (0)	0.17	36.9	-	-
Pyrene	36	3700 (0)	54000 (0)	0.18	36.2	-	-
Benzo[a]anthracene	36	11 (**2**)	170 (0)	0.11	16.9	6.2	16.9, 11.6
Chrysene	36	30 (0)	350 (0)	0.13	15.9	-	-
Benzo[b]fluoranthene	36	3.9 (**11**)	44 (0)	<0.07	14.4	5.6	14.4
Benzo[k]fluoranthene	36	110 (0)	1200 (0)	0.08	5.0	-	-
Benzo[a]pyrene	36	3.2 (**12**)	35 (0)	0.08	12.1	4.7	12.1
Indeno[123-cd]pyrene	36	45 (0)	500 (0)	0.05	5.89	-	-
Dibenzo[ah]anthracene	36	0.31 (**16**)	3.5 (0)	<0.04	1.44	0.7	-
Benzo[ghi]perylene	36	360 (0)	3900 (0)	0.05	4.51	-	-

S4UL used where there is no C4SL
*The calculations of the US95 include outliers and were not undertaken where exceedances of the relevant S4UL / C4SL have not been identified

All samples recorded BTEX and PAH concentrations below the relevant commercial screening thresholds.

Petroleum Hydrocarbons

A total of 25 samples of Made Ground were analysed for petroleum hydrocarbons. The results are presented in Table 8—6 below, with the full screening assessment and factual data in Appendix D and Appendix J, respectively.

Table 8—6 Concentrations of Petroleum Hydrocarbons (mg/kg)

Determinand	No. of Samples	GAC (No. of samples exceeding GAC); SGV; C4SL		Min.	Max.	US95*	Outlier
		Residential without Uptake	Commercial				
Aliphatic C5 - C6	25	42 (0)	3200 (0)	0.0	0.0	-	-
Aliphatic C6 - C8	25	100 (0)	7800 (0)	0.0	0.0	-	-
Aliphatic C8 - C10	25	27 (0)	2000 (0)	1.0	8.0	-	-
Aliphatic C10 - C12	25	130 (0)	9700 (0)	1.0	16.0	-	-
Aliphatic C12 - C16	25	1100 (0)	59000 (0)	1.0	38.0	-	-
Aliphatic C16 - C21	25	65000 (0)	1600000 (0)	2.0	39.0	-	-
Aliphatic C21 - C35	25	64000 (0)	1600000 (0)	7.0	379.0	-	-
Aromatic C5 - C7	25	370 (0)	26000 (0)	0.03	0.03	-	-

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Determinand	No. of Samples	GAC (No. of samples exceeding GAC); SGV; C4SL		Min.	Max.	US95*	Outlier
		Residential without Uptake	Commercial				
Aromatic C7 - 8	25	860 (0)	56000 (0)	0.01	0.14	-	-
Aromatic C8 - C10	25	47 (**1**)	3500 (0)	1.0	253.0	58.7	253.0, 26.0
Aromatic C10 - 12	25	250 (0)	16000 (0)	2.0	57.0	-	-
Aromatic C12 - C16	25	1800 (0)	36000 (0)	5.0	267.0	-	-
Aromatic C16 - C21	25	1900 (0)	28000 (0)	6.0	855.0	-	-
Aromatic C21 - C35	25	1900 (0)	28000 (0)	14.0	1790.0	-	-
Total Aliphatic and Aromatic	25	490 (**15**)	38000 (0)	39.0	3220.0	1272.0	3220.0

S4UL used where there is no C4SL
*The calculations of the US95 average concentrations is not required where exceedances of the relevant S4UL / C4SL have not been identified

Concentrations of hydrocarbon fractions in all samples are below the relevant commercial screening thresholds.

8.3.3 pH in Made Ground

Measurements of soil pH are typically alkaline with an average pH of 9.3 and a maximum recorded concentration of 11.0.

8.3.4 Asbestos

Suspected Asbestos Containing Materials (ACM) were not observed in the soils encountered in any of the exploratory holes during the site investigation. A total of 36 samples taken from the Made Ground (>2.0m BGL, west) were screened for asbestos. Asbestos was identified in four different samples at three separate locations (11% of data set), within all samples the asbestos form was loose fibres of Chrysotile. BH19/04 and BH19/26 both recorded concentrations below the limit of detection (<0.001%) at 4.5m and 3.0m BGL respectively; BH19/09 recorded a concentration of 0.007% at 7.0m BGL; TP19/08 recorded 0.001% at 3.8m BGL.

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8.4 Zone 3 - Made Ground (>2.0m BGL EAST) – Chronic Risks

8.4.1 Inorganic Determinands

A total of 17 samples of Made Ground (over 2.0m BGL, east) were analysed for inorganic determinands (as per Table 8—7). A summary of the results are presented below in Table 8—7 with the full screening assessment and factual data in Appendix E and Appendix J, respectively.

Table 8—7 Concentrations of inorganic determinands (mg/kg)

Determinand	No of samples	GAC (No of samples exceeding GAC). SGV; C4SL		Min.	Max.	US95*	Outliers
		$Resi_2$	Commercial / Industrial				
Total Cyanide	17	760 (0)	16000 (0)	<1.0	102.0	-	-
Arsenic	17	40 (**3**)	640 (0)	2.0	73.0	41.3	73.0
Boron	17	11000 (0)	240000 (0)	<1.0	6.9	-	-
Cadmium	17	149 (0)	410 (0)	<0.5	2.0	-	-
Chromium	17	910 (0)	8600 (0)	13.0	87.0	-	-
Hexavalent Chromium	2	21 (0)	49 (0)	<1.0	<1.0	-	-
Copper	17	7100 (0)	68000 (0)	14.0	318.0	-	-
Lead	17	310 (**2**)	2330 (0)	11.0	509.0	242.3	509.0, 362.0
Mercury (inorganic)	17	56 (0)	58 (0)	<0.17	0.9	-	-
Nickel	17	180 (0)	980 (0)	13.0	75.0	-	-
Zinc	17	40000 (0)	730000 (0)	23.0	194.0	-	-

*The calculation of US95 average concentrations is not required for determinands where exceedances of the relevant guidance values have not been identified.

All samples recorded inorganic contaminant concentrations below the relevant commercial screening thresholds.

8.4.2 Organic determinands

BTEX and PAHs

A total of 10 samples of Made Ground (over 2.0m BGL, east) were analysed for BTEX [benzene, toluene, ethyl benzene and xylene] and 17 samples for PAHs. Concentrations were compared with relevant screening values for human health risk assessment. No samples contained elevated concentrations of BTEX above the more conservative residential thresholds therefore have not been tabulated. Table 8—8 presents a summary of the PAHs, with the full screening assessment and factual data in Appendix E and Appendix J, respectively.

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Table 8—8 Concentrations of PAHs (mg.kg)

Determinand	No. of Samples	GAC (No. of samples exceeding GAC); SGV; C4SL		Min.	Max.	US95*	Outlier
		Residential without Uptake	Commercial				
Naphthalene	17	2.3 (**1**)	190 (0)	<0.03	3.1	1.3	3.1
Acenaphthylene	17	2900 (0)	83000 (0)	<0.01	0.2	-	-
Acenaphthene	17	3000 (0)	84000 (0)	<0.01	2.6	-	-
Fluorene	17	2800 (0)	63000 (0)	<0.07	2.2	-	-
Phenanthrene	17	1300 (0)	22000 (0)	<0.03	13.4	-	-
Anthracene	17	31000 (0)	520000 (0)	<0.02	3.2	-	-
Fluoranthene	17	1500 (0)	23000 (0)	<0.08	14.4	-	-
Pyrene	17	3700 (0)	54000 (0)	<0.07	14.3	-	-
Benzo[a]anthracene	17	11 (0)	170 (0)	<0.04	7.1	-	-
Chrysene	17	30 (0)	350 (0)	<0.06	6.9	-	-
Benzo[b]fluoranthene	17	3.9 (1)	44 (0)	<0.05	5.3	-	-
Benzo[k]fluoranthene	17	110 (0)	1200 (0)	<0.07	1.7	-	-
Benzo[a]pyrene	17	3.2 (**1**)	35 (0)	<0.04	4.5	2.0	4.5, 2.3
Indeno[123-cd]pyrene	17	45 (0)	500 (0)	<0.03	2.9	-	-
Dibenzo[ah]anthracene	17	0.31 (**2**)	3.5 (0)	<0.04	0.6	0.3	0.6
Benzo[ghi]perylene	17	360 (0)	3900 (0)	<0.05	2.5	-	-

S4UL used where there is no C4SL
*The calculations of the US95 include outliers and were not undertaken where exceedances of the relevant S4UL / C4SL have not been identified

All samples recorded PAH concentrations below the relevant commercial screening thresholds.

Petroleum Hydrocarbons

A total of 25 samples of Made Ground were analysed for petroleum hydrocarbons. The results are presented in Table 8—9 below, with the full screening assessment and factual data in Appendix E and Appendix J, respectively.

Table 8—9 Concentrations of Petroleum Hydrocarbons (mg/kg)

Determinand	No. of Samples	GAC (No. of samples exceeding GAC); SGV; C4SL		Min.	Max.	US95*	Outlier
		Residential without Uptake	Commercial				
Aliphatic C5 - C6	25	42 (0)	3200 (0)	0.00	0.00	-	-
Aliphatic C6 - C8	25	100 (0)	7800 (0)	0.08	0.66	-	-
Aliphatic C8 - C10	25	27 (0)	2000 (0)	2.00	20.00	-	-
Aliphatic C10 - C12	25	130 (0)	9700 (0)	2.00	19.00	-	-
Aliphatic C12 - C16	25	1100 (0)	59000 (0)	3.00	42.00	-	-
Aliphatic C16 - C21	25	65000 (0)	1600000 (0)	4.00	45.00	-	-
Aliphatic C21 - C35	25	64000 (0)	1600000 (0)	7.00	180.00	-	-
Aromatic C5 - C7	25	370 (0)	26000 (0)	0.00	0.00	-	-
Aromatic C7 - 8	25	860 (0)	56000 (0)	0.22	0.22	-	-

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Determinand	No. of Samples	GAC (No. of samples exceeding GAC); SGV; C4SL		Min.	Max.	US95*	Outlier
		Residential without Uptake	Commercial				
Aromatic C8 - C10	25	47 (0)	3500 (0)	3.00	25.00	-	-
Aromatic C10 - 12	25	250 (0)	16000 (0)	2.00	23.00	-	-
Aromatic C12 - C16	25	1800 (0)	36000 (0)	6.00	84.00	-	-
Aromatic C16 - C21	25	1900 (0)	28000 (0)	8.00	223.00	-	-
Aromatic C21 - C35	25	1900 (0)	28000 (0)	26.00	718.00	-	-
Total Aliphatic and Aromatic	25	490 (3)	38000 (0)	65.00	1260.00	880.0	1260.0

S4UL used where there is no C4SL
*The calculations of the US95 average concentrations is not required where exceedances of the relevant S4UL / C4SL have not been identified

Concentrations of hydrocarbon fractions in all samples are below the relevant commercial screening thresholds.

8.4.3 pH in Made Ground

Measurements of soil pH are typically alkaline with an average pH of 7.5 and a maximum recorded concentration of 12.7.

8.4.4 Asbestos

Suspected Asbestos Containing Materials (ACM) were not observed in the soils encountered in any of the exploratory holes during the site investigation. A total of 17 samples taken from the Made Ground (>2.0m BGL, east) were screened for asbestos. No ACMs were detected.

8.5 Zone 4 - Natural Strata (site-wide) – Chronic Risks

A total of 7 samples were taken just below the Made Ground, within the natural strata across the Site. These were analysed for inorganic determinands, PAHs and BTEX, speciated TPHs and asbestos. No samples recorded elevated concentrations of the above listed determinands when compared to the residential and commercial thresholds.

8.5.1 pH in natural strata

Measurements of soil pH are typically alkaline with an average pH of 7.7 and a maximum recorded concentration of 9.5.

8.6 Acute Risk to Human Health

All the relevant determinands within the Made Ground across the east of the Site (>2.0m) and within the top 2.0m site-wide were below the SoBRA Acute Generic Assessment Criteria (AGAC) [21] for both adult receptors and the more sensitive child receptor. Across the west of the Site (>2.0m BGL), two exceedances were recorded for concentrations of arsenic. The results are presented in Table 8**—10.**

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Table 8—10 Summary of SoBRA AGAC - >2.0m BGL West

Determinand	AGAC (mg/kg)	
	Child (no. of exceedances)	**Adult (no. of exceedances)**
Arsenic	80 (**2**)	7000 (0)
Benzene	47 (0)	4100 (0)
Cadmium	140 (0)	12000 (0)
Free cyanide	24 (0)	2100 (0)
Trichloroethylene	8,000 (0)	16000 (0)
Vinyl chloride	98 (0)	220 (0)

Where there are no guidance values for assessing acute risk related to soil contamination, a comparison of the maximum concentrations of the determinands discussed above has been made with the various GACs derived for chronic risks, which will provide a conservative benchmark for such short term risks (as the GACs etc. are based upon a long term exposure). Determinands with highly elevated maximum values may pose an acute risk to construction or maintenance workers. In the majority of the Made Ground, no samples contained highly elevated maximum values of any determinands with most samples recording concentrations of determinands below residential thresholds. Some samples of the ashy Made Ground material recorded concentrations of some PAHs above the commercial thresholds, with one sample recording concentrations about twice the commercial threshold.

8.7 Phytotoxicity Risk

Analysis has been carried out for the phytotoxic metals copper, nickel and zinc within the four separate zones. The soil test results indicating phytotoxicity are assessed using the British Standards Specification for Topsoil (REF). Zone 4 (natural strata) did not record any concentrations of these phytotoxic metals above the relevant screening thresholds. Elevated concentrations of zinc were encountered within Zone 1 and 2 and elevated concentrations of copper within Zones 2 and 3. The results are summarised below in tables Table 8—11 to Table 8—13.

Table 8—11 Zone 1 (0.0-2.0m site-wide) phytotoxicity results

Determinand	No. of Samples	Screening threshold **(No. of samples exceeding)**	US95	Min.	Max.
Copper	48	200 (0)	66.2	21	126
Nickel	48	110 (0)	27.4	9	40
Zinc	48	300 (**1**)	92.5	52	307

Zinc – A total of one sample (2%) recorded concentrations of zinc elevated above the phytotoxicity threshold. The maximum concentration marginally exceeds the threshold. The US95 is 92.5mg/kg, well below the threshold.

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Table 8—12 Zone 2 (>2.0m WEST) phytotoxicity results

Determinand	No. of Samples	Screening threshold **(No. of samples exceeding)**	US95	Min.	Max.
Copper	36	200 (**3**)	193.0	18	786
Nickel	36	110 (1)	39.6	12	71
Zinc	36	300 (**8**)	196.8	39	411

Copper – A total of three samples (8%) recorded concentrations of copper elevated above the phytotoxicity threshold. The maximum concentration is almost 4 times the threshold. The US95 is 193mg/kg, just below the threshold.

Zinc – A total of eight samples (22%) recorded concentrations of zinc elevated above the phytotoxicity threshold. The maximum concentration is 1.4 times the threshold. The US95 is 196.8mg/kg, below the threshold.

Table 8—13 Zone 3 (>2.0m EAST) phytotoxicity results

Determinand	No. of Samples	Screening threshold **(No. of samples exceeding)**	US95	Min.	Max.
Copper	17	200 (**2**)	157.3	14	318
Nickel	17	110 (0)	47.4	13	75
Zinc	17	300 (0)	135.5	23	194

8.8 Copper – A total of two samples (12%) recorded concentrations of copper elevated above the phytotoxicity threshold. The maximum concentration is almost 1.5 times the threshold. The US95 is 157.3mg/kg, below the threshold.Risks to Below Ground Structures

The desk study [8] identified potential risks to buried services (potable water supply pipework) associated with the proposed development and the potential for contamination to permeate any plastic water supply pipework laid directly in contaminated ground.

The data for the shallow Made Ground has been discussed in some detail in Section 8.2 with respect to human health assessment criteria. Some of the determinands assessed in that chapter (particular organic compounds) have the potential to affect below ground water supply. This is because there is potential for particular organic contaminants to permeate plastic pipes and taint water supply if those pipes are laid in contact with contaminated soils. An assumption has been made that the relevant data is that for the materials within the Made Ground from a depth of 0.00 (ground level) to 1.75m BGL which have the potential to impact the buried services.

1.2.1 Water Supply Pipework data assessment

The data for the Made Ground has been assessed in some detail above with respect to human health assessment criteria. Some of the determinands have the potential to affect the below ground water supply. This is because there is a potential for particular organic determinands to permeate plastic pipes and taint water supply if those pipes are laid in contact with contaminated soils.

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Table 8—14 Summary of results using United Utilities [23] thresholds

Test Group	**Determinand used**	**PE Threshold** mg/kg	**No. Samples** (No. exceedances)	**LCL*** mg/kg	**Mean** mg/kg	**UCL** mg/kg
EC5-EC10 aliphatic and aromatic hydrocarbons	Aliphatic and Aromatic C5-C10	2	21 (**19**)	1.3	5.6	9.8
EC10-EC16 aliphatic and aromatic hydrocarbons	Aliphatic and Aromatic C10-C16	10	21 (**16**)	30.7	56.9	83.0
EC16-EC40 aliphatic and aromatic hydrocarbons	Aliphatic and Aromatic C16-C35	500	21 (**12**)	273.9	485.7	697.6
Total BTEX +MTBE		0.1	21 (0)	0.01	0.03	0.06
Total VOCs		0.5	11 (**3**)	0.0002	0.002	0.003
Total SVOCs (excl. PAHs and determinands listed **)	HexachlorobenzeneA, Diethyl phthalateA, Dimethyl phthalateA, DibenzofuranA, CarbazoleA, Butylbenzyl phthalateA, Bis(2-ethylhexyl)phthalateA, Bis(2-chloroethoxy)methaneA, Bis(2-chloroethyl)etherA, 2,6-DinitrotolueneA, 2,4-DinitrotolueneA, 2-ChloronaphthaleneA, 2-MethylnaphthaleneA, n-Nitroso-n-dipropylamineA, n-DioctylphthalateA, n-DibutylphthalateA, NitrobenzeneA, IsophoroneA, HexachloroethaneA, HexachlorocyclopentadieneA, PeryleneA	2	11 (**10**)	<0.1	5.4	13.0
Phenols (from SVOC analysis)	Phenols	2	11 (0)	<0.1	0.09	0.2
Cresols and chlorinated phenols (from SVOC analysis)	2,4-DimethylphenolA, 2,4-DichlorophenolA 2,4,6-TrichlorophenolA, 2,4,5-TrichlorophenolA Phenols, 4-Chloro-3-methylphenolA, Pentachlorophenol (SVOC)A, 2-NitrophenolA 4-NitrophenolA, 3+4-MethylphenolA, 2-MethylphenolA	2	11 (0)	<0.1	0.2	0.8

**Limit of Detection shown where LCL was a negative number*

***PAHs, ethers, nitrobenzene, ketones, aldehydes, phenols, cresols and chlorinated phenols (phenols, cresols and chlorinated phenols are given their own assessment criteria)*

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The analytical data have been assessed against the Water UK [24], UKWIR Guidance [25] and the information provided by United Utilities [23] in Manchester. This assessment indicates that polyethylene (PE), poly-vinyl chloride (PVC) and copper pipes may not be appropriate for potable water supply in the redevelopment of the site within the Made Ground due to the elevated concentrations of TPHs and total SVOCs. If Made Ground remains in-situ and the pipes are laid within the Made Ground, barrier pipe materials are likely to be required unless otherwise agreed with the utility company.

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9 Analytical Results for Groundwater

9.1 Groundwater monitoring levels

Monitoring of groundwater levels was carried out on six occasions post fieldwork and on one occasion during the fieldwork. The results of the monitoring are presented in Table 9—1 below.

Table 9—1 Summary of groundwater monitoring data

Borehole ID	Installation range [m BGL]	Target strata	Fieldwork and Monitoring Rounds m OD [m BGL]						
			F/W 25/10/19	MR 1 30/10/19	MR 2 07/11/19	MR 3 14-15/11/19	MR 4 20-21/11/19	MR 5 25-26/11/19	MR 6 05/12/19
BH19/02a	8.0 – 18.0	Made Ground (ash fill)	+44.46 [12.82]	+43.48 [13.8]	+45.09 [12.19]	+43.46 [13.82]	+43.44 [13.84]	+43.43 [13.85]	+43.38 [13.9]
BH19/02a	40.0 – 50.0	Coal Measures (very weak siltstone and mudstone)	+37.83 [19.45]	+37.78 [19.5]	+37.65 [19.63]	+38.04 [19.24]	+37.82 [19.46]	+37.77 [19.51]	+37.74 [19.54]
BH19/03	20.0 – 31.5	Coal Measures (weak to moderate weak mudstone)	+37.31 [20.05]	+37.46 [19.9]	+37.51 [19.85]	+37.61 [19.75]	+37.58 [19.78]	+37.58 [19.78]	+38.07 [19.29]
BH19/04	1.0 – 12.0	Made Ground (gravelly sand)	+45.82 [11.46]	+45.83 [11.45]	+45.8 [11.48]	+45.87 [11.41]	+45.67 [11.61]	+45.65 [11.63]	+45.63 [11.65]
BH19/05	10.0 – 13.5	Made ground (very gravelly sand)	+47.56 [9.65]	+47.36 [9.85]	+46.96 [10.25]	+46.98 [10.23]	+47.08 [10.13]	+47.06 [10.15]	+47.01 [10.2]
BH19/05	47.0 – 51.0	Coal Measures (very weak mudstone)	+37.66 [19.55]	+37.61 [19.6]	+37.63 [19.58]	+37.72 [19.49]	+37.71 [19.5]	+37.72 [19.49]	+37.58 [19.63]
BH19/06	1.0 – 8.0	Made Ground (gravel)	+50.29 [7.1]	+50.29 [7.1]	+50.2 [7.19]	+50.3 [7.09]	+50.31 [7.08]	+50.24 [7.15]	+50.22 [7.17]
BH19/07c	30.0 – 50.0	Coal Measures (minimal recovery, mudstone)	+38.33 [21.18]	+38.01 [21.5]	+38.1 [21.41]	+38.23 [21.28]	+38.14 [21.37]	+38.16 [21.35]	+38.07 [21.44]
BH19/09	11.0 – 14.0	River Terrace Deposits (sand)	+46.13 [12.55]	+46.18 [12.5]	+46.91 [11.77]	+46.07 [12.61]	+45.79 [12.89]	+46.49 [12.19]	+45.86 [12.82]
BH19/09	40.0 – 45.0	Coal Measures (very weak mudstone)	+37.9 [20.78]	+37.24 [21.44]	+37.68 [21.0]	+37.86 [20.82]	+37.75 [20.93]	+37.74 [20.94]	+37.15 [21.53]
BH19/10	1.0 – 9.5	Made Ground (gravelly clay)	DRY	DRY	DRY	+50.26 [9.2]	+50.22 [9.24]	+50.26 [9.2]	DRY
BH19/11	11.0 – 15.0	Coal Measures & Glacial Till (zone of no recovery, black coal, gravelly clay)	+47.88 [11.78]	+48.01 [11.65]	+47.69 [11.97]	+45.91 [13.75]	+46.08 [13.58]	+46.15 [13.51]	+46.03 [13.63]

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Borehole ID	Installation range [m BGL]	Target strata	Fieldwork and Monitoring Rounds m OD [m BGL]						
			F/W 25/10/19	MR 1 30/10/19	MR 2 07/11/19	MR 3 14-15/11/19	MR 4 20-21/11/19	MR 5 25-26/11/19	MR 6 05/12/19
BH19/11	24.0 – 26.0	Coal Measures (very weak mudstone)	+39.21 [20.45]	+39.11 [20.55]	+39.0 [20.66]	+38.96 [20.7]	+38.81 [20.85]	+38.9 [20.76]	+38.94 [20.72]
BH19/13	2.0 – 12.0	Glacial Till & Made Ground (gravelly clay)	+51.53 [9.21]	+51.49 [9.25]	+51.57 [9.17]	+52.4 [8.34]	+51.24 [9.5]	+51.24 [9.5]	+50.99 [9.75]
BH19/13	25.0 – 35.0	Coal Measures (very weak mudstone with siltstone)	+38.74 [22.0]	+38.34 [22.4]	+38.4 [22.34]	+37.91 [22.83]	37.93 [22.81]	+37.92 [22.82]	+38.44 [22.3]
BH19/14	1.0 – 8.6	Made Ground & Alluvium (sandy clay)	+51.83 [8.55]	+51.68 [8.7]	+51.46 [8.92]	+51.71 [8.67]	+51.49 [8.89]	+51.7 [8.68]	+51.51 [8.87]
BH19/15	9.0 – 14.0	Glacial Till & Made Ground (sandy gravelly clay)	+51.33 [8.89]	+51.27 [8.95]	+53.14 [7.08]	+51.27 [8.95]	+51.31 [8.91]	+51.28 [8.94]	+51.25 [8.97]
BH19/15	35.0 – 45.0	Coal Measures (very weak mudstone)	+37.62 [22.6]	+37.52 [22.7]	+37.58 [22.64]	+37.65 [22.57]	+37.63 [22.59]	+37.62 [22.6]	+37.52 [22.7]
BH19/17	11.0 – 14.0	Glacial Till (sandy gravelly clay)	+50.44 [10.36]	+50.15 [10.65]	+20.24 [10.56]	+49.92 [10.88]	+49.8 [11.0]	+49.87 [10.93]	+49.78 [11.02]
BH19/17	25.0 – 27.0	Coal Measures (extremely weak mudstone)	+38.04 [22.76]	+38.05 [22.75]	+37.76 [23.04]	+38.12 [22.68]	+38.87 [21.93]	+39.96 [20.84]	+37.58 [23.22]
BH19/18	8.0 – 10.0	Glacial Till (clay, pockets of silty sand)	+54.87 [5.65]	+55.32 [5.2]	+54.53 [5.99]	+54.5 [6.02]	+54.36 [6.16]	+54.36 [6.16]	+54.32 [6.2]
BH19/19	1.0 – 12.0	Made Ground (gravelly sand)	+45.49 [11.36]	+45.85 [11.0]	+45.36 [11.49]	+45.82 [11.03]	+45.79 [11.06]	+45.79 [11.06]	+45.79 [11.06]
BH19/20	1.0 – 8.5	Made Ground	DRY	DRY	DRY	DRY	DRY	DRY	DRY
BH19/21	1.0 – 8.5	Made Ground	DRY	DRY	DRY	DRY	DRY	DRY	DRY
BH19/22	0.5 – 8.0	Made Ground (gravelly clay)	+51.16 [7.5]	+51.26 [7.4]	+51.17 [7.49]	+51.16 [7.5]	+51.14 [7.52]	+51.15 [7.51]	+51.1 [7.56]
BH19/23	1.0 – 7.0	Made ground (gravelly clay)	DRY	DRY	53.48 [6.76]	53.48 [6.76]	53.48 [6.76]	53.48 [6.76]	DRY
BH19/24	0.5 – 7.0	Made Ground (clayey gravel)	DRY	DRY	DRY	DRY	+53.18 [6.83]	DRY	DRY
BH19/25	0.5 – 5.0	Made Ground	DRY	DRY	DRY	DRY	DRY	DRY	DRY
BH19/26	0.5 – 7.0	Made Ground	DRY	DRY	DRY	DRY	DRY	DRY	DRY

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The deeper groundwater table within the Coal Measures was consistently between 37.0mOD and 39.0mOD. Previously the River Medlock passed through the northwest corner of the site, today it passes through a culvert north of the site boundary. The River currently sits at approximately +41.7mOD and the flow direction is south-west. The shallower readings within the deeper groundwater (around 39.0mOD) were monitored within the south east of the site (BH19/11 and BH19/17) at a point more distant from the river than other monitored locations on site. There does not appear to be any discernible pattern relating to groundwater flow direction on the site. There is no evidence that groundwater flow is in the direction of the river or to other surface water features.

Perched water was recorded in localised areas within the Made Ground and at the boundary between the Glacial Till or Alluvium and Made Ground. There is no evidence that these bodies of water are in continuation with one another or with offsite receptors, they appear to be present due to depressions in low permeability materials which inhibit downward percolation of rainwater. A small number of the wells also encountered water within the Glacial Till, these pockets of water will likely be confined to more granular lenses within the Glacial Till, also not in continuation with one another.

Visual evidence of contamination (thin layer of product on water surface) was observed within two locations (BH19/11 and BH19/15) on the initial monitoring visit. These locations were included within the groundwater sampling detailed below.

9.2 Sampling and analysis

On the 25th November and 4th December 2019, two rounds of groundwater sampling were undertaken from eight groundwater monitoring wells (BH19/02a, BH19/05, BH19/07c, BH19/09, BH19/11, BH19/13 and BH19/15) across the site and were subject to chemical analysis in order to provide an outline assessment of groundwater quality. BH19/02a included two different samples targeting two different depths. Samples were taken from the Made Ground (perched water) and the underlying Coal Measures (Secondary A Aquifer). The groundwater data has been assessed against Water Supply Regulations Potable [31], the Freshwater Environmental Quality Standards Annual Average [32] and the World Health Organisation Drinking Water Standards [31]. The analytical test results for contaminants are presented in full in Appendix G.

The following chemical analysis for groundwater samples has been undertaken:

Chemical Analysis
CLEA metals suite (arsenic, barium, beryllium, cadmium, total chromium, copper, lead, nickel, selenium, vanadium and zinc)
Speciated TPH
SVOCs and VOCs including PAHs and BTEX
pH
Total Cyanide
Phenols

9.3 Perched water within the Made Ground

9.3.1 Inorganic determinands

All concentrations of recorded inorganic determinands from the Made Ground (perched water) have been presented below in Table 9—2.

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Table 9—2 Summary of inorganic determinand concentrations within the perched water (ug/l)

Contaminant	No. of Samples	Water Supply Regulations 2016 Potable Screening Threshold **(no. of exceedances);** ug/l	Environmental Quality Standards 2014 AA Fresh Screening Threshold **(no. of exceedances);** ug/l	World Health Organisation (WHO) Drinking Water Standards Potable Screening Threshold **(no. of exceedances);** ug/l	Max. Concentration (ug/l) [samples location]
Cyanide (total)	12	50 (**3**)	1 (**10**)	70 (**2**)	94 [BH19/13]
Mercury	12	1 (0)	-	6 (0)	All <LoD*
Arsenic	12	10 (**1**)	50 (0)	10 (**1**)	11 [BH19/02a]
Barium	12	-	-	-	159 [BH19/15]
Beryllium	12	-	-	-	All <LoD*
Boron	12	1000 (0)	-	2400 (0)	476 [BH19/13]
Cadmium	12	5 (0)	0.08 (0)	3 (0)	All <LoD*
Chromium	12	50 (0)	4.7 (**1**)	50 (0)	7 [BH19/05]
Copper	12	2000 (0)	1 (**7**)	2000 (0)	4 [BH19/11, BH19/13]
Lead	12	10 (0)	1.2 (**1**)	10 (0)	7 [BH19/15]
Nickel	12	20 (**4**)	4 (**7**)	70 (**2**)	706 [BH19/15]
Selenium	12	10 (0)	-	40 (0)	1 [BH19/11]
Vanadium	12	-	-	-	1 [BH19/09]
Zinc	12	-	10.9 (**6**)	-	756 [BH19/15]

***** *All samples recorded concentrations of determinand below the relevant Limit of Detection*

Cyanide – Elevated concentrations of total cyanide exceeding the Water Supply Regulations were encountered within 25% of the samples, all during sampling round two on the 4th December 2019, no samples exceed the Water Supply Regulations during the initial visit on 25th November 2019. During the second sampling round, elevated concentrations were recorded within 50% of the samples (3 out of 6). A total of 16% of all samples exceed the World Health Organisation threshold (70ug/l). For Environmental Quality Standards, the threshold is much more conservative (1ug/l). The majority of the samples during both monitoring rounds exceeded this threshold with the exception of two samples, these were both below the Limit of Detection.

Arsenic – The thresholds for Water Supply Regulations and World Health Organisation is the same for arsenic (10ug/l). One sample (8%) contained an elevated concentration of arsenic above these thresholds. The concentration was 11ug/l (marginally over the thresholds), recorded during the second round of sampling.

Chromium – One sample (8%) contained an elevated concentration of chromium above the Environmental Quality Standards threshold. There were no exceedances of the Water Supply Regulations or World Health Organisation thresholds. The elevated concentration recorded was 7ug/l, approximately 1.5 times the threshold.

Copper – No samples contained concentrations of copper exceeding the relevant thresholds for Water Supply Regulations and the World health Organisation. A total of 7 samples (58%) included concentrations for copper elevated above the Environmental Quality Standards. The maximum concentration recorded was 4ug/l (4 times the threshold), recorded within two different wells on the second sampling round.

Lead – One sample (8%) included a concentration of lead elevated above the Environmental Quality Standards threshold, this was located within BH19/15 during the initial round of sampling. The recorded concentration (7ug/l) was almost 6 times the threshold. No elevated concentrations were recorded within the second round of sampling.

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Nickel –The Environmental Quality Standards threshold for nickel is the most conservative, a total of 7 samples (58%) included elevated concentrations exceeding this threshold. The maximum recorded concentration was 706ug/l within BH19/02a during the initial monitoring round (25/11/2019). The second most elevated concentration was recorded within the same location on the following monitoring round (04/12/2019). A total of 4 samples (30%) included concentrations of nickel exceeding the Water Supply Regulations and 2 samples (16%) with concentrations elevated above the World Health Organisation threshold.

Zinc – Elevated concentrations of zinc above the Environmental Quality Standards were recorded within 50% of the samples. The maximum concentration (756ug/l) was located within BH19/02a during the initial sampling round. This elevated concentration is over 65 times the relevant threshold. During the second round of sampling (04/12/2019) a further sample from the same location recorded 103ug/l, the second highest concentration of zinc recorded, exceeding the relevant threshold by almost 10 times.

9.3.2 Organic determinands

VOCs and SVOCs (including PAHs and BTEX)

All samples were subject to VOC and SVOC analysis (including PAHs and BTEX). Concentrations of all determinands within all samples were below the relevant thresholds for groundwater with one exception, benzene. Concentrations of benzene within one sample marginally exceeded the Water Supply Regulations. The exceedance was recorded within BH19/02a during the second round of sampling (04/12/2019).

Speciated TPHs

All samples (a total of 11) were tested for speciated TPH analysis. The Environmental Quality Standards provide an annual average (most conservative) threshold for the specific carbon band Aromatics >EC10-EC12. Using this threshold (0.4ug/l) a total of 8 samples (72%) contained concentrations of this band that exceed this threshold. The maximum recorded concentration (94ug/l) is over two orders of magnitude above this threshold.

The majority of the elevated concentrations across the speciated carbon bands are heavy end hydrocarbons therefore of low solubility, mobility and volatility.

Phenols

All samples contained concentrations of phenols below the relevant Environmental Quality Standards threshold of 7.7ug/l.

9.4 Groundwater within the Coal Measures (Secondary A Aquifer)

9.4.1 Inorganic determinands

Contaminant	No. of Samples	Water Supply Regulations 2016 Potable Screening Threshold **(no. of exceedances);** ug/l	Environmental Quality Standards 2014 AA Fresh Screening Threshold **(no. of exceedances);** ug/l	World Health Organisation (WHO) Drinking Water Standards Potable Screening Threshold **(no. of exceedances);** ug/l	Max. Concentration (ug/l) [samples location]
Cyanide (total)	4	50 (**2**)	1 (**1**)	70 (**2**)	190 [BH19/02a]
Mercury	4	1 (0)	-	6 (0)	All <LoD*
Arsenic	4	10 (**2**)	50 (0)	10 (**2**)	26 [BH19/02a and BH19/07c]

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Contaminant	No. of Samples	Water Supply Regulations 2016 Potable Screening Threshold **(no. of exceedances);** ug/l	Environmental Quality Standards 2014 AA Fresh Screening Threshold **(no. of exceedances);** ug/l	World Health Organisation (WHO) Drinking Water Standards Potable Screening Threshold **(no. of exceedances);** ug/l	Max. Concentration (ug/l) [samples location]
Barium	4	-	-	-	67 [BH19/02a]
Beryllium	4	-	-	-	All <LoD*
Boron	4	1000 (0)	-	2400 (0)	488 [BH19/02a]
Cadmium	4	5 (0)	0.08 (0)	3 (0)	All <LoD*
Chromium	4	50 (0)	4.7 (**2**)	50 (0)	10 [BH19/07c]
Copper	4	2000 (0)	1 (**3**)	2000 (0)	7 [BH19/07c]
Lead	4	10 (0)	1.2 (0)	10 (0)	All <LoD*
Nickel	4	20 (**1**)	4 (**2**)	70 (0)	21 [BH19/02a]
Selenium	4	10 (0)	-	40 (0)	7 [BH19/07c]
Vanadium	4	-	-	-	10 [BH19/07c]
Zinc	4	-	10.9 (**2**)	-	29 [BH19/02a]

***** *All samples recorded concentrations of determinand below the relevant Limit of Detection*

Cyanide – All four samples exceeded the Environment Quality Standards by an order of magnitude. A total of two samples, 50%, exceeded both the Water Supply Regulations and the World Health Organisation thresholds. The maximum concentration recorded, 190ug/l within BH19/02a, is almost 4 times the Water Supply Regulations threshold and almost 3 times the World Health Organisation threshold.

Arsenic – No samples exceeded the Environmental Quality Standards. Two samples taken on the second round of sampling (04/12/2019) recorded concentrations of arsenic exceeding both the Water Supply Regulations and the World Health Organisation thresholds. The maximum concentration recorded, 26ug/l, is over two times these thresholds.

Chromium - Concentrations recorded within BH19/07c on both sampling rounds marginally exceed the Environmental Quality Standards threshold of 4.7ug/l.

Copper – 75% of the samples recorded concentrations of copper elevated above the Environmental Quality Standards threshold of 1ug/l. The maximum recorded concentrations were from the same location (BH19/07c) and were 7 times the threshold.

Nickel – Elevated concentrations of nickel were recorded within BH19/02a during both sampling rounds. The initial sampling round recorded a concentration of 21ug/l, marginally exceeding the Water Supply Regulations threshold and over 5 times the Environmental Quality Standards threshold. The second round of sampling a concentration of 11ug/l was recorded, almost 3 times the Environmental Quality Standards threshold.

Zinc – Two samples recorded elevated concentrations of zinc elevated above the Environmental Quality Standards threshold. These were both from BH19/02a. The maximum concentration was 29ug/l, recorded during the initial monit0oring round and over 2.5 times the threshold.

9.4.2 Organic determinands

VOCs and SVOCs (including PAHs and BTEX)

All samples were subject to VOC and SVOC analysis (including PAHs and BTEX). Concentrations of all determinands within all samples were below the relevant thresholds for groundwater.

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Speciated TPHs

All samples (a total of 4) were tested for speciated TPH analysis. The Environmental Quality Standards provide an annual average (most conservative) threshold for the specific carbon band Aromatics >EC10-EC12. Using this threshold (0.4ug/l) a total of 3 samples (75%) contained concentrations of this band that exceed this threshold. The maximum recorded concentration (132ug/l) is over two orders of magnitude above this threshold.

The majority of the elevated concentrations across the speciated carbon bands are heavy end hydrocarbons therefore of low solubility, mobility and volatility.

Phenols

All samples contained concentrations of phenols below the relevant Environmental Quality Standards threshold of 7.7ug/l.

9.5 Groundwater analysis quality control

No deviating samples were reported by the laboratory; therefore, the groundwater data presented is considered representative of site conditions and is suitable for use in this assessment.

9.6 Concluding comment

The water samples obtained from the Made ground (perched water) included elevated concentrations of some inorganic determinands. Over half of the samples recorded elevated concentrations of zinc, nickel, copper and total cyanide exceeding the Environmental Quality Standards. With approximately one quarter to a third also exceeding the less conservative Water Supply Regulations and World Health Organisation thresholds. Elevated concentrations of arsenic, chromium and lead were also encountered within occasional samples however the majority of the samples were below the relevant thresholds.

The majority of SVOC and VOC concentrations within all samples were below the relevant thresholds. Almost ¾ of the samples tested for speciated TPH concentrations exceeded the relevant threshold for carbon band >EC10-12. The majority of samples included elevated concentrations of mostly heavy-end hydrocarbon bands, therefore shall typically be of low solubility, mobility and volatility. Thin layers of product were observed during the initial sampling round in two locations within the perched water of the Made ground.

The water samples obtained from the Secondary A Aquifer within the Coal Measures included elevated concentrations of total cyanide (within all samples), chromium, copper, nickel and zinc (within over half the samples) above the Environmental Quality Standards. Approximately half the samples tested for concentrations of arsenic and total cyanide also exceeded the Water Supply Regulations and World Health Organisation thresholds.

No samples contained elevated SVOC and VOC concentrations. Similarly to the perched water in the Made ground, ¾ of the water samples in the Secondary A Aquifer tested for speciated TPH concentrations also exceeded the relevant threshold for carbon band >EC10-12. The majority of samples included elevated concentrations of mostly heavy-end hydrocarbon bands, therefore shall typically be of low solubility, mobility and volatility.

The samples with elevated concentrations of both inorganic and organic determinands within both the perched water in the Made Ground and the groundwater in the Secondary A Aquifer (Coal Measures) were generally very similar.

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10 Analytical Results for Ground Gas and Characterisation

10.1 Monitoring Regime

Ground gas monitoring was undertaken on a total of 11 locations following the site investigation. The monitoring was carried out by Structural Soils Ltd on 6 post-fieldwork occasions, between 30th October 2019 and 5th December 2019. One round of monitoring was carried out toward the end of the site investigation, this took place on 25th October 2019. Gas monitoring was undertaken and recorded in accordance with guidance and protocols presented in good practice guidance [19] and the relevant British Standard [29].

During each round of gas monitoring the gas concentrations and groundwater level for each borehole were recorded. An infrared gas meter was used to measure concentrations of carbon dioxide (CO_2), methane (CH_4) and oxygen (O_2) in percentage volume while carbon monoxide (CO) and hydrogen sulphide (H_2S) were recorded in parts per million (ppm). Initial and steady state conditions were recorded. An integral flow meter was used to measure gas flow rates (initial and steady state) in litres per hour. In addition, the atmospheric pressure before and during the monitoring together with the temperature were noted. The data has been summarised below and is presented in full within Appendix H.

10.2 Monitoring Data

Sample ID	No. readings	Response zone mbgl	Depth to water	Response zone flooded?	Strata	Max flow rate l/hr*	Peak methane %*	Peak carbon dioxide %*	Min oxygen %*	Peak carbon monoxide ppm*	Peak hydrogen sulphide ppm*
BH19/06	7	1.0-7.8	7.08	Partially (0.72m)	Made Ground	0.1	0.2	8.9 [4.5, 4.9, 7.1, 8.3, 8.3, 8.6]	2.7	1.0	<0.05
BH19/10	7	1.0-9.48	9.2	Partially (0.28m)	Made Ground	0.1	10.10 [9.0, 9.3, 8.8, 8.2, 8.8, 9.7]	0.2	<0.05	3.0	1.0
BH19/14	7	1.0-9.0	8.55	Partially (0.45m)	Made Ground	0.1	0.4	5.6 [2.6, 4.4, 4.2, 2.5, 1.7, 2.5]	<0.05	1.0	<0.05
BH19/19	7	1.0-11.74	11	Partially (0.49m)	Made Ground	0.1	0.5	0.3	<0.05	18.0	1.0
BH19/20	7	0.5-6.1	DRY	No, dry	Made Ground	0.1	8.2 [4.2, 5.9, 5.3, 5.7, 5.9, 8.2]	0.2	<0.05	2.0	2.0
BH19/21	7	1.0-8.49	DRY	No, dry	Made Ground	0.1	1.6 [0.1, 0.4, 0.2, 0.6, 1.1, 1.1]	1.9	<0.05	5.0	1.0
BH19/22	7	0.5-7.8	7.4	Partially (0.4m)	Made Ground	0.1	0.3	8.0 [2.0, 2.7, <0.05, 6.7, <0.05, 0.3]	4.4	<0.05	<0.05

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Sample ID	No. readings	Response zone mbgl	Depth to water	Response zone flooded?	Strata	Max flow rate l/hr*	Peak methane %*	Peak carbon dioxide %*	Min oxygen %*	Peak carbon monoxide ppm*	Peak hydrogen sulphide ppm*
BH19/23	7	1.0-6.83	6.76	Minimal, mostly dry (0.07m)	Made Ground	0.1	10.9 [2.9, 3.4, 5.1, 1.3, 3.5, 2.6]	1.2	<0.05	3.0	<0.05
BH19/24	7	0.5-6.87	6.83	Minimal, mostly dry (0.04m)	Made Ground	0.1	0.1	2.0	8.1	7.0	<0.05
BH19/25	7	0.5-4.75	DRY	No, dry	Made Ground	0.1	0.1	3.2	10.9	2.0	1.0
BH19/26	7	0.5-6.99	DRY	No, dry	Made Ground	0.2	0.2	0.3	10.0	4.0	3.0
Worst case example	**-**	**-**	**-**	**-**	**-**	**0.2**	**10.9**	**8.9**	**0.0**	**18.0**	**3.0**

**Where 0.0%, 0.0l/hr or 0.0ppm recorded within results, limit of detection used (0.05%, 0.05l/hr or 0.05ppm) as worst case scenario*

10.3 Description of monitoring data

10.3.1 Response zone

All of the response zones installed within the exploratory holes were reflective of the Made Ground, however, due to encountered obstructions, occasional installations were not reflective of the entirety of the Made Ground. Shallow 'perched' groundwater was present in the Made Ground within five installations. Where water is perched, this is likely to be due to the underlying low permeability (clay) superficial deposits or low permeability bands within the Made Ground. Over half of the installations did not encounter any perched water during the monitoring rounds and were recorded as 'dry'.

10.3.2 Atmospheric conditions

Monitoring was carried out on a total of six different occasions post site investigation and on one occasion during the investigation. Atmospheric pressures were recorded by the field instrument and weather data obtained from the meteorological office. The maximum atmospheric pressure recorded on the days of monitoring was 1026mb and the minimum was 984mb. The results indicate one occasion experienced stable atmospheric pressure conditions (the initial fieldwork round). The remaining six post-fieldwork monitoring occasions the results indicate varying atmospheric pressure regimes (both rising and falling), detailed below.

Fieldwork round	25th October 2019: 1009-1004-1003mb (steady, falling by evening)
Return visit 1	30th October 2019: 1027-1025-1023mb (falling)
Return visit 2	6th November 2019: 1006-999-997mb (falling)
Return visit 3	14th November 2019: 995-1002-1006mb (rising)
Return visit 4	20th November 2019: 1011-1009-1005mb (falling)
Return visit 5	26th November 2019: 996-987-984mb (falling)
Return visit 6	5th December 2019: 1018-1010-1008mb (falling)

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10.3.3 Data description

Elevated concentrations of methane above the guideline threshold of 1% were recorded in 4 of the 11 installations (36%). Maximum concentrations were recorded between 0.1% and 10.9%. Approximately 30% of all readings recorded concentrations of methane below the limit of detection (<0.05%).

Elevated concentrations of carbon dioxide above the guideline threshold of 5% were recorded within 3 of the 11 installations (27%). Maximum concentrations ranged between 0.2% and 8.9%. Slightly elevated concentrations over 2.5% were recorded in 4 of the 11 installations (36%). The majority of all readings recorded concentrations of carbon dioxide elevated above the limit of detection (<0.05%) with the exception of one reading on one monitoring occasion.

Depleted concentrations of oxygen, below 16%, was recorded in all installations on all monitoring occasions. The minimum concentrations ranged between <0.05% and 10.9%. Concentrations of oxygen above the guideline value (>16%) were only recorded on 5 occasions.

Concentrations of carbon monoxide were recorded in the range <0.05ppm to 18ppm and concentrations of hydrogen sulphide recorded in the range <0.05ppm to 3ppm. Typically, concentrations of both carbon monoxide and hydrogen sulphide were below the detection limit (<0.05ppm).

10.4 Assessment of ground gas regime

The monitoring data described above has been assessed in accordance with CIRIA 665 (ref) and BS8485 (ref). In accordance with this guidance the reliability of this data and thus characterisation of the ground gas regime is influenced by the following;

i. There is a sufficient set of monitoring data from the recent ground investigation; six return monitoring visits where all the exploratory holes were monitored, and a fieldwork round of monitoring was also undertaken [a total of 77 readings on all determinands];

ii. The monitoring data is generally consistent with the nature and extent of the source (Made Ground). The Made Ground is typically about 9m thick (varies from 1.3m to 17.2m) [Made Ground thicker within the north and west of the site]. This residual Made Ground typically contained organic material including hydrocarbons, coal and rare visual sightings of oily sheen on the perched water in the monitoring installations.

iii. The response zones of all installations contained a suitable length of unsaturated element which allows the ingress of ground gas from the target strata. On occasions the response zones were partially flooded so a proportion of the measured gas may have evolved from the shallow perched water within the Made Ground;

iv. The monitoring has been carried out during steady, rising and falling atmospheric pressure conditions;

v. The GSVs based on the maximum concentrations of CO_2, CH_4 and flow rates (in accordance with the above) are calculated as 0.0128l/hr (CH_4) and 0.0178l/hr (CO_2), Characteristic Situation 1 (CS1). The maximum flow rate was 0.2l/hr which has been used for the GSV calculations. This was recorded on two return visits in one location;

vi. The maximum concentrations of methane were recorded at 8.2%, 10.1% and 10.9%, all other recorded concentrations within these installations were also elevated above the guideline threshold (1%);

vii. The maximum concentrations of carbon dioxide (in installations with elevated concentrations) were typically in the range of 1 to 8.9% with concentrations above 2.5% recorded in 4 of the 11 installations on at least one occasion. Three installations recorded concentrations of carbon dioxide elevated above 5%;

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viii. Carbon monoxide concentrations were recorded above detection limit within all installations with the exception of one well where concentrations were always <0.05ppm. The maximum recorded concentration of carbon monoxide was 18ppm, this was recorded on one occasion in one installation, concentrations did not exceed 3ppm on all other occasions within this installation. Generally, carbon monoxide concentrations ranged between <0.05ppm and 4ppm, occasional readings of 5ppm and 7ppm were recorded. All concentrations recorded were below the long-term exposure limit (30ppm over 8 hours);

ix. Hydrogen sulphide was rarely recorded above detection limit during the monitoring programme. On two different return visits hydrogen sulphide concentrations were recorded between 1ppm and 3ppm in approximately 30% of the wells. All other readings were below the limit of detection. This is below the limit for long-term exposure (5ppm over 8 hours).

The calculated GSV for CO_2 and CH_4 (concentrations x flow rate) have been determined as Characteristic Situation 1. However, in accordance with CIRIA C665 (ref) it is recommended the Characteristic Situation is increased to Characteristic Situation 2 due to the multiple elevated concentrations of CH_4 and $C0_2$ above the typical maximum value for CS1 (1% and 5%, respectively) and the depleted oxygen concentrations (<16%). Under the worst case scenario gas flow rates only need to increase to 0.7l/hr with the methane concentration recorded for a classification of CS2 to be triggered. Such a variation in flow though not recorded is feasible and therefore it is considered appropriate for the site to be considered CS2.

The data described above are considered reliable, having been obtained from an appropriate number of installations, with appropriate response zones and under varying atmospheric conditions. The data are generally very consistent, both within the data set itself and with the observed ground conditions. The soil descriptions and the nature of the gas regime provide good lines of evidence that the source of the gas is the Made Ground, the nature and extent of which has been well defined by the recent ground investigations.

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11 Waste Management

11.1 Legislation and Guidance

In order to determine the likely waste classification, soil test results have been assessed using the EA (Environment Agency) 'Technical Guidance WM3, Guidance on the classification and assessment of waste' Version 1.1 2018.

11.2 Preliminary Waste Classification

During the intrusive ground investigation, a total of 101 samples were recovered from the Made Ground and were subject to chemical analysis. These samples were sub-divided into three different zones (see Figure 8—1), based on recent (2011) remediation work and varying site uses to the east (residential developments) and west (former gas works). Preliminary waste classification has been carried out and the details are provided in Appendix I.

Zone 1 - 0.0m-2.0m BGL, site wide (area of more recent remedial work – 2011) – a total of 48 samples recovered from the Made Ground.

Zone 2 - Over 2.0m BGL, west (area of former gas works) – a total of 36 samples recovered from the Made Ground.

Zone 3 - Over 2.0m BGL, east (area of former residential development) – a total of 17 samples recovered from the Made Ground.

Zone 1: 0.0m-2.0m BGL, site wide (area of more recent remedial work – 2011)

The chemical classification indicates that the majority of the potential arisings from the Made Ground within Zone 1 are likely to be classified as Non-Hazardous Waste (36 samples, 75%). The remaining samples are likely to be classified as Hazardous Waste (12 samples, 25%).

A total of 15 samples likely to be classified as Non-Hazardous were tested for Total Organic Carbon (TOC), of which two (13%) were below the inert threshold (<3% TOC). The remainder were likely to be classified Non-Hazardous.

Seven samples are likely to be classified as Hazardous were also tested for TOC, of which three (43%) exceeded the Hazardous acceptance threshold (>6%) indicating that treatment would be required prior to disposal at Hazardous landfill for these samples.

Based on the sampling above, around 75% of material is likely to be classified as Non-Hazardous Waste of which, 13% is likely to meet the inert threshold for TOC (e.g. 9.7% of all samples meets inert threshold). 25% of material is likely to be classified as Hazardous, of which 43% will require treatment prior to disposal at landfill (e.g. 10.8% of material).

Zone 2: Over 2.0m BGL, west (area of former gas works)

The assessment indicates that the majority of the potential arisings from the Made Ground within Zone 2 (25 samples, 69%) are likely to be classified as Non-Hazardous Waste. The remaining samples (11 samples, 31%) are likely to be classified as Hazardous Waste.

A total of 12 samples likely to be classified as Non-Hazardous were tested for TOC, of which five (42%) were below the inert threshold of 3%. The remainder were likely to be Non-Hazardous.

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Four samples likely to be classified as Hazardous were tested for TOC, of which two (50%) exceeded the Hazardous acceptance criteria of 6%.

Based on the above, around 69% of material is likely to be Non-Hazardous of which 42% are below the inert threshold (e.g. 29% of samples meet inert threshold). 31% of samples are likely to be classified as Hazardous, of which 50% will require treatment before disposal to landfill (e.g. 15.5% of material).

Zone 3: Over 2.0m BGL, east (area of former residential development)

The assessment indicates that the majority of the potential arisings from the Made Ground within Zone 3 (16 samples, 94%) are likely to be classified as Non-Hazardous Waste. The remaining sample (1 sample, 6%) is likely to be classified as Hazardous Waste.

Six of the likely Non-Hazardous samples were tested for TOC, all of which exceeded the inert thresholds.

One of the likely Hazardous samples was tested for TOC which was below the 6% hazardous acceptance threshold, and so can be accepted at Hazardous landfill without further treatment.

Total - all Made Ground samples

If no zoning is to take place, the following figures should be used (includes TOC assessment information).

The assessment indicates that the majority of the potential arisings from the Made Ground across the entire site (67 samples, 66%) are likely to be classified as Non-Hazardous Waste. Of these around 21% are below the inert TOC threshold (13.9% of material).

The remaining samples (34 samples, 34%) are likely to be classified as Hazardous Waste, of which 33% of samples are above the Hazardous waste TOC threshold, indicating treatment will be required prior to disposal.

Zone	% meeting inert thresholds	% Non-Hazardous inc. inert (excl. inert)	% Hazardous inc. treatment (no treatment required)	% Hazardous but requiring treatment prior to landfilling
1	9.7	75 (65.3)	25 (14.2)	10.8
2	29	69 (40)	31 (15.5)	15.5
3	0	94 (94)	6 (6)	0
All	13.9	66 (52.1)	34 (22.8)	11.2

11.3 Concluding Comments

Variations in individual landfill licenses could result in some landfills applying different classification to spoil for disposal. The available data indicates that it is likely the majority of the Made Ground arisings (2/3s) would be classified as Non-Hazardous Waste, but with a portion (1/3) of the material classified as Hazardous Waste. Uncontaminated natural soil arisings would likely be classified as Inert. The vast majority of the hazardous properties within the Made Ground derive from elevated concentrations of petroleum hydrocarbons, although segregation is possible it is likely that some of the material identified as Non-Hazardous will likely be mixed during the excavation with the Hazardous material therefore potentially increasing the 34% Hazardous Waste defined above.

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Notwithstanding the comments and assessment above, it will be the enabling contractor's responsibility, in association with the operator and/or land owner of the landfill to classify the materials appropriately and ensure disposal in accordance with the relevant regulations. This is particularly true of total organic carbon concentrations.

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12 Geoenvironmental Risk Assessment

1.3 General approach

In the UK, the assessment of risk from contamination follows the source-pathway-target approach. If one of these three elements is absent it is considered that there is no risk of harm. If, however, there is considered to be a linkage between any given source and any given target / receptor then a risk-based approach is used to assess the significance or impact of any such linkage.

Source	The contaminants that have the potential to negatively affect human health and/or the health of the environment (i.e. the hazard).
Pathway	The potential route by which a receptor may come into contact with the source.
Receptor	The specific group of human beings or aspect of the environment (e.g. controlled waters) that could be affected by the source.

Risks are defined as the probability of an event occurring combined with the severity of the consequence of that event occurring. Particularly, to assess the risk to site end users posed by any given source, the sensitivity of each receptor is considered. For example, the concentration of contamination acceptable at a site to be developed as a residential property, with a garden used to grow vegetables and accessible to young children, is set lower than that for a commercial site where soil is exposed in minor areas of landscaping and the only long-term users of the site are adults. Similarly, a site overlying a major aquifer supplying potable water to a large population will be considered more stringently than a site overlying an impermeable geology with only minor seepages of groundwater.

1.4 Conceptual Site Model (CSM)

The potential risks posed to the human health, controlled waters (River Medlock and Ashton Canal) and the environment by ground contamination at this site have been evaluated by a generic quantitative risk assessment which incorporates the 'source-pathway-receptor' identification and assessment methodology in accordance with the Model Procedures The risk assessment process therefore involves the identification of each source based on the site setting information and ground investigation results and the identification of the relevant exposure pathway and each potential receptor. The potential risks to the receptors are then assessed by considering the potential effect of the source on the receptor as well as the likelihood of a pathway linking the two, i.e. a contaminant linkage as discussed above. The CSM is based the commercial use of the Site following earthworks to modify ground levels.

1.5 Contamination sources

Potential contamination sources from former uses of the site have been identified following a review of site setting and desk study information and from information gained during the ground investigation. The potential sources of contamination and associated contaminants of concern are listed in Table 12—1.

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Table 12—1: Principal potential sources of contamination at the site

Potential Source	Location	Likely Age	Potential contaminants of concern
Made Ground from previous site uses, including the former Bradford Road Gas Works	On site	>100 years	Asbestos, some elevated heavy metals, some elevated PAHs and petroleum hydrocarbons
Ground gas generated from the underlying Made Ground	On site	>100 years	Methane, carbon dioxide, carbon monoxide and reduced oxygen
Water perched within the Made ground and groundwater within the Coal Measures (Secondary A Aquifer)	On site	>100 years	Heavy metals and petroleum hydrocarbons

Made Ground – The site was divided into four zones in order to suitably assess the soils. Zone 1 represents the soils within the top 2m across the entire site (materials that were part of the site-wide remediation carried out in 2011); Zone 2 represents the soils >2m on the western portion of the site (area of former Bradford Road Gas Works); Zone 3 represents the soils >2m on the eastern portion of the site (area of former residential development); and Zone 4 represents the natural strata below the entire site.

All samples within all zones contained concentrations of all inorganic and organic determinands below the relevant commercial screening criteria.

Asbestos was occasionally recorded during the laboratory screening process, four samples (8%) within Zone 1 and four samples within Zone 2 (11%). Within Zone 1, one sample recorded asbestos in the form of chrysotile and amosite below the limit of detection, two samples included loose chrysotile fibres (0.003% and 0.011%) and the final sample encountered amosite board (3.619%, over the 0.1% Hazardous Waste threshold). Within all samples from Zone 2 the asbestos form was loose fibres of chrysotile. Two of the samples recorded asbestos below the limit of detection. The remaining samples included trace concentrations <0.01%.

Groundwater - A total of 12 water samples perched within the Made Ground were obtained and 4 samples from the Secondary A Aquifer (Coal Measures). Elevated concentrations of total cyanide, arsenic and nickel above the Water Supply Regulations and the World Health Organisation thresholds were recorded within both the perched water table and the Secondary A Aquifer. Elevated concentrations of total cyanide, chromium, copper, lead, nickel and zinc above the Environmental Quality Standards were all recorded. No elevated concentrations of Phenols, VOCs and SVOCs (including PAHs and BTEX) were recorded with the exception of one sample recording a marginally elevated concentration of benzene above the Water Supply Regulations threshold within the perched water. A total of 11 water samples perched within the Made Ground and 4 samples from the Secondary A Aquifer were tested for speciated TPH analysis. The Environmental Quality Standards provide an annual average (most conservative) threshold for the specific carbon band Aromatics >EC10-EC12. Using this threshold, approximately ¾ of both data sets contained concentrations of this band exceeding the threshold.

Ground Gas – The GSV for both CO_2 and CH_4 have been determined as CS1. However, according to CIRIA C665 [19] it is recommended the Characteristic Situation is increased to CS2 due to multiple consistent elevated concentrations of CO_2 (>5%) and CH_4 (>1%, concentrations recorded around 10%) and depleted oxygen levels (<16%, concentrations frequently recorded at <0.05%, the limit of detection). Carbon monoxide generally ranged between <0.05ppm and 4ppm with occasional readings as much as 18ppm. Hydrogen sulphide was rarely recorded above detection limit. Flow rate ranged between <0.05l/hr and 0.2l/hr and only a slight increase in flow would tip the Characteristic Situation into CS2.

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1.6 Pollutant linkages

Off-site historic land uses are not considered potential sources of contamination due to the confined nature of the Site and the Site's long industrial history which was linked to some of the nearby land uses. Therefore, such uses have been excluded from the risk assessment undertaken. Site specific pathway receptor linkages have been identified for the site in Table 9-2 with respect to the sources outlined above and the anticipated future use of the site as a commercial development.

Table 12—2: Receptors and pathways

Receptor		Pathway
Human Health	Future site users	Direct contact and dermal uptake, soil and dust ingestion
	Construction workers	Direct contact and dermal uptake, soil and dust ingestion during earthworks and construction
	Occupiers and users of neighbouring land	Soil and dust inhalation / ingestion during earthworks and construction
Controlled Waters	Ashton Canal	Migration via overland flow / surface water drainage during earthworks and construction
	River Medlock	Migration via permeable strata and introduced preferential pathways
Environment	Flora	Direct contact / uptake by plant roots
Building / Services	Below ground services and structures	Direct contact / permeation of plastic pipe work by contaminants in soil and leachate. Degradation of below ground concrete

The underlying Secondary A aquifer within the coal measures is not considered a receptor but has the potential to be a pathway. It is not considered a receptor as its quality is already degraded due to contact with the coal measures and it has no local abstractions.. The groundwater body itself does not appear to be flowing based on the groundwater monitoring data.

Based on the results of the intrusive ground investigation and the preliminary conceptual site model, the geoenvironmental risk assessment is presented in Table 12—3 below.

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Table 12—3 Results of Geoenvironmental Risk Assessment

Source			**Hazard to Receptor [bold text]**	**Risk Assessment (following CIRIA C552)**			**Description of source [bold text]**
Origin	**Contaminants of concern**	**Zone affected**	Pathway [normal text]	**Consequence**	**Probability**	**Risk**	Comment on hazard realisation [normal text]
Made Ground [Zones 1 – 3]	Elevated heavy metals, PAHs, petroleum hydrocarbons and asbestos	On Site	**<u>Description of source:</u> Previous developments on site include a former gas works on the western part of the site and residential developments to the east. The gas works were present on site between the 1900s and the 1970s prior to the development of the gas works the River Medlock once flowed through the NW of the site, this was straightened and later diverted into a culvert further north of the site. Within the area of the former River location and the gas works, Made Ground reached depths of 17.2m BGL. Generally, across the site the Made Ground ranged between 9m and 12m BGL with the exception of the south east area, where Made Ground terminated around 1.3m BGL. The Made Ground typically comprised brown black sandy gravelly clay and sandy clayey gravel. Ash, coal, clinker, lime, asphalt, brick, concrete, sandstone, limestone, pottery, wood, plastic and rebar formed the main constituents of the Made Ground. Visual and olfactory evidence of gross contamination was observed, strong hydrocarbon odours in clay pockets, slight oily sheens on the perched water. Concentrations of all inorganic and organic determinands across the site did not exceed the relevant thresholds for commercial development. No asbestos was visually identified during the site investigation however occasional samples identified loose fibres and amosite board during the laboratory screening process, four samples (8%) within Zone 1 and four samples within Zone 2 (11%).**				
			Health impact to future site users Direct contact and dermal uptake, soil and dust ingestion	Medium	Low Likelihood	**Moderate / Low**	The majority of the site will be occupied by the proposed development and/or hardstanding, preventing direct contact with contaminants. Potential for exposure in areas of soft landscaping directly onto residual Made Ground. In limited areas of soft landscaping (see flora below), it is anticipated that suitable soil materials (thickness and quality) will be imported.
			Health impact to construction workers Direct contact and dermal uptake, soil and dust ingestion during earthworks and construction	Severe	Low Likelihood	**Moderate**	There is a potential for exposure during any excavation, earthworks and construction. However, exposure time will be relatively limited and standard good practice and Health and Safety precautions including dust control and PPE likely to be implemented.
			Occupiers and users of neighbouring land Soil and dust inhalation / ingestion during earthworks and construction	Medium	Low Likelihood	**Moderate / Low**	There is a potential for exposure during any excavation, earthworks and construction. However, exposure time will be relatively limited, standard good practice and Health and Safety precautions including dust control to be implemented.
			River Medlock Migration via permeable strata and/or introduced preferential pathways	Medium	Unlikely	**Low**	Downward migration (e.g. piling) of contaminants into the Secondary A Aquifer (Coal Measures). No evidence of continuity with the River Medlock. Standard good practice and suitable control measures to be implemented during excavation, earthworks and construction.
			Ashton Canal Migration via surface water run-off and drainage	Medium	Unlikely	Low	Migration via surface water and/or drainage into the neighbouring Ashton Canal. Standard good practice and suitable control measures to be implemented during excavation, earthworks and construction. No evidence of groundwater continuity.
			Impact to flora Root uptake	Minor	Low Likelihood	Very Low	Made Ground has some phytotoxic elements, however, suitable thickness of imported material will be required for horticultural purposes. It is anticipated that this material will suitable for landscaping mitigating this risk.
			Attack on below ground infrastructure Direct contact / permeation of plastic pipe work by contaminants in soil and leachate. Degradation of below ground concrete	Mild	Low likelihood	Low	Potential for direct contact with contamination in shallow soils and groundwater. Capable of mitigation- i.e. clean fill for service trenches, supply pipework that will be in accordance with relevant guidance (for water supply pipework and attack on below ground concrete) and agreed with the water utility company.

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Source			**Hazard to Receptor [bold text]**	**Risk Assessment (following CIRIA C552)**			**Description of source [bold text]**
Origin	**Contaminants of concern**	**Zone affected**	Pathway [normal text]	**Consequence**	**Probability**	**Risk**	Comment on hazard realisation [normal text]
Generation of ground gas from Made Ground [Zones 1 – 3]	Methane, carbon dioxide, depleted oxygen, carbon monoxide and hydrogen sulphide	On Site	**<u>Description of Source:</u> The GSV for both CO2 and CH4 have been determined as CS1. However, it is recommended the Characteristic Situation is increased to CS2 due to multiple consistent elevated concentrations of CO2 (>5%) and CH4 (>1%, concentrations recorded around 10%) and depleted oxygen levels (<16%, concentrations frequently recorded at <0.05%, the limit of detection). Carbon monoxide generally ranged between <0.05ppm and 4ppm with occasional readings as much as 18ppm. Hydrogen sulphide was rarely recorded above detection limit. Flow rate ranged between <0.05l/hr and 0.2l/hr and only a slight increase in flow would tip the Characteristic Situation into CS2.**				
			Health impact to future site users Migration via permeable strata, asphyxiation and inhalation of gas	Severe	Low Likelihood	**Moderate**	There is potential for gas to ingress into enclosed spaces within the proposed development. The proposed ground excavation work and presence of a basement will reduce the potential source and (by default) contribute to protection against ground gas ingress. However, Made Ground is present to 17.2m, a large portion of the source is going to remain in place. Implementation of a protective barrier across the development slab will provide suitable protection against ground gas ingress.
			Health impact to construction workers Vapour migration, asphyxiation and inhalation of gas	Severe	Unlikely	**Moderate / Low**	There is potential for gas to ingress into enclosed spaces. Exposure time will be relatively limited and standard good practice and Health and Safety precautions including confined space entry likely.
			Occupiers and users of neighbouring land Migration via permeable strata, asphyxiation and inhalation of gas	Severe	Unlikely	**Moderate / Low**	There is the potential for gas to migrate into neighbouring enclosed spaces. Implementation of suitable ventilation measures surrounding the site will provide suitable protection against ground gas ingress.
Groundwater contamination [site-wide]	Elevated heavy metals and petroleum hydrocarbons	On Site	**<u>Description of Source:</u> A total of 16 samples were tested for groundwater contamination. Elevated concentrations of heavy metals and petroleum hydrocarbons were encountered within the two rounds of groundwater sampling. Visual evidence of hydrocarbon contamination (occasional oily sheen) recorded during initial monitoring rounds. Contamination of water located perched within the Made Ground and within the deeper Secondary A Aquifer.**				
			River Medlock Migration via permeable strata	Medium	Unlikely	Low	There is a potential for groundwater contaminants to migrate via permeable strata into the River Medlock. The groundwater data indicates that there is no evidence of a connection between site groundwater and the River Medlock.

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13 Conclusions & Recommendations

13.1 Geotechnical

- Ground conditions comprise a significant thickness of variable Made Ground overlying mixed superficial deposits (Alluvium, River Terrace Gravels and Glacial Till) overlying bedrock comprising Coal Measures strata. Bedrock was encountered generally between 13 to 17m below ground level and includes worked coal seams that have been remediated previously by drilling and grouting.
- A design ground model has been developed based on the recent ground investigation. This presents geotechnical parameters to be used for the foundation and retaining wall design. A summary of the ground model is presented in Table 13—1 below.
- Three known and treated mineshafts are present on the site together with an unknown "ghost" shaft. Although treated there will be a requirement for bridging structures over these features.
- Given the ground conditions, in particular the variable nature and depth of the Made Ground, a piled foundation solution is proposed. Rotary bored piles founded in the underlying Coal Measures with appropriate cognisance of the presence of coal seams are proposed.
- Ground bearing slabs may be suitable for the proposed seating area however these will need to include appropriate detailing to allow for potential differential movements.
- Retaining walls will be required and at this stage contiguous piling is assumed to be the preferred option. The use of sheet piling is considered unlikely to be suitable owing to the presence of buried obstructions.
- The proposed slab level of +54.0mOD requires a significant amount of excavation across the site, which will create large amounts of soil to be disposed off-site. In addition a methodology for removing the perched groundwater within the site must be considered.

Table 13—1 Summary Geotechnical Design Ground Model

Strata	Range Depth Top (max/min)		Unit Weight (kN/m³) Bulk [Dry]	Undrained Strength, C_u (kPa)	Drained Strength, ϕ' (°)	UCS (MPa)	Stiffness (MPa) [Undrained] Drained
	mbgl	mOD					
Made Ground	GL	60.0/57.7	18	40	$\phi'_{cv,k} = \phi'_{pk,k} =$ 26	-	[12] 9.6
Alluvium	10.8/-	52.8/-	16	30	$\phi'_{cv,k} = \phi'_{pk,k}$ =25	-	[9] 7.2
River Terrace Deposits	10.8/-	49.0/-	18	-	$\phi'_{cv,k}$ =33 $\phi'_{pk,k}$ =39	-	20
Glacial Till	12.3/4.0	56.0/45.4	20	45 +12z (z =depth from 2mbgl)	$\phi'_{cv,k} = \phi'_{pk,k} =$ 27 [c′ = 5]	-	[450S_u] 360S_u
Coal Measures (Mudstone)	17.7/12.5	47.2/40.0	24 [22]	-	-	1	150

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13.2 Geoenvironmental

13.2.1 Contamination risk assessment

The risk assessment undertaken indicates the risks to construction workers from on-site contaminants is Moderate. It is considered that the potential risks to construction workers can be mitigated through good construction practice and adoption of suitable construction methodologies.

The potential risks to occupiers and users of neighbouring land is assessed as Moderate / Low. It is considered the potential risks to these users during excavation, earthworks and construction can be mitigated through standard good practice and adoption of suitable construction methodologies e.g. dust suppression measures.

The potential risks to future site users is assessed Moderate / Low reflecting the potential for exposure in limited areas of soft landscaping. The potential risks to future site users can be mitigated by the incorporation of an appropriate thickness of subsoil and topsoil materials in these limited landscaped areas.

The risks to future site users and occupiers/users of neighbouring land from ground gas has been assessed as Moderate and Moderate / Low reflecting the nature of the ground gas regime (elevated concentrations of CH_4, $C0_2$ and depleted oxygen) and the nature of the proposed development. Implementation of suitable remediation measures during the proposed development will mitigate this risk. The site has been classified as CS2.

The potential risk to the River Medlock is assessed as Low reflecting the lack of evidence of groundwater flow in the direction of the River Medlock and a lack of any significant groundwater migration pathway.

Risks to Ashton Canal, flora and below ground infrastructure are assessed as Low.

13.2.2 Recommendations

Asbestos has been recorded in a small proportion of samples tested. The appointed groundworks contractor will need to put in place appropriate health and hygiene control measures. Such measures would include minimisation of dust generation by damping down and management of material excavations and stockpiling and the use of appropriate PPE/RPE.

In accordance with the relevant British Standard [29], the gas protection score required for buildings on a site classified as CS2 is 1.5. It may be possible to achieve this score through the existing building design without the need for any specific gas protection measures. The building substructure will (by default) provide protection against hazardous gas ingress. A reinforced waterproofed basement slab with minimal penetrations and cracking control (waterproofing additive / membrane within Grade 2 and Grade 3 areas) merits 2-2.5 points. The presence of basements will further contribute to the protection against gas ingress. If these basements are ventilated to meet Building Regulations requirements for dealing with car exhaust fumes then a further 4 points can be warranted.

The need for and scope of gas protection measures will need to be considered once a fixed design is arrived at.

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The assessment indicates the majority of the Made Ground arisings (2/3s) would be classified as Non-Hazardous Waste, but with a portion (1/3) of the material classified as Hazardous Waste. The underlying natural soil would likely be classified as Inert (unless exhibiting visual / olfactory evidence of contamination). The vast majority of the hazardous properties within the Made Ground derive from elevated concentrations of petroleum hydrocarbons, although segregation is possible it is likely that some of the material identified as Non-Hazardous will likely be mixed during the excavation with the Hazardous material therefore potentially increasing the 1/3 Hazardous Waste portion. It is the enabling / earthworks contractor's responsibility, in association with the operator and/or operator of the landfill to classify the materials appropriately and ensure disposal and / or re-use in accordance with the relevant regulations. Accordingly, the contractor is likely to carry out additional testing and classification in due course.

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Appendix A Relevant Drawings

Drawing Number	Issue	Description
BRA-BHE-XX-XX-DR-GE-0100	31.01.2020	Exploratory Hole Location Plan
BRA-BHE-XX-XX-DR-GE-0101	31.01.2020	Constraints Plan
BRA-BHE-XX-XX-DR-GE-0102	31.01.2020	Historical site features
BRA-BHE-XX-XX-DR-GE-0104	31.01.2020	Site location and abandonment plans
BRA-BHE-XX-XX-DR-GE-0105	31.01.2020	Base of drill & grout and shaft locations
BRA-BHE-XX-XX-DR-GE-0200	31.01.2020	Cross Section Location Plan
BRA-BHE-XX-XX-DR-GE-0201	31.01.2020	Geological Cross Section Sheet 1 (A-A' and B-B')
BRA-BHE-XX-XX-DR-GE-0202	31.01.2020	Geological Cross Section Sheet 2 (C-C' and D-D')
BRA-BHE-XX-XX-DR-GE-0203	31.01.2020	Geological Cross Section Sheet 3 (E-E' and F-F')
BRA-BHE-XX-XX-DR-GE-0300	31.01.2020	Contour Plot Base of Made Ground
BRA-BHE-XX-XX-DR-GE-0301	31.01.2020	Contour Plot Top of Coal Measures

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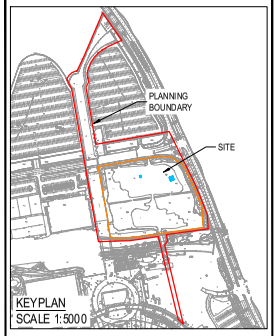
IN ADDITION TO THE HAZARDS/RISKS NORMALLY ASSOCIATED WITH THE TYPES OF WORK DETAILED ON THIS DRAWING, NOTE THE FOLLOWING

CONSTRUCTION.

MAINTENANCE/CLEANING/OPERATION.

DECOMMISSIONING/DEMOLITION.

Notes



Rev	Description	Date	Drn	Chkd
P02	PLANNING	31.01.20	NG	FG
P01	DRAFT STAGE 3	27.11.19	NG	FG

PLANNING

Status of drawing

DEVELOPMENT BOUNDARY
GROUT TREATMENT WORKS - 2011
VALIDATED AREA - 2011

HISTORICAL GROUND INVESTIGATION
- BOREHOLE - I.G.S 1954
- BOREHOLE - WARD ASHCROFT & PARKMAN 1983
- BOREHOLE - NORTHERN FOUNDATIONS 1991
- BOREHOLE - NORTHERN FOUNDATIONS 1993
- BOREHOLE - PARKMAN 1996
- BOREHOLE - NORWEST HOLST 1999
- COBBLE SEARCH - NORWEST HOLST 1999
- MINESHAFT INVESTIGATION - SOIL MECHANICS 2000
- BOREHOLE - SOIL MECHANICS 2000
- BOREHOLE - SOIL MECHANICS 2003
- BOREHOLE - MAY GURNEY 2009
- INSPECTION PIT - WARD ASHCROFT & PARKMAN 1983
- TRIAL PIT - WARD ASHCROFT & PARKMAN 1983
- TRIAL PIT - NORTHERN FOUNDATIONS 1991
- TRIAL PIT - PARKMAN 1996
- TRIAL PIT - NORWEST HOLST 1999
- TRIAL PIT - SOIL MECHANICS 2000
- TRIAL PIT - SOIL MECHANICS 2003
- TRIAL PIT - MAY GURNEY 2009

2019 GROUND INVESTIGATION
- BOREHOLE - DEEP GROUNDWATER(UP TO 60 mBGL THROUGH COAL MEASURES)
- BOREHOLE - SHALLOW GROUNDWATER (BASE OF SUPERFICIAL DEPOSITS)
- BOREHOLE - GROUND GAS (BASE OF MADE GROUND UP TO 16 mBGL)
- TRIAL PIT (UP TO 5 mBGL)
- OBSERVATION PIT (UP TO 2 mBGL)
- SLIP TRENCH (UP TO 2 mBGL)

SHAFT NO. 386398-003

SHAFT NO. 386398-010

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Architect: POPULOUS

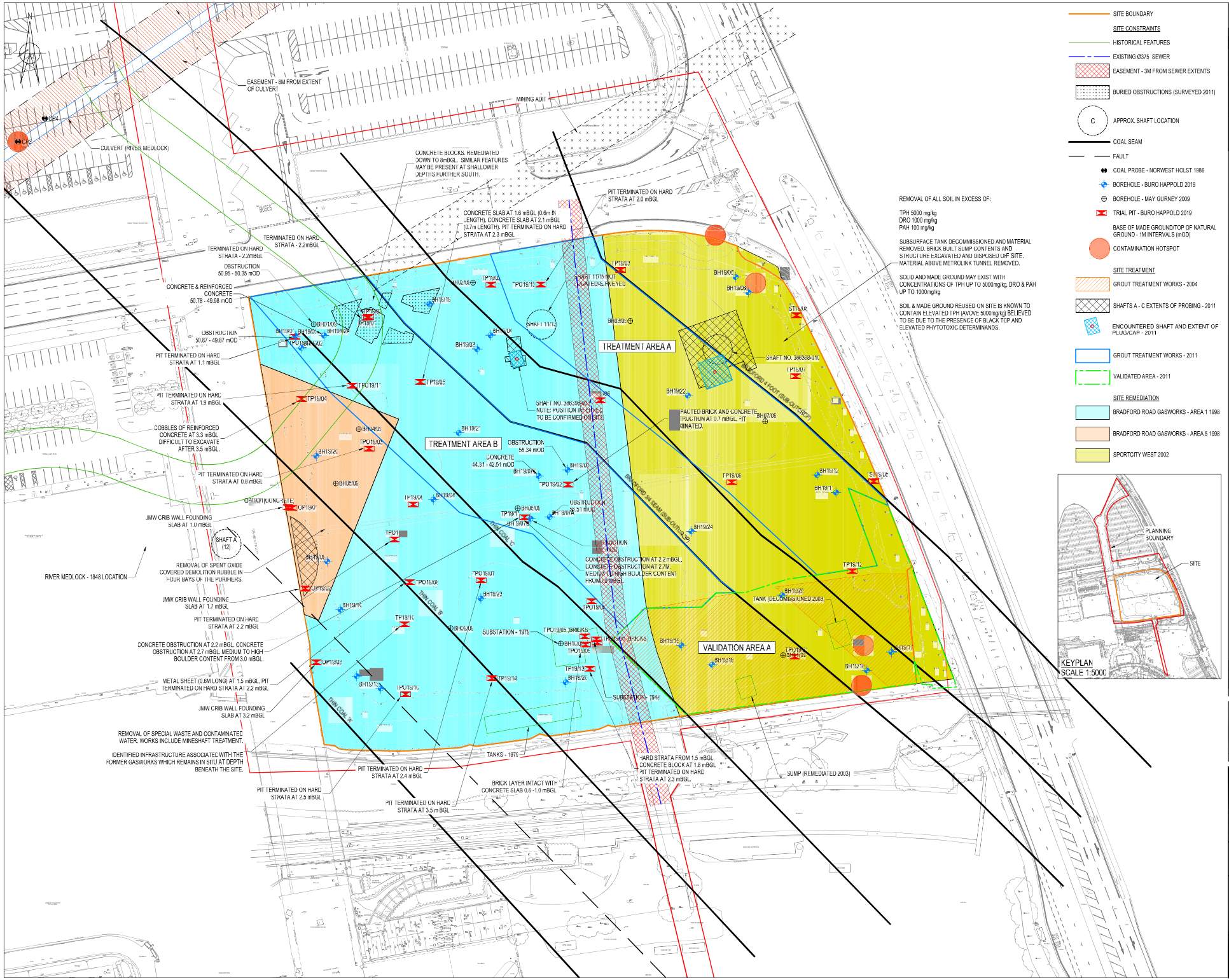
Project: OVG MANCHESTER

Drg Title: EXPLORATORY HOLE LOCATION PLAN

Scales@A1: 1:500
Drawn by: NG
Checked by: FG

Job No.: 0042841
Date: NOV 2019
Rev: P02

Drawing No.: BRA-BHE-XX-XX-DR-GE-0100



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Notes
1848 RIVER MEDLOCK POSITION, SUBSTATION & TANKS LOCATIONS - GROUNDSURE.

SHAFT A - ARUP, MINESHAFT AND MINE WORKINGS, FIGURE 14, 15.10.08.

SHAFTS B & C - BWB CONSULTING, AS BUILT MINESHAFT POSITIONS, DRAWING NO. NTH/185/201, REVISION P1, 14.03.11.

SHAFT 13 - ARUP, MINESHAFTS AND MINE WORKINGS, FIGURE 14, 15.10.08.

COAL SEAMS AND FAULTS - ARUP, COAL SEAMS AND MINESHAFT DETAILS, DRAWING NO., ARP-LAY-CG-132, REVISION C, 01.03.10.

COAL PROBE BOREHOLE LOCATIONS - NORWEST HOLST ENGINEERING, MINE SHAFTS LOCATION SITE PLAN, DRAWING NO. 14/6873/AO, AUGUST 1986.

BASE OF MADE GROUND/TOP OF NATURAL GROUND - ARUP, BASE OF MADE GROUND CONTOURS, DRAWING NO. ARP-LAY-CE-242, REVISION C, 01.03.10

CONTAMINATION HOTSPOTS, HISTORICAL TANK & SUMP - ARUP, EARTHWORKS VALIDATION PLAN, DRAWING NO. CLC060405, 23.01.04.

2004 SITE TREATMENT WORKS - ARUP, DRILLING AND GROUTING TREATMENT LOCATION PLAN, DRAWING NO. CLC060403, 23.01.04.

2011 SHAFT A - C TREATMENT - BWB CONSULTING, FIGURE 2 AREA C MINESHAFT INVESTIGATION, VALIDATION AND TREATMENT WORKS, DRAWING NO. NTN185/03/AREAC/F2, FEBRUARY 2011.

TREATMENT AREA A - BWB CONSULTING, FIGURE 5 TREATMENT AREA A MINE STABILISATION WORKS, DRAWING NO. NTH185/03/AREAC/F5, JANUARY 2011.

TREATMENT AREA B - BWB CONSULTING, FIGURE 6 TREATMENT AREA B MINE STABILISATION WORKS, DRAWING NO. NTH185/03/AREAC/F6, JANUARY 2011.

VALIDATION AREA - BWB CONSULTING, FIGURE 4 VALIDATION AREA A MINE STABILISATION WORKS, DRAWING NO. NTH185/03/AREAC/F4, FEBRUARY 2011.

BURIED OBSTRUCTIONS - BUCKINGHAM GROUP CONTRACTING, SURVEYED OBSTRUCTIONS, DRAWING NO. 005, REVISION A, 11.02.11.

HISTORICAL REMEDIATION - ARUP, PREVIOUS ENABLING AND REMEDIAL WORKS, FIGURE 15, 25.09.08.

RESIDUAL CONTAMINATION - ARUP, POTENTIAL RESIDUAL CONTAMINATION, FIGURE 16, 15.10.08.

Rev	Description	Date	Dsn	Ckd
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P01	DRAFT STAGE 3	27.11.19	NG	FG

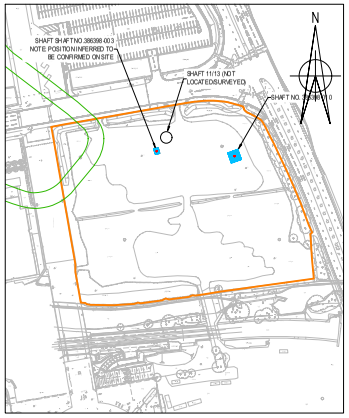
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Status of drawing

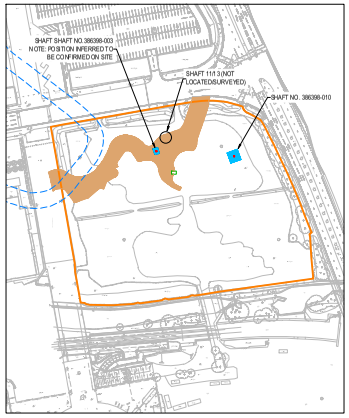
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Architect: POPULOUS
Project: OVG MANCHESTER
Drg Title: CONSTRAINTS PLAN

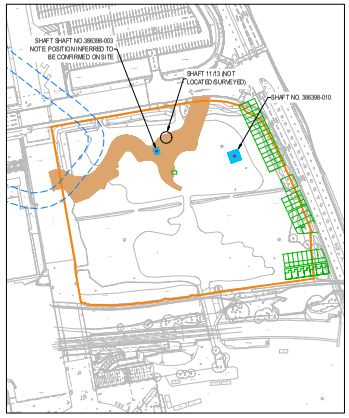
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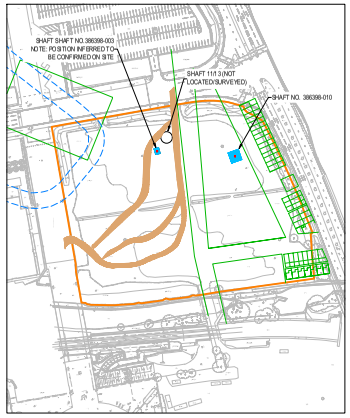
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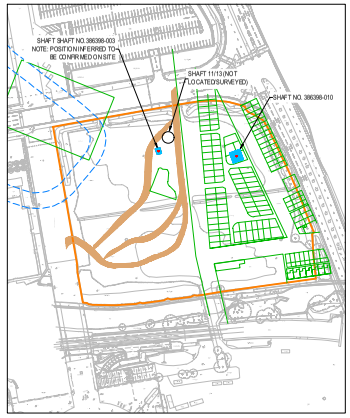
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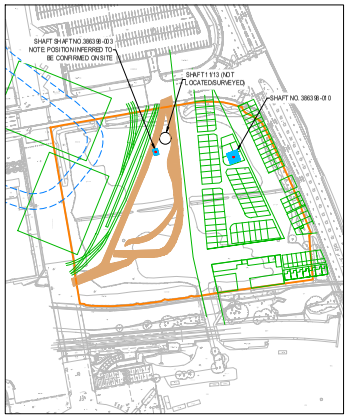
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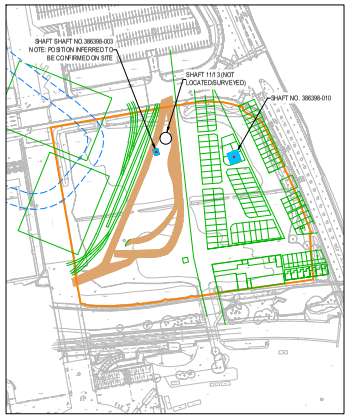
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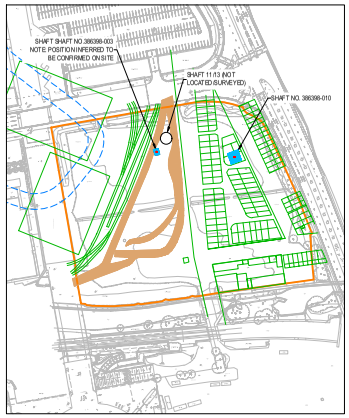
1922



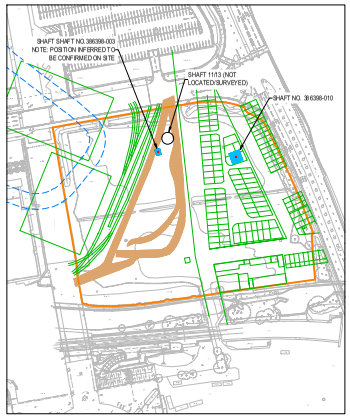
1931 - 1932



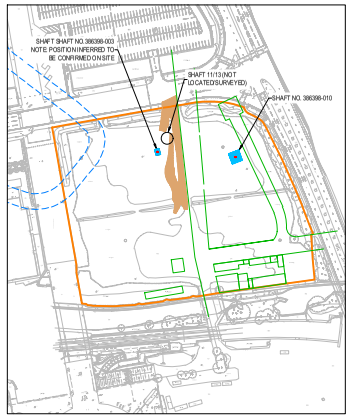
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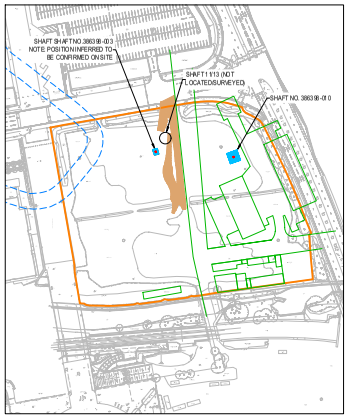
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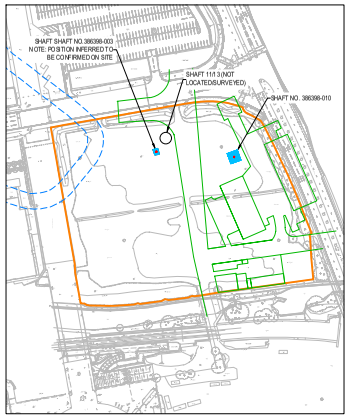
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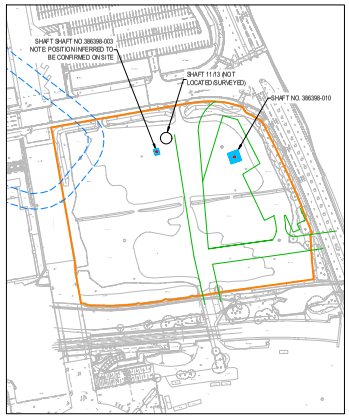
1979



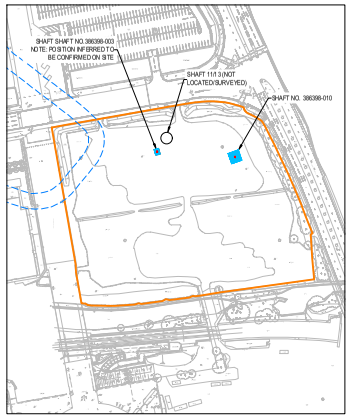
1984 - 1987



1989 - 1995



2002



CURRENT

SITE BOUNDARY
HISTORICAL STRUCTURES
HISTORICAL CUTTING
POSITION OF RIVER MEDLOCK (1848 MAPPING)

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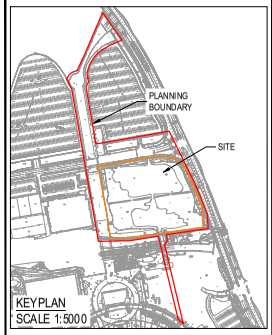
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P01	DRAFT PLANNING	20.12.19	NG	FG

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Architect: POPULOUS

Project: OVG MANCHESTER

Drg Title: HISTORIAL SITE FEATURES

Scales @A1: 1:500
Drawn by: NG
Checked by: FG

Job No.: 0042841
Date: NOV 2019
Rev: P02

Drawing No.: BRA-BHE-XX-XX-DR-GE-0102

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MINE ABANDONMENT PLAN 2



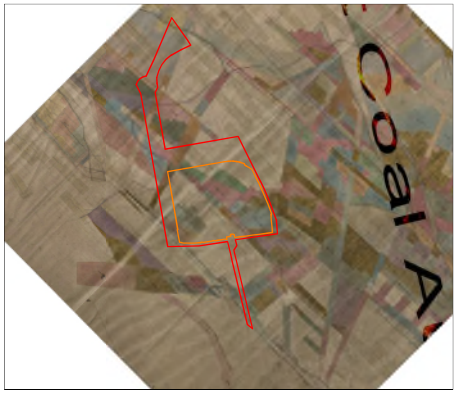
MINE ABANDONMENT PLAN 3



MINE ABANDONMENT PLAN 4



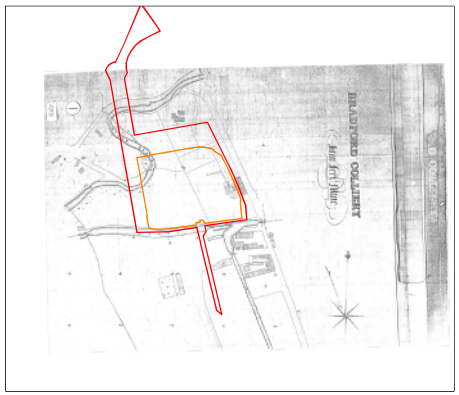
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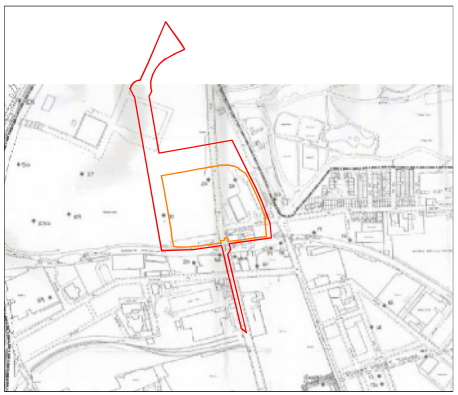
MINE ABANDONMENT PLAN 6



MINE ABANDONMENT PLAN 7



MINE ABANDONMENT PLAN 8



MINE ABANDONMENT PLAN 9

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DEVELOPMENT BOUNDARY

PLANNING BOUNDARY

Rev.	Description	Date	Drn	Chkd
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Architect: POPULOUS

Project: OVG MANCHESTER

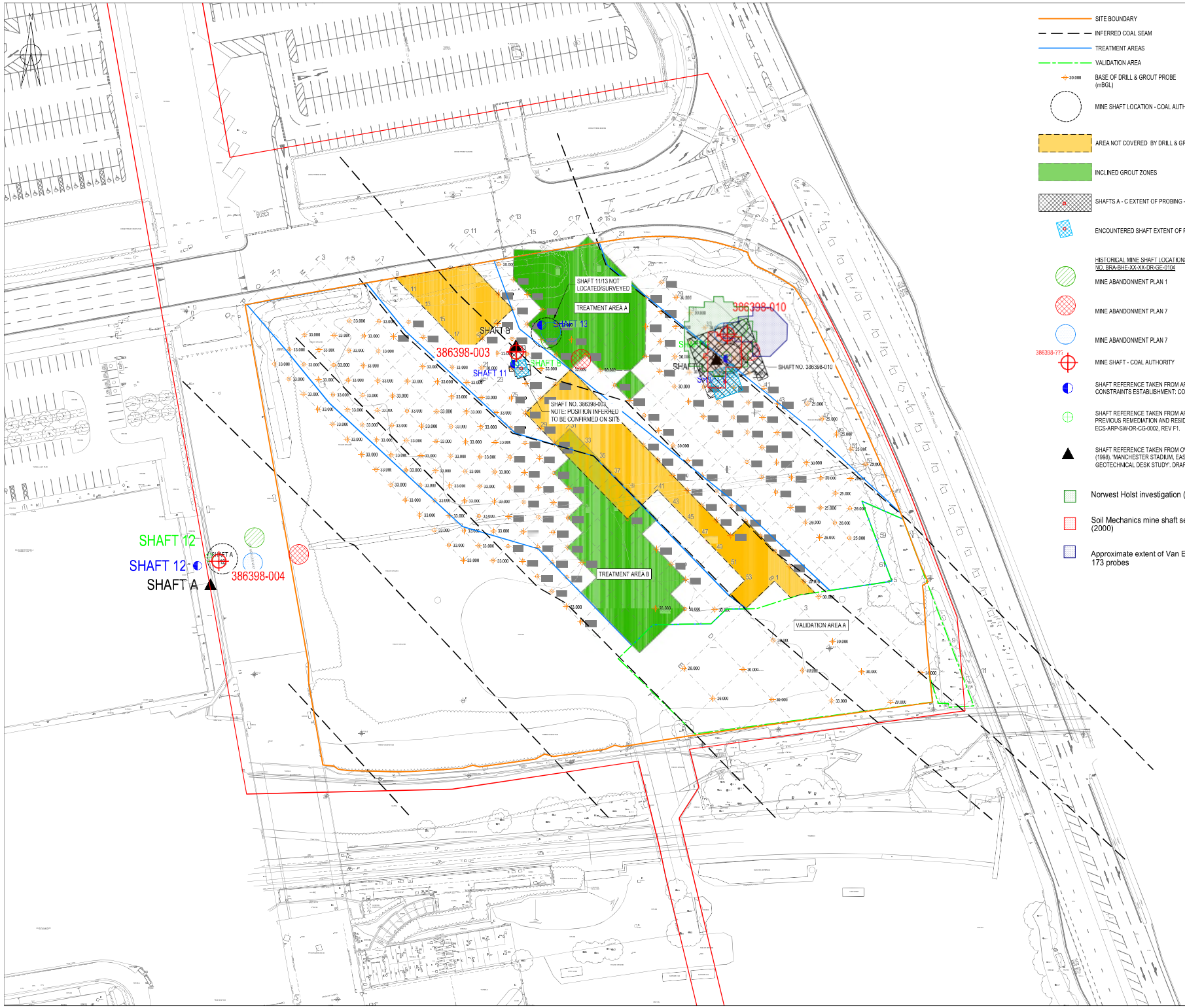
Drg Title: SITE LOCATION & MINE ABANDONMENT PLANS

Scales@A1: 1:500
Drawn by: NG
Checked by: FG

Job No: 0042841
Date: JAN 2020
Rev: P01

Drawing No: BRA-BHE-XX-XX-DR-GE-0104

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SITE BOUNDARY
INFERRED COAL SEAM
TREATMENT AREAS
VALIDATION AREA
BASE OF DRILL & GROUT PROBE (mBGL)
MINE SHAFT LOCATION - COAL AUTHORITY
AREA NOT COVERED BY DRILL & GROUT WORKS
INCLINED GROUT ZONES
SHAFTS A - C EXTENT OF PROBING - 2011
ENCOUNTERED SHAFT EXTENT OF PLUG/CAP

HISTORICAL MINE SHAFT LOCATIONS - REFER TO DRAWING NO. BRA-BHE-XX-XX-DR-GE-0104

MINE ABANDONMENT PLAN 1
MINE ABANDONMENT PLAN 7
MINE ABANDONMENT PLAN 7
386398-777 MINE SHAFT - COAL AUTHORITY
SHAFT REFERENCE TAKEN FROM ARUP (2008), 'SPORTCITY CONSTRAINTS ESTABLISHMENT: CONTEXT REPORT ISSUE 1.
SHAFT REFERENCE TAKEN FROM ARUP (2019), 'EXTENT OF PREVIOUS REMEDIATION AND RESIDUAL CONSTRAINTS'. ECS-ARP-SW-DR-CG-0002, REV F1.
SHAFT REFERENCE TAKEN FROM OVE ARUP& PARTNERS (1998), 'MANCHESTER STADIUM, EASTLANDS; INTERIM GEOTECHNICAL DESK STUDY'. DRAFT 1.

Norwest Holst investigation (1998)
Soil Mechanics mine shaft search extents (2000)
Approximate extent of Van Elle search (2003) - 173 probes

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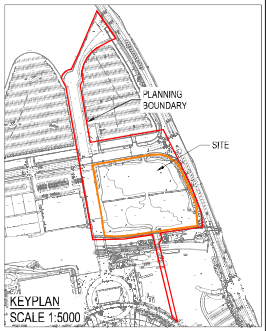
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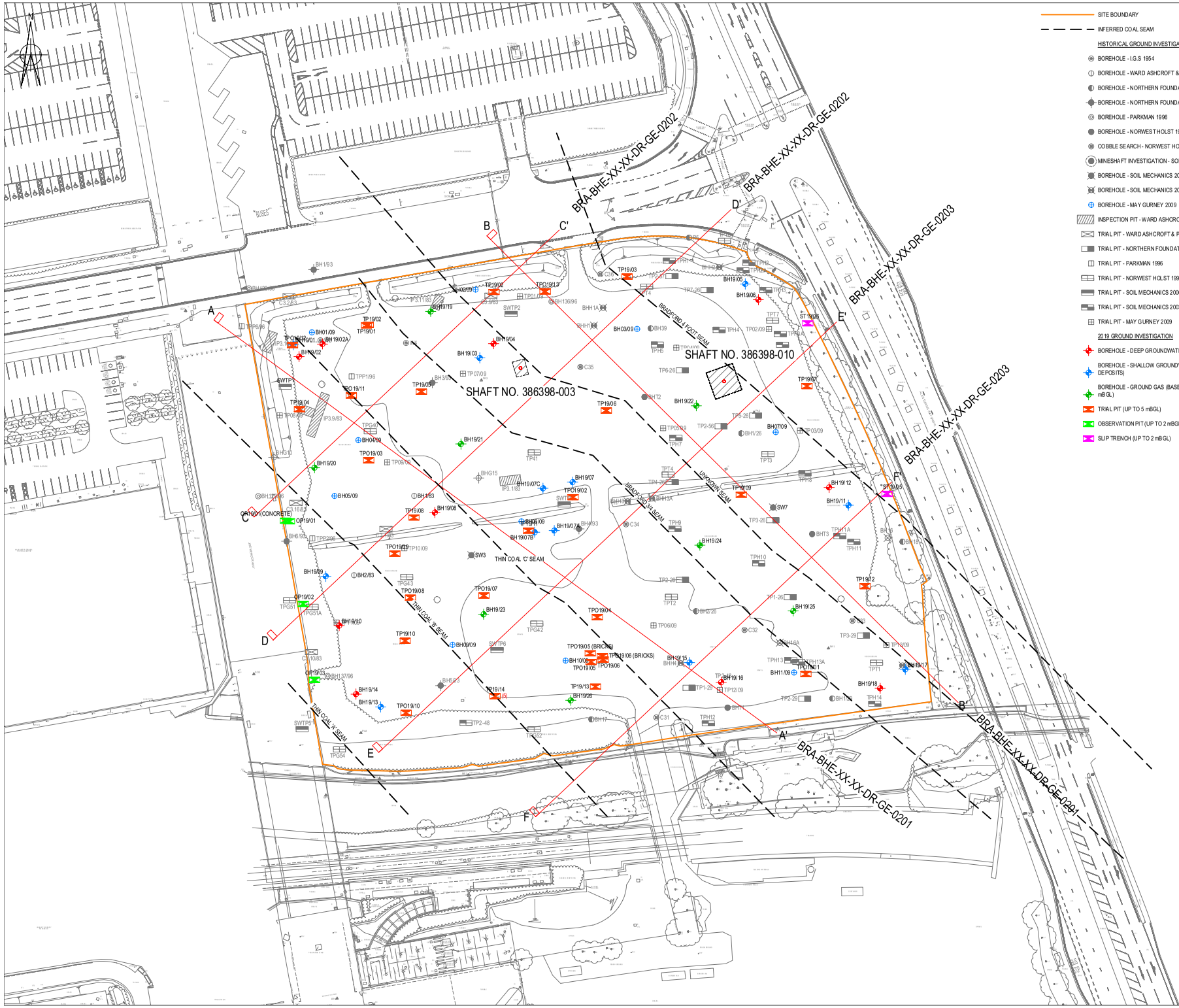
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Architect: POPULOUS
Project: OVG MANCHESTER
Drg Title: BASE OF DRILL & GROUT HOLES (mBGL) AND HISTORICAL SHAFT LOCATIONS

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Drawn by: NG	Date: JAN 2020
Checked by: AKS	Rev: P01
Drawing No: BRA-BHE-XX-XX-DR-GE-0105	

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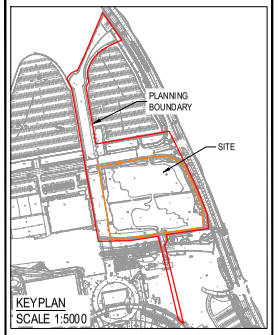
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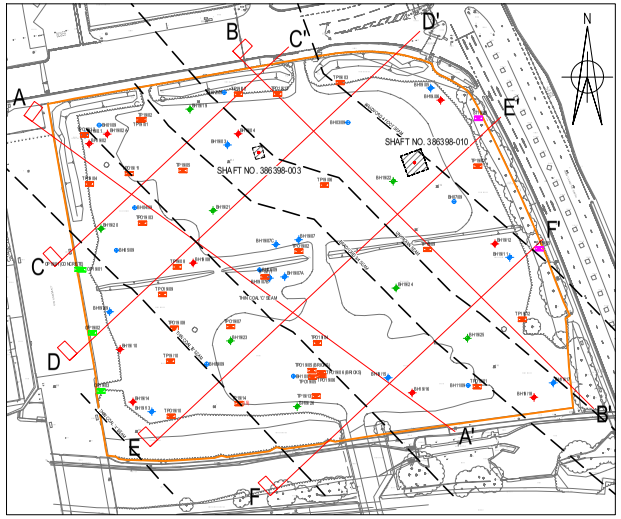
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Web: www.burohappold.com

Architect: POPULOUS
Project: OVG MANCHESTER
Drg Title: CROSS SECTION LOCATION PLAN

Scales @A1: 1:500
Drawn by: NG
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Job No. 0042841
Date NOV 2019
Rev P03

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- INFERRED COAL SEAM
- MG MADE GROUND
- ALV ALLUVIUM
- RTG RIVER TERRACE DEPOSITS
- GT GLACIAL TILL
- CM COAL MEASURES
- COAL SEAM FROM GROUND INVESTIGATION DATA
- ASSUMED ZONE OF CORE LOSS
- GROUNDWATER TABLE (mOD)
- GROUNDWATER - PERCHED (mOD)

DRILL & GROUT LEVELS

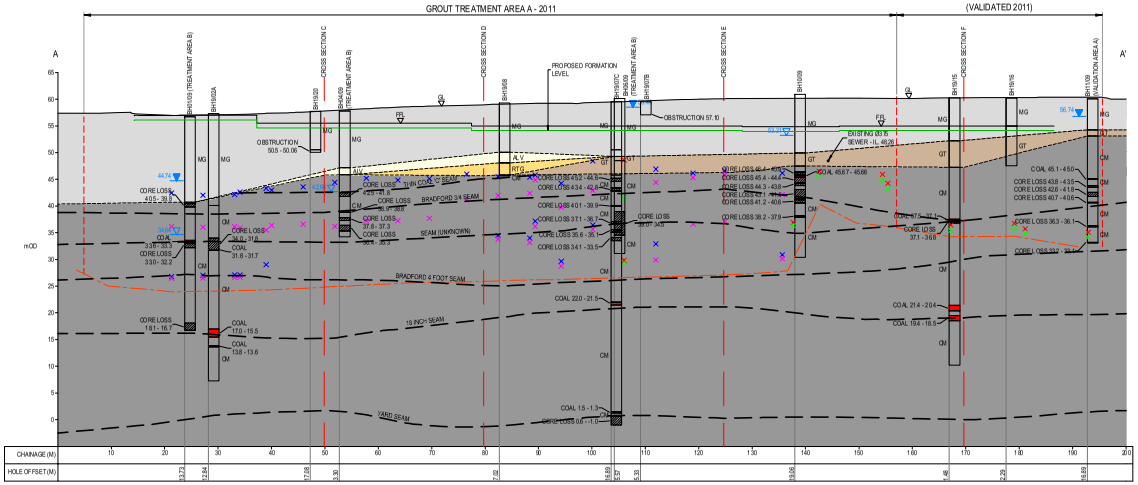
- TOP OF COAL SEAM
- BASE OF COAL SEAM
- TOP OF SHALE & COAL ZONE
- BASE OF SHALE & COAL ZONE
- BASE OF DRILL & GROUT TREATMENT

NOTE

HOLES MARKED TREATMENT AREAS A & B WERE LOCATED WITHIN TREATMENT AREAS FROM THE 2011 BWB REPORT. WITHIN THESE AREAS GLACIAL TILL WAS ENCOUNTRED AT APPROX. 11 mBGL AND 14 mBGL FOLLOWED BY GREY MUDSTONE OF THE COAL MEASURES.

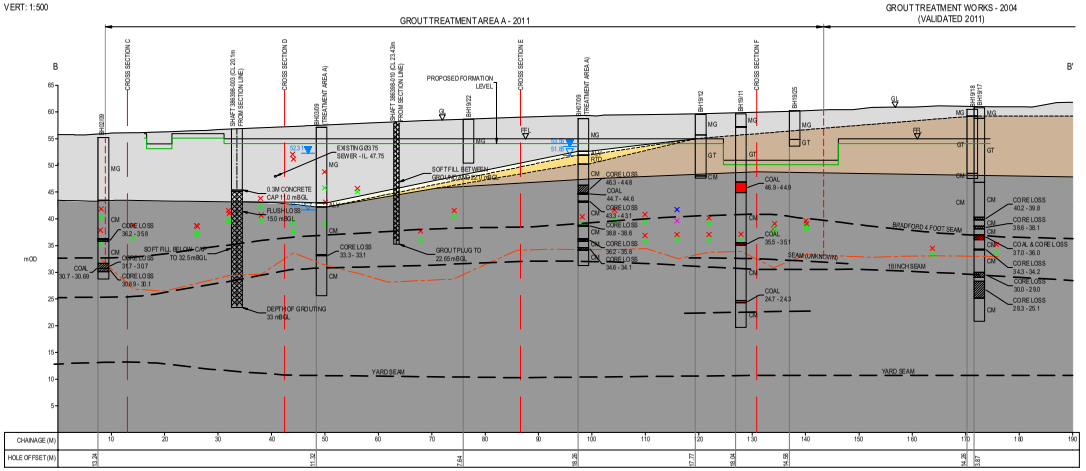
SECTION A - A'

SCALES
HORIZ. 1:500
VERT: 1:500



SECTION B - B'

SCALES
HORIZ. 1:500
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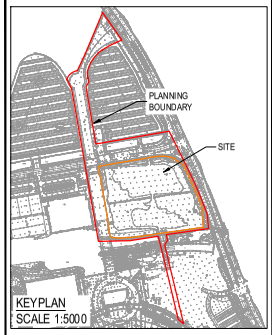
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Bath BA2 3DQ
UK

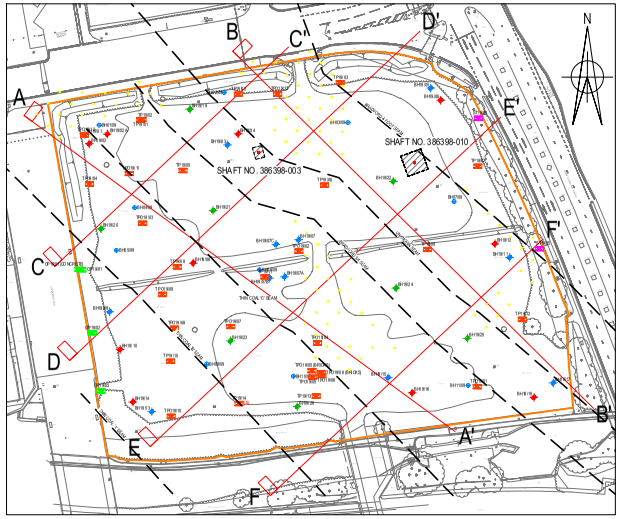
Tel: +44 (0)1225 320800
Fax: +44 (0)870 787 4148
Email: 0042841@burohappold.com
Web: www.burohappold.com

Architect: POPULOUS
Project: OVG MANCHESTER
Drg Title: GEOLOGICAL CROSS SECTIONS SHEET 1

Scales@A1 1:500
Drawn by NG
Checked by FG

Job No. 0042841
Date NOV 2019
Rev P03

Drawing No. BRA-BHE-XX-XX-DR-GE-0201



- INFERRED COAL SEAM
- MG MADE GROUND
- ALV ALLUVIUM
- RTG RIVER TERRACE DEPOSITS
- GT GLACIAL TILL
- CM COAL MEASURES
- COAL SEAM FROM GROUND INVESTIGATION DATA
- ASSUMED ZONE OF CORE LOSS
- GROUNDWATER TABLE (mOD)
- GROUNDWATER - PERCHED (mOD)

DRILL & GROUT LEVELS

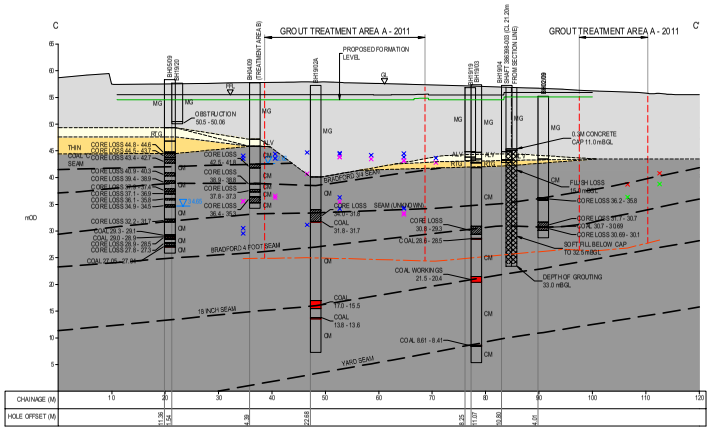
- TOP OF COAL SEAM
- BASE OF COAL SEAM
- TOP OF SHALE & COAL ZONE
- BASE OF SHALE & COAL ZONE
- BASE OF DRILL & GROUT TREATMENT

NOTE

HOLES MARKED TREATMENT AREAS A & B WERE LOCATED WITHIN TREATMENT AREAS FROM THE 2011 BWB REPORT. WITHIN THESE AREAS GLACIAL TILL WAS ENCOUNTRED AT APPROX. 11 mBGL AND 14 mBGL FOLLOWED BY GREY MUDSTONE OF THE COAL MEASURES.

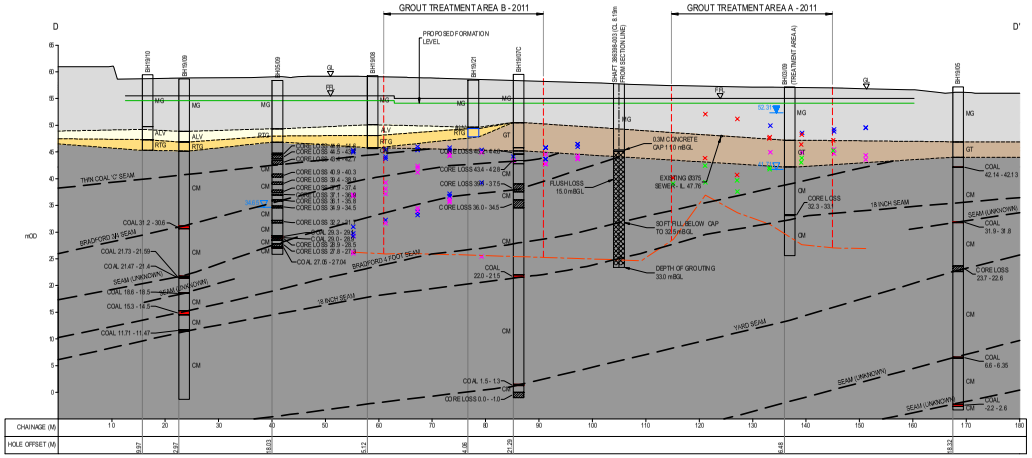
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SCALES
HORIZ. 1:500
VERT: 1:500



SECTION D - D'

SCALES
HORIZ. 1:500
VERT: 1:500



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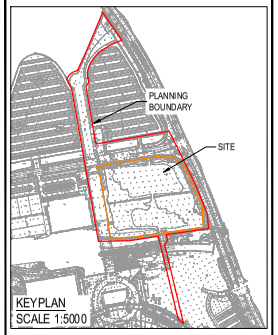
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Notes
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Rev	Description	Date	Drn	Chkd
P03	PLANNING	31.01.20	NG	FG
P02	DRAFT FOR PLANNING	20.12.19	NG	FG
P01	DRAFT STAGE 3	27.11.19	NG	FG

PLANNING

Status of drawing

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Project: OVG MANCHESTER

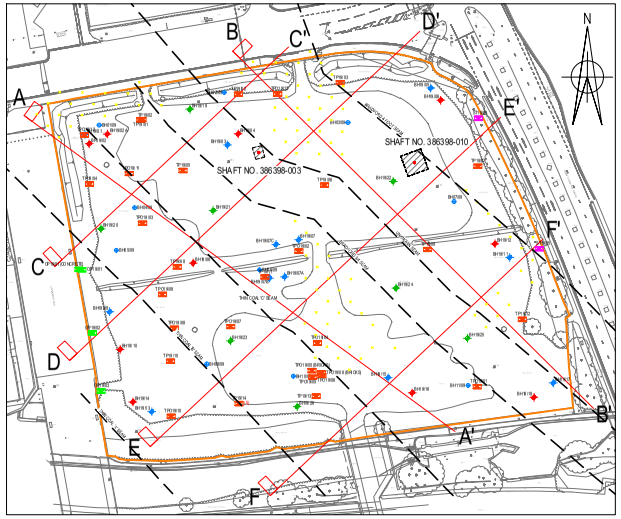
Drg Title: GEOLOGICAL CROSS SECTIONS SHEET 2

Scales@A1 1:500
Drawn by NG
Checked by FG

Job No. 0042841
Date NOV 2019
Rev P03

Drawing No. BRA-BHE-XX-XX-DR-GE-0202

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- - - - - - INFERRED COAL SEAM
MG MADE GROUND
ALV ALLUVIUM
RTG RIVER TERRACE DEPOSITS
GT GLACIAL TILL
CM COAL MEASURES
COAL SEAM FROM GROUND INVESTIGATION DATA
ASSUMED ZONE OF CORE LOSS
GROUNDWATER TABLE (mOD)
GROUNDWATER - PERCHED (mOD)

DRILL & GROUT LEVELS

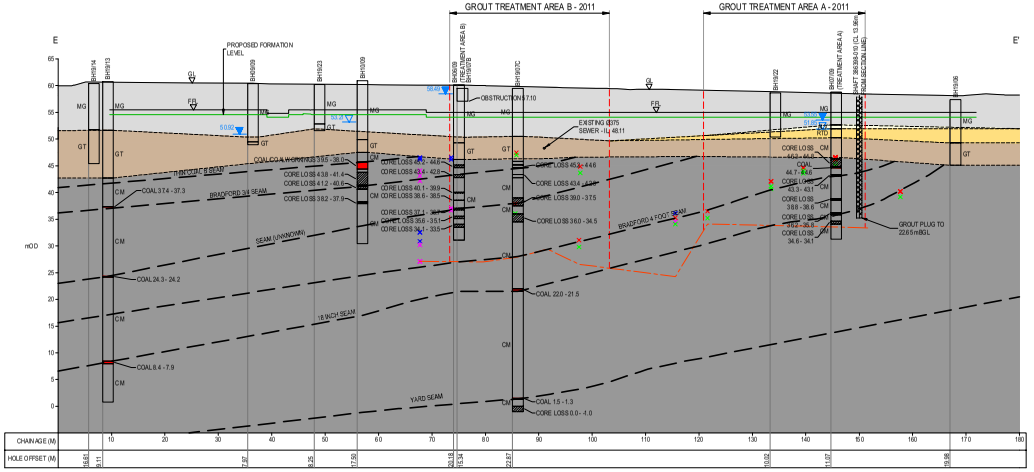
× TOP OF COAL SEAM
× BASE OF COAL SEAM
× TOP OF SHALE & COAL ZONE
× BASE OF SHALE & COAL ZONE
BASE OF DRILL & GROUT TREATMENT

NOTE

HOLES MARKED TREATMENT AREAS A & B WERE LOCATED WITHIN TREATMENT AREAS FROM THE 2011 BWB REPORT. WITHIN THESE AREAS GLACIAL TILL WAS ENCOUNTRED AT APPROX. 11 mBGL AND 14 mBGL FOLLOWED BY GREY MUDSTONE OF THE COAL MEASURES.

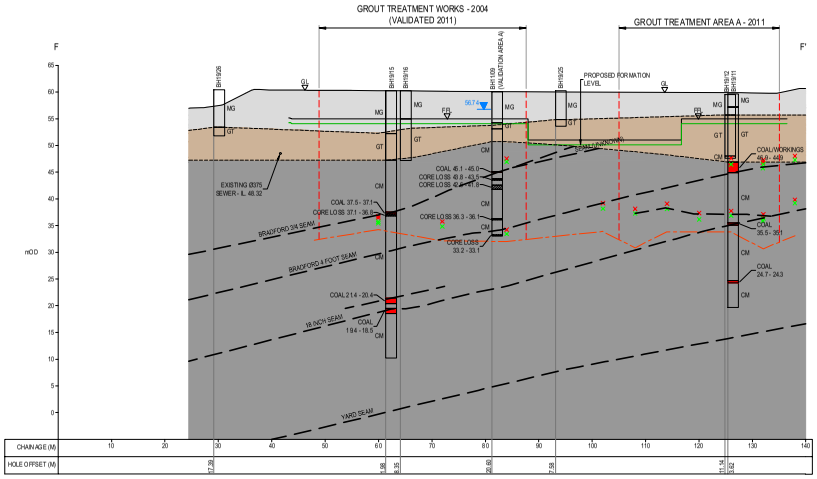
SECTION E - E'

SCALES
HORIZ. 1:500
VERT: 1:500



SECTION F - F'

SCALES
HORIZ. 1:500
VERT: 1:500



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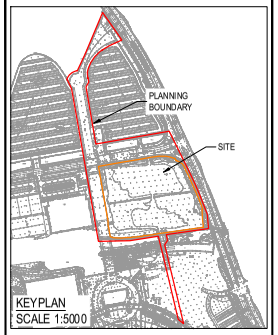
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Rev	Description	Date	Drn	Chkd
P03	PLANNING	31.01.20	NG	FG
P02	DRAFT FOR PLANNING	20.12.19	NG	FG
P01	DRAFT STAGE 3	27.11.19	NG	FG

PLANNING

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Project: OVG MANCHESTER
Drg Title: GEOLOGICAL CROSS SECTIONS SHEET 3

Scales@A1 1:500
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Job No. 0042841
Date NOV 2019
Rev P03

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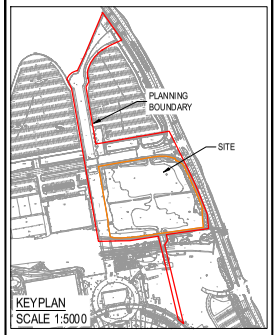
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Notes



Rev.	Description	Date	Drn	Chk'd
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P01	DRAFT STAGE 3	27.11.19	NG	FG

PLANNING

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Architect: POPULOUS

Project: OVG MANCHESTER

Drg Title: CONTOUR PLOT
BASE OF MADE GROUND

Scales @A1: 1:500
Drawn by: NG
Checked by: FG

Job No. 0042841
Date NOVEMBER 2019
Rev P02

Drawing No. BRA-BHE-XX-XX-DR-GE-0300



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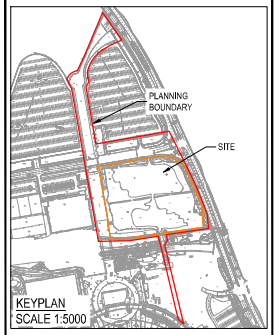
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Notes



Rev	Description	Date	Drn	Ckd
P03	PLANNING	31.01.20	NG	FG
P02	DRAFT FOR PLANNING	20.12.19	NG	FG
P01	DRAFT STAGE 3	27.11.19	NG	FG

PLANNING

Status of drawing

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Architect: POPULOUS

Project: OVG MANCHESTER

Drg Title: CONTOUR PLOT
TOP OF COAL MEASURES

Scales@A1: 1:500
Drawn by: NG
Checked by: FG

Job No.: 0042841
Date: NOVEMBER 2019
Rev: P03

Drawing No.: BRA-BHE-XX-XX-DR-GE-0301

Appendix B Contamination Risk Assessment Criteria

Introduction

A risk-based approach is used for the assessment of contamination, requiring identification of a contaminant source, a receptor and a realistic pathway via which the contaminant may reach the receptor. The key receptors considered in this assessment are site end-users, construction workers and controlled waters. In order to perform a generic quantitative risk assessment, the soil test results have been compared with available Soil Guideline Values (SGVs), Category 4 Screening Levels (C4SLs), BuroHappold and other industry Generic Assessment Criteria (GAC).

General Contaminants

Analytical data derived from the investigation has been put into context by comparison with published guidance or derived thresholds values. Current UK guidance published thresholds comprise SGVs and C4SLs, which are available for a limited number of determinands (Reference. 1 to Reference. 9) and land uses. For contaminants without published SGVs or C4SLs or where soil conditions are different to those assumed for the published guideline values (6% soil organic matter content and sandy loam soil), GACs have been derived. The derivation of GACs has been carried out based on published statutory guidance documents (Reference. 10, Reference. 11 and Reference. 12) and with consideration of the most sensitive receptors in the respective CLEA standard land- uses scenarios (the 0 to 6 year old child for the residential with plant uptake ($Resi_1$) and residential without plant uptake ($Resi_2$) scenarios and the adult for the commercial/ industrial land-use scenario) using the software model "CLEA 1.06" and "CLEA 1.071" and associated handbook (Reference. 13, Reference. 14 and Reference. 15). Contaminant specific model input values have been selected as prescribed by the Environment Agency SGV reports (Reference. 1 to Reference. 7). In the absence of SGV reports, contaminant specific input values have been selected as suggested by SC050021/SR7 (Reference. 16) and / or the LQM reports (Reference. 17 and Reference. 18) and/or the EIC/AGS report (Reference. 19).

Lead

Assessment criteria for Lead have been adopted as derived and detailed in the C4SL documents (Reference. 8).

Mercury

Assessment criteria for mercury is based on the published threshold SGV (Reference. 7) and the S4UL (Reference. 18), these have been produced for elemental, inorganic and methyl mercury. Inorganic mercury is the most common form of mercury in the environment. It is recommended by the Environment Agency that elemental and methyl mercury are used as thresholds where the Desk Study has identified a potential source otherwise inorganic mercury should be used. Concentrations of elemental mercury will also be considered where concentrations are notably higher than 'natural' background concentrations (e.g. 20mg/kg).

Nickel

Following the report by the European Food Safety Authority (EFSA) in February 2015 (Reference. 21) the Environment Agency withdrew the Soil Guideline Value (SGV) for nickel and its supporting reports. The Environment Agency have no plans to update the documents or produce any new SGV reports. Following the publication of the EFSA report, LQM advised that the TDI for oral pathways proposed by EFSA was more appropriate than the value previously used. Accordingly LQM issued a revised S4UL value for nickel which has been adopted here.

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Chromium

Assessment criteria for chromium is based on the published threshold LQM value (Reference. 17 and Reference. 18) and have been produced for chromium III (trivalent) and chromium VI (hexavalent). Chromium III is the most common form of chromium in the environment, chromium VI is produced by the oxidation of chromium III through industrial processes. Therefore chromium VI should only be assessed where the Desk Study has identified a potential source otherwise chromium III should be used.

Statistical Analysis

Where individual concentrations of contaminants have been found exceeding assessment criteria, the data of the specific contaminant was analysed statistically in line with the 'Guidance on Comparing Soil Contaminant Data with Critical Concentrations' (Reference. 20). Where the distribution of data for particular determinands showed evidence of non-normality, the 95% upper confidence limits (US95) were calculated using the Chebychev Theorem in accordance with this guidance (Reference. 20).

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Appendix References

Reference. 1. Environment Agency. 2009. Soil Guideline Values for toluene in soil - Science Report SC050021 / toluene SGV. Bristol: Environment Agency

Reference. 2. Environment Agency. 2009. Soil Guideline Values for selenium in soil - Science Report SC050021 / Selenium SGV. Bristol: Environment Agency

Reference. 3. Environment Agency. 2009. Soil Guideline Values for inorganic arsenic in soil - Science Report SC050021/ arsenic SGV. Bristol: Environment Agency

Reference. 4. Environment Agency. 2009. Soil Guideline Values for xylene in soil - Science Report SC050021 / xylene SGV. Bristol: Environment Agency

Reference. 5. Environment Agency. 2009. Soil Guideline Values for benzene in soil - Science Report SC050021 / benzene SGV. Bristol: Environment Agency

Reference. 6. Environment Agency. 2009. Soil Guideline Values for ethylbenzene in soil - Project SC050021 / ethylbenzene SGV. Bristol: Environment Agency

Reference. 7. Environment Agency. 2009. Soil Guideline Values for mercury in soil - Science Report SC050021 / Mercury SGV. Bristol: Environment Agency

Reference. 8. Department for Environment, Food and Rural Affairs. 2014. SP1010: Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination – Policy Companion Document. March 2014.

Reference. 9. Contaminated Land: Applications in Real Environments. 2013 SP1010 – Development of Category 4 Screening Levels for Assessment of Land Affected by Contamination. Final Project Report. 20th December 2013.

Reference. 10. Environment Agency. 2005. The UK Approach for Evaluating Human Health Risks from Petroleum Hydrocarbons in Soils. Science Report P5-080/TR3, February 2005

Reference. 11. Environment Agency. 2009. Updated technical background to the CLEA model. Science Report – SC050021/SR3 January 2009

Reference. 12. Environment Agency. 2009. Human health toxicological assessment of contaminants in soil. Science Report – SC050021/SR2, January 2009

Reference. 13. Environment Agency 2009. CLEA Software (Version 1.06), Retrieved from the internet: http://www.environment-agency.gov.uk/research/planning/40397.aspx.

Reference. 14. Environment Agency 2015. CLEA Software (Version 1.071), Retrieved from the internet: https://www.gov.uk/government/publications/contaminated-land-exposure-assessment-clea-tool

Reference. 15. Environment Agency. 2009. CLEA Software (Version 1.05) Handbook. Science Report – SC050021/SR4, January 2009

Reference. 16. Environment Agency. 2008. Science report SC050021/SR7 - Compilation of Data for Priority Organic Pollutants for Derivation of Soil Guideline Values. Bristol: Environment Agency.

Reference. 17. LQM/CIEH. 2009. Generic Assessment Criteria for Human Health Risk Assessment – 2nd edition. Land Quality Press. Nottingham.

Reference. 18. LQM/CIEH. 2015. The LQM/CIEH S4ULs for Human Health Risk Assessment. Land Quality Press, Nottingham.

Reference. 19. Environmental Industries Commission (EIC), The Association of Geotechnical and Geoenvironmental Specialists (AGS) and Contaminated Land: Applications in Real Environments (CL:AIRE), Soil Generic Assessment Criteria for Human Health Risk Assessment, January 2010.

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Reference. 20. Cl:AIRE and CIEH. 2008. Guidance on Comparing Soil Contaminant Data with Critical Concentrations.

Reference. 21. European Food Safety Authority (EFSA). Scientific Opinion on the risks to public health related to the presence of nickel in food and drinking water. EFSA Journal 2015;13(2):4002

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Appendix C Zone 1 Soil Data

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BUROHAPPOLD ENGINEERING

Project: OVG Manchester
Project Number: 42841
Date: Nov-2019

Asbestos

Asbestos Screen	No. Samples	No. samples detected	No. samples ND	% of samples detect
	48	4	44	8.33
Asbestos Quantification	No. Quants	No. samples <0.001%	No. samples >0.001% <0.01%	No. samples >0.01%
	4	1	1	2

Human Health

Soil Organic Matter 1%
N/A = no screening criteria available

		Residential with uptake	Residential without Uptake	Commercial	No. samples exceeding: Residential with uptake	Residential without Uptake	Commercial	No Tests	No <LOD	Min	Max	Location of Maximum
Cyanide	mg/kg	4.6	760	16000	6			48	33	1.00	42.00	BH19/07A 2mbgl
Free Cyanide	mg/kg	4.6	760	16000				17	17			
Arsenic	mg/kg	37	40	640				48		3.00	28.00	BH1907C 0.5mbgl
Boron	mg/kg	290	11000	240000				48	4	1.10	3.80	BH19/09 1mbgl
Cadmium	mg/kg	26	149	410				48	1	0.50	2.50	BH1907C 0.5mbgl
Chromium	mg/kg	910	910	8600				48		10.00	120.00	BH19/05 0.5mbgl
Chromium VI	mg/kg	21	21	49				10				
Copper	mg/kg	2400	7100	68000				48		21.00	126.00	TP19/02 2mbgl
Lead	mg/kg	200	310	2330	2			48		36.00	238.00	BH19/05 0.5mbgl
Mercury (inorganic)	mg/kg	40	56	58				46	8	0.19	7.07	BH19/18 1mbgl
Nickel	mg/kg	130	180	980				48		9.00	40.00	TP19/12 1.6mbgl
Zinc	mg/kg	3700	40000	730000				48		52.00	307.00	BH1907C 0.5mbgl
TPH	mg/kg	490	490	38000	33	33		48		28.30	2420.00	TP19/01 1mbgl
Benzene	mg/kg	0.087	0.38	27				21	21			
Toluene	mg/kg	130	869	869				21	20	0.02	0.02	BH19/03 2mbgl
Ethyl Benzene	mg/kg	47	83	518				21	21			
m/p Xylenes	mg/kg	56	79	576				21	20	0.01	0.01	BH19/10 1mbgl
o Xylenes	mg/kg	60	88	478				21	21			
MTBE	mg/kg	N/A	N/A	N/A				21	21			
Naphthalene	mg/kg	2.3	2.3	190	10	10		48	1	0.12	10.30	BH19/02 1mbgl
Acenaphthylene	mg/kg	170	2900	83000				48	1	0.02	0.44	TP19/02 2mbgl
Acenaphthene	mg/kg	210	3000	84000				48		0.02	10.30	BH19/12 1mbgl
Fluorene	mg/kg	170	2800	63000				48		0.02	9.97	BH19/12 1mbgl
Phenanthrene	mg/kg	95	1300	22000				48		0.17	63.20	BH19/12 1mbgl
Anthracene	mg/kg	2400	31000	520000				48		0.04	14.40	BH19/12 1mbgl
Fluoranthene	mg/kg	280	1500	23000				48		0.24	47.00	BH19/12 1mbgl
Pyrene	mg/kg	620	3700	54000				48		0.22	38.80	BH19/12 1mbgl
Benzo[a]anthracene	mg/kg	7.2	11	170	8	2		48		0.12	17.40	BH19/12 1mbgl
Chrysene	mg/kg	15	30	350	1			48		0.12	18.20	BH19/12 1mbgl
Benzo[b]fluoranthene	mg/kg	2.6	3.9	44	33	23		48		0.12	14.20	BH19/12 1mbgl
Benzo[k]fluoranthene	mg/kg	77	110	1200				48	1	0.13	6.07	BH19/03 1mbgl
Benzo[a]pyrene	mg/kg	2.2	3.2	35	37	28		48		0.10	10.90	BH19/12 1mbgl
Indeno[123-cd]pyrene	mg/kg	27	45	500				48		0.08	6.63	TP19/08 0.2mbgl
Dibenzo[ah]anthracene	mg/kg	0.24	0.31	3.5	39	37		48	1	0.04	1.35	TP19/08 0.2mbgl
Benzo[ghi]perylene	mg/kg	320	360	3900				48		0.07	5.64	TP19/08 0.2mbgl
Total USEPA 16 PAHs	mg/kg	N/A	N/A	N/A				48		1.32	266.00	BH19/12 1mbgl
Aliphatic C5 - C6	mg/kg	42	42	3200				21	21			
Aliphatic C6 - C8	mg/kg	100	100	7800				21	20	0.01	0.01	BH19/10 1mbgl
Aliphatic C8 - C10	mg/kg	27	27	2000				21	14	1.00	6.00	TP19/06 2mbgl
Aliphatic C10 - C12	mg/kg	130	130	9700				21	2	1.00	5.00	BH19/20 2mbgl
Aliphatic C12 - C16	mg/kg	1100	1100	59000				21	1	3.00	18.00	TP19/04 1mbgl
Aliphatic C16 - C21	mg/kg	65000	65000	1600000				21	1	5.00	27.00	BH19/20 2mbgl
Aliphatic C21 - C35	mg/kg	65000	64000	1600000				21		12.00	217.00	BH19/20 2mbgl
Total Aliphatic	mg/kg	N/A	N/A	N/A				21		14.00	318.00	BH19/13 2mbgl
Aromatic C5 - C7	mg/kg	70	370	26000				21	21			
Aromatic C7 - 8	mg/kg	130	860	56000				21	20	0.02	0.02	BH19/03 2mbgl
Aromatic C8 - C10	mg/kg	34	47	3500				21		1.00	21.00	TP19/04 2mbgl
Aromatic C10 - 12	mg/kg	74	250	16000				21	1	3.00	17.00	TP19/04 1mbgl
Aromatic C12 - C16	mg/kg	140	1800	36000				21		2.00	69.00	BH19/10 1mbgl
Aromatic C16 - C21	mg/kg	260	1900	28000	1			21		4.00	418.00	BH19/10 1mbgl
Aromatic C21 - C35	mg/kg	1100	1900	28000				21		22.00	474.00	BH19/10 1mbgl
Total Aromatic	mg/kg	1100	1900	28000				21		30.00	975.00	BH19/10 1mbgl
Total Aliphatic and Aromatic	mg/kg	490	490	38000	12	12		21		44.00	1040.00	BH19/10 1mbgl

Appendix D Zone 2 Soil Data

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BUROHAPPOLD ENGINEERING

Project: OVG Manchester
Project Number: 42841
Date: Nov-2019

Asbestos

Asbestos Screen	No. Samples	No. samples detected	No. samples ND	% of samples detect
	36	4	32	11.11
Asbestos Quantification	No. Quants	No. samples <0.001%	No. samples >0.001% <0.01%	No. samples >0.01%
	4	2	2	0

Human Health

Soil Organic Matter 1%
N/A = no screening criteria available

		Residential with uptake	Residential without Uptake	Commercial	No. samples exceeding: Residential with uptake	Residential without Uptake	Commercial	No Tests	No <LOD	Min	Max	Location of Maximum
Cyanide	mg/kg	4.6	760	16000	10			36	17	1.00	102.00	BH19/14 3mbgl
Free Cyanide	mg/kg	4.6	760	16000	1			11	10	7.00	7.00	BH19/14 3mbgl
Arsenic	mg/kg	37	40	640	5	5		36		4.00	92.00	BH19/13 6mbgl
Boron	mg/kg	290	11000	240000				36	1	1.10	23.40	BH19/19 9mbgl
Cadmium	mg/kg	26	149	410				36	1	0.50	4.00	BH19/20 4mbgl
Chromium	mg/kg	910	910	8600				36		10.00	49.00	TP19/14 3mbgl
Chromium VI	mg/kg	21	21	49				5				
Copper	mg/kg	2400	7100	68000				36		18.00	786.00	BH19/13 6mbgl
Lead	mg/kg	200	310	2330	10	4		36		25.00	439.00	BH19/13 6mbgl
Mercury (inorganic)	mg/kg	40	56	58				36	12	0.21	1.01	BH19/13 6mbgl
Nickel	mg/kg	130	180	980				36		12.00	71.00	BH19/13 6mbgl
Zinc	mg/kg	3700	40000	730000				36		39.00	411.00	BH19/13 6mbgl
TPH	mg/kg	490	490	38000	20	20		34		88.00	3220.00	TP19/11 3mbgl
Benzene	mg/kg	0.087	0.38	27				25	24	0.03	0.03	BH19/23 5mbgl
Toluene	mg/kg	130	869	869				25	22	0.01	0.14	BH19/04 8mbgl
Ethyl Benzene	mg/kg	47	83	518				25	23	0.01	0.36	BH19/07C 5mbgl
m/p Xylenes	mg/kg	56	79	576				25	21	0.01	0.07	BH19/23 7mbgl
o Xylenes	mg/kg	60	88	478				25	23	0.01	0.10	BH19/07C 5mbgl
MTBE	mg/kg	N/A	N/A	N/A				25	25			
Naphthalene	mg/kg	2.3	2.3	190	5	5		36		0.09	8.22	BH19/23 7mbgl
Acenaphthylene	mg/kg	170	2900	83000				36	2	0.02	1.30	BH19/04 8mbgl
Acenaphthene	mg/kg	210	3000	84000				36		0.05	6.50	BH19/13 4mbgl
Fluorene	mg/kg	170	2800	63000				36		0.04	5.02	BH19/13 4mbgl
Phenanthrene	mg/kg	95	1300	22000				36		0.36	45.30	BH19/14 3mbgl
Anthracene	mg/kg	2400	31000	520000				36		0.05	9.66	BH19/13 4mbgl
Fluoranthene	mg/kg	280	1500	23000				36		0.17	36.90	BH19/13 4mbgl
Pyrene	mg/kg	620	3700	54000				36		0.18	36.20	BH19/14 3mbgl
Benzo[a]anthracene	mg/kg	7.2	11	170	4	2		36		0.11	16.90	BH19/13 4mbgl
Chrysene	mg/kg	15	30	350	3			36		0.13	15.90	BH19/13 4mbgl
Benzo[b]fluoranthene	mg/kg	2.6	3.9	44	16	11		36	1	0.24	14.40	BH19/13 4mbgl
Benzo[k]fluoranthene	mg/kg	77	110	1200				36		0.08	5.00	BH19/13 4mbgl
Benzo[a]pyrene	mg/kg	2.2	3.2	35	17	12		36		0.08	12.10	BH19/13 4mbgl
Indeno[123-cd]pyrene	mg/kg	27	45	500				36		0.05	5.89	BH19/13 4mbgl
Dibenzo[ah]anthracene	mg/kg	0.24	0.31	3.5	21	16		36	2	0.04	1.44	BH19/13 4mbgl
Benzo[ghi]perylene	mg/kg	320	360	3900				36		0.05	4.51	BH19/13 4mbgl
Total USEPA 16 PAHs	mg/kg	N/A	N/A	N/A				36		2.36	212.00	BH19/13 4mbgl
Aliphatic C5 - C6	mg/kg	42	42	3200				25	25			
Aliphatic C6 - C8	mg/kg	100	100	7800				25	25			
Aliphatic C8 - C10	mg/kg	27	27	2000				25	15	1.00	8.00	BH19/23 7mbgl
Aliphatic C10 - C12	mg/kg	130	130	9700				25	8	1.00	16.00	BH19/23 7mbgl
Aliphatic C12 - C16	mg/kg	1100	1100	59000				25	2	1.00	38.00	BH19/23 7mbgl
Aliphatic C16 - C21	mg/kg	65000	65000	1600000				25	2	2.00	39.00	TP19/10 3.5mbgl
Aliphatic C21 - C35	mg/kg	65000	64000	1600000				25		7.00	379.00	BH19/20 6mbgl
Total Aliphatic	mg/kg	N/A	N/A	N/A				25		10.00	445.00	BH19/20 6mbgl
Aromatic C5 - C7	mg/kg	70	370	26000				25	24	0.03	0.03	BH19/23 5mbgl
Aromatic C7 - 8	mg/kg	130	860	56000				25	22	0.01	0.14	BH19/04 8mbgl
Aromatic C8 - C10	mg/kg	34	47	3500	1	1		25		1.00	253.00	TP19/11 3mbgl
Aromatic C10 - 12	mg/kg	74	250	16000				25		2.00	57.00	BH19/23 7mbgl
Aromatic C12 - C16	mg/kg	140	1800	36000	2			25		5.00	267.00	TP19/11 3mbgl
Aromatic C16 - C21	mg/kg	260	1900	28000	3			25		6.00	855.00	TP19/11 3mbgl
Aromatic C21 - C35	mg/kg	1100	1900	28000	1			25		14.00	1790.00	TP19/11 3mbgl
Total Aromatic	mg/kg	1100	1900	28000	2	1		25		28.00	3190.00	TP19/11 3mbgl
Total Aliphatic and Aromatic	mg/kg	490	490	38000	15	15		25		39.00	3220.00	TP19/11 3mbgl

Appendix E Zone 3 Soil Data

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BUROHAPPOLD ENGINEERING

Project: OVG Manchester
Project Number: 42841
Date: Nov-2019

Asbestos

Asbestos Screen	No. Samples	No. samples detected	No. samples ND	% of samples detect
	17	0	17	0.00
Asbestos Quantification	No. Quants	No. samples <0.001%	No. samples >0.001% <0.01%	No. samples >0.01%
	0	0	0	0

Human Health

Soil Organic Matter 1%
N/A = no screening criteria available

		Residential with uptake	Residential without Uptake	Commercial	No. samples exceeding: Residential with uptake	Residential without Uptake	Commercial	No Tests	No <LOD	Min	Max	Location of Maximum
Cyanide	mg/kg	4.6	760	16000	2			17	13	2.00	15.00	TP19/03 3mbgl
Free Cyanide	mg/kg	4.6	760	16000				2	2			
Arsenic	mg/kg	37	40	640	3	3		17		2.00	73.00	BH19/12 3mbgl
Boron	mg/kg	290	11000	240000				17	5	1.20	6.90	BH19/15 7mbgl
Cadmium	mg/kg	26	149	410				17	3	0.60	2.00	BH19/12 3mbgl
Chromium	mg/kg	910	910	8600				17		13.00	87.00	BH19/06 5mbgl
Chromium VI	mg/kg	21	21	49				2				
Copper	mg/kg	2400	7100	68000				17		14.00	318.00	BH19/05 3mbgl
Lead	mg/kg	200	310	2330	2	2		17		11.00	509.00	BH19/05 3mbgl
Mercury (inorganic)	mg/kg	40	56	58				17	12	0.34	0.85	TP19/03 3mbgl
Nickel	mg/kg	130	180	980				17		13.00	75.00	BH19/12 3mbgl
Zinc	mg/kg	3700	40000	730000				17		23.00	194.00	BH19/06 5mbgl
TPH	mg/kg	490	490	38000	3	3		17	1	17.00	1260.00	TP19/03 3mbgl
Benzene	mg/kg	0.087	0.38	27				10	10			
Toluene	mg/kg	130	869	869				10	9	0.22	0.22	BH19/24 6mbgl
Ethyl Benzene	mg/kg	47	83	518				10	10			
m/p Xylenes	mg/kg	56	79	576				10	10			
o Xylenes	mg/kg	60	88	478				10	10			
MTBE	mg/kg	N/A	N/A	N/A				10	10			
Naphthalene	mg/kg	2.3	2.3	190	1	1		17	2	0.08	3.08	TP19/03 3mbgl
Acenaphthylene	mg/kg	170	2900	83000				17	9	0.01	0.19	TP19/03 3mbgl
Acenaphthene	mg/kg	210	3000	84000				17	2	0.01	2.61	TP19/03 3mbgl
Fluorene	mg/kg	170	2800	63000				17	2	0.01	2.21	TP19/03 3mbgl
Phenanthrene	mg/kg	95	1300	22000				17	1	0.12	13.40	TP19/03 3mbgl
Anthracene	mg/kg	2400	31000	520000				17	2	0.02	3.23	TP19/03 3mbgl
Fluoranthene	mg/kg	280	1500	23000				17	2	0.09	14.40	TP19/03 3mbgl
Pyrene	mg/kg	620	3700	54000				17	2	0.10	14.30	TP19/03 3mbgl
Benzo[a]anthracene	mg/kg	7.2	11	170				17	3	0.06	7.06	TP19/03 3mbgl
Chrysene	mg/kg	15	30	350				17	4	0.09	6.85	TP19/03 3mbgl
Benzo[b]fluoranthene	mg/kg	2.6	3.9	44	2	1		17	4	0.06	5.25	TP19/03 3mbgl
Benzo[k]fluoranthene	mg/kg	77	110	1200				17	8	0.07	1.68	TP19/03 3mbgl
Benzo[a]pyrene	mg/kg	2.2	3.2	35	2	1		17	4	0.05	4.45	TP19/03 3mbgl
Indeno[123-cd]pyrene	mg/kg	27	45	500				17	5	0.04	2.93	TP19/03 3mbgl
Dibenzo[ah]anthracene	mg/kg	0.24	0.31	3.5	4	2		17	9	0.05	0.62	TP19/03 3mbgl
Benzo[ghi]perylene	mg/kg	320	360	3900				17	8	0.08	2.54	TP19/03 3mbgl
Total USEPA 16 PAHs	mg/kg	N/A	N/A	N/A				17	1	0.33	84.80	TP19/03 3mbgl
Aliphatic C5 - C6	mg/kg	42	42	3200				10	10			
Aliphatic C6 - C8	mg/kg	100	100	7800				10	8	0.08	0.66	TP19/07 3.6mbgl
Aliphatic C8 - C10	mg/kg	27	27	2000				10	1	2.00	20.00	BH19/24 6mbgl
Aliphatic C10 - C12	mg/kg	130	130	9700				10	2	2.00	19.00	BH19/24 6mbgl
Aliphatic C12 - C16	mg/kg	1100	1100	59000				10	1	3.00	42.00	BH19/24 6mbgl
Aliphatic C16 - C21	mg/kg	65000	65000	1600000				10	1	4.00	45.00	BH19/24 6mbgl
Aliphatic C21 - C35	mg/kg	65000	64000	1600000				10	1	7.00	180.00	BH19/06 5mbgl
Total Aliphatic	mg/kg	N/A	N/A	N/A				10	1	19.00	225.00	TP19/03 3mbgl
Aromatic C5 - C7	mg/kg	70	370	26000				10	10			
Aromatic C7 - 8	mg/kg	130	860	56000				10	9	0.22	0.22	BH19/24 6mbgl
Aromatic C8 - C10	mg/kg	34	47	3500				10	1	3.00	25.00	BH19/24 6mbgl
Aromatic C10 - 12	mg/kg	74	250	16000				10	1	2.00	23.00	BH19/24 6mbgl
Aromatic C12 - C16	mg/kg	140	1800	36000				10	1	6.00	84.00	BH19/24 6mbgl
Aromatic C16 - C21	mg/kg	260	1900	28000				10	1	8.00	223.00	TP19/03 3mbgl
Aromatic C21 - C35	mg/kg	1100	1900	28000				10	1	26.00	718.00	TP19/03 3mbgl
Total Aromatic	mg/kg	1100	1900	28000				10	1	46.00	1040.00	TP19/03 3mbgl
Total Aliphatic and Aromatic	mg/kg	490	490	38000	3	3		10	1	65.00	1260.00	TP19/03 3mbgl

Appendix F Zone 4 Soil Data

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BUROHAPPOLD ENGINEERING

Project: OVG Manchester
Project Number: 42841
Date: Nov-2019

Asbestos

Asbestos Screen	No. Samples	No. samples detected	No. samples ND	% of samples detect
	7	0	7	0.00
Asbestos Quantification	No. Quants	No. samples <0.001%	No. samples >0.001% <0.01%	No. samples >0.01%
	0	0	0	0

Human Health

Soil Organic Matter 1%
N/A = no screening criteria available

No. samples exceeding

		Residential with uptake	Residential without Uptake	Commercial	Residential with uptake	Residential without Uptake	Commercial	No Tests	No <LOD	Min	Max	Location of Maximum
Cyanide	mg/kg	4.6	760	16000	1			7	5	2.00	9.00	BH19/09 10mbgl
Free Cyanide	mg/kg	4.6	760	16000								
Arsenic	mg/kg	37	40	640				7	2	1.00	6.00	BH19/04 13mbgl
Boron	mg/kg	290	11000	240000				7	6	1.30	1.30	BH19/04 13mbgl
Cadmium	mg/kg	26	149	410				7	3	0.50	0.80	BH19/21 9mbgl
Chromium	mg/kg	910	910	8600				7		6.00	27.00	BH19/16 6mbgl
Copper	mg/kg	2400	7100	68000				7		4.00	18.00	BH19/04 13mbgl
Lead	mg/kg	200	310	2330				7		8.00	16.00	BH19/04 13mbgl
Mercury (inorganic)	mg/kg	40	56	58				7	6	0.30	0.30	BH19/06 9mbgl
Nickel	mg/kg	130	180	980				7		9.00	27.00	BH19/04 13mbgl
Zinc	mg/kg	3700	40000	730000				7		22.00	95.00	BH19/04 13mbgl
TPH	mg/kg	490	490	38000				7	3	29.00	163.00	BH19/09 10mbgl
Benzene	mg/kg	0.087	0.38	27				1	1			
Toluene	mg/kg	130	869	869				1	1			
Ethyl Benzene	mg/kg	47	83	518				1	1			
m/p Xylenes	mg/kg	56	79	576				1	1			
o Xylenes	mg/kg	60	88	478				1	1			
MTBE	mg/kg	N/A	N/A	N/A				1	1			
Naphthalene	mg/kg	2.3	2.3	190				7	4	0.07	0.12	BH19/06 9mbgl
Acenaphthylene	mg/kg	170	2900	83000				7	6	0.01	0.01	BH19/10 10mbgl
Acenaphthene	mg/kg	210	3000	84000				7	4	0.10	0.18	BH19/09 10mbgl
Fluorene	mg/kg	170	2800	63000				7	4	0.08	0.11	BH19/06 9mbgl
Phenanthrene	mg/kg	95	1300	22000				7	4	0.54	0.72	BH19/10 10mbgl
Anthracene	mg/kg	2400	31000	520000				7	4	0.13	0.18	BH19/10 10mbgl
Fluoranthene	mg/kg	280	1500	23000				7	4	0.51	0.81	BH19/10 10mbgl
Pyrene	mg/kg	620	3700	54000				7	4	0.38	0.69	BH19/10 10mbgl
Benzo[a]anthracene	mg/kg	7.2	11	170				7	4	0.19	0.30	BH19/10 10mbgl
Chrysene	mg/kg	15	30	350				7	4	0.19	0.30	BH19/10 10mbgl
Benzo[b]fluoranthene	mg/kg	2.6	3.9	44				7	5	0.29	0.30	BH19/10 10mbgl
Benzo[k]fluoranthene	mg/kg	77	110	1200				7	4	0.09	0.12	BH19/06 9mbgl
Benzo[a]pyrene	mg/kg	2.2	3.2	35				7	4	0.09	0.24	BH19/10 10mbgl
Indeno[123-cd]pyrene	mg/kg	27	45	500				7	4	0.07	0.16	BH19/10 10mbgl
Dibenzo[ah]anthracene	mg/kg	0.24	0.31	3.5				7	7			
Benzo[ghi]perylene	mg/kg	320	360	3900				7	5	0.12	0.14	BH19/10 10mbgl
Total USEPA 16 PAHs	mg/kg	N/A	N/A	N/A				7	4	2.57	4.21	BH19/10 10mbgl
Aliphatic C5 - C6	mg/kg	42	42	3200				1	1			
Aliphatic C6 - C8	mg/kg	100	100	7800				1	1			
Aliphatic C8 - C10	mg/kg	27	27	2000				1	1			
Aliphatic C10 - C12	mg/kg	130	130	9700				1	1			
Aliphatic C12 - C16	mg/kg	1100	1100	59000				1	1			
Aliphatic C16 - C21	mg/kg	65000	65000	1600000				1	1			
Aliphatic C21 - C35	mg/kg	65000	64000	1600000				1		4.00	4.00	BH19/06 9mbgl
Total Aliphatic	mg/kg	N/A	N/A	N/A				1		4.00	4.00	BH19/06 9mbgl
Aromatic C5 - C7	mg/kg	70	370	26000				1	1			
Aromatic C7 - 8	mg/kg	130	860	56000				1	1			
Aromatic C8 - C10	mg/kg	34	47	3500				1	1			
Aromatic C10 - 12	mg/kg	74	250	16000				1		1.00	1.00	BH19/06 9mbgl
Aromatic C12 - C16	mg/kg	140	1800	36000				1		3.00	3.00	BH19/06 9mbgl
Aromatic C16 - C21	mg/kg	260	1900	28000				1		7.00	7.00	BH19/06 9mbgl
Aromatic C21 - C35	mg/kg	1100	1900	28000				1		15.00	15.00	BH19/06 9mbgl
Total Aromatic	mg/kg	1100	1900	28000				1		28.00	28.00	BH19/06 9mbgl
Total Aliphatic and Aromatic	mg/kg	490	490	38000				1		33.00	33.00	BH19/06 9mbgl

Appendix G Groundwater Data

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BUROHAPPOLD ENGINEERING

Project: OVG Manchester
Project Number: O042841
Date: 31st January 2020

	Threshold Values			Number of exccedences			Summary			
Determinand	Water Supply Regulations 2016 Potable	Environmental Quality Standards 2014 AA Fresh	World Health Organisation (WHO) Drinking Water Standards Potable	Water Supply Regulations 2016 Potable	Environmental Quality Standards 2014 AA Fresh	World Health Organisation (WHO) Drinking Water Standards Potable	Total tests	Total <LoD	Maximum concentration	Location of maximum concentration
pH	6.5 - 9.0						13	0	12.71	0
Conductivity	2500			0			7	0	2057	BH19/15
Dissolved Oxygen							7	0	5.1	BH19/15
Ammoniacal Nitrogen (NH3-N)							12	0	8350	BH19/15
Nitrate (NO3-)	50000		50000	1			12	6	134000	BH19/13
Cyanide	50	1	70	3	10	2	12	2	94	BH19/15
Mercury	1		6	0			12	12		
Arsenic	10	50	10	1	0		12	0	11	BH19/15
Barium							12	0	159	BH19/15
Beryllium							12	12		
Boron	1000		2400	0			12	0	476	BH19/15
Cadmium	5	0.08	3	0	0		12	12		
Chromium	50	4.7	50	0	1		12	7	7	BH19/05
Copper	2000	1	2000	0	7		12	3	4	BH19/15
Lead	10	1.2	10	0	1		12	10	7	BH19/15
Nickel	20	4	70	4	7		12	0	706	BH19/02A
Selenium	10		40	0			12	11	1	BH19/11
Vanadium							12	11	1	BH19/09
Zinc		10.9			6		12	1	756	BH19/02A
Naphthalene		2			0		9	9		
Acenaphthene							9	9		
Acenaphthylene							9	9		
Fluoranthene		0.0063			0		9	9		
Anthracene		0.1			0		9	9		
Phenanthrene							9	9		
Fluorene							9	9		
Chrysene							9	9		
Pyrene							9	9		
Benzo(a)anthracene							9	9		
Benzo(b)fluoranthene							9	9		
Benzo(k)fluoranthene							9	9		
Benzo(a)pyrene	0.01	0.00017	0.7	0	0		9	9		
Dibenzo(a,h)anthracene							9	9		
Benzo(g,h,i)perylene							9	9		
Indeno(1,2,3-cd)pyrene							9	9		
Methyl tertiary butyl ether (MTBE)							12	12		
Benzene	1	10	10	1	0		12	11	2	BH19/02A
Toluene		74	700		0		12	12		
Ethylbenzene			300				12	12		
m,p-Xylene							12	12		
o-Xylene							12	12		
Aliphatics >C5-C6							12	12		
Aliphatics >C6-C8							12	12		
Aliphatics >C8-C10							11	7	22	BH19/02A
Aliphatics >C10-C12							11	9	52	BH19/02A
Aliphatics >C12-C16							11	3	244	BH19/13
Aliphatics >C16-C21							11	2	228	BH19/13
Aliphatics >C21-C35							11	1	1407	BH19/15
Total Aliphatics >C12-C35							11	1	1942	BH19/15
Aromatics >EC5-EC7							12	10	2	BH19/02A
Aromatics >EC7-EC8							12	12		
Aromatics >EC8-EC10							11	4	38	BH19/13
Aromatics >EC10-EC12		0.4			8		11	3	94	BH19/13
Aromatics >EC12-EC16							11	1	570	BH19/13
Aromatics >EC16-EC21							11	1	219	BH19/13
Aromatics >EC21-EC35							11	5	227	BH19/13
Total Aromatics >EC12-EC35							11	1	1102	BH19/13
Total Aliphatics & Aromatics >C5-35	10			11			11	0	3044	BH19/15
Phenols		7.7			0		9	1	6	BH19/15
Tetrachloroethylene (PCE)	10	10	40	0	0					
Trichloroethylene (TCE)	10		40	0						
Dichloroethylene (DCE)			50							
1,2 - Dichloroethane (DCA)	3	10	30	0	0					
Vinyl choride (VC)	0.5		0.3	0			12	12		
Carbon tetrachloride / tetrachloromethane		12	4		0		12	12		

BUROHAPPOLD ENGINEERING

Project: OVG Manchester
Project Number: O042841
Date: 31st January 2020

	Threshold Values			Number of exccedences			Summary			
Determinand	Water Supply Regulations 2016 Potable	Environmental Quality Standards 2014 AA Fresh	World Health Organisation (WHO) Drinking Water Standards Potable	Water Supply Regulations 2016 Potable	Environmental Quality Standards 2014 AA Fresh	World Health Organisation (WHO) Drinking Water Standards Potable	Total tests	Total <LoD	Maximum concentration	Location of maximum concentration
pH	6.5 - 9.0						5	0	7.2	0
Conductivity	2500			0			4	0	1965	BH19/02A
Dissolved Oxygen							4	0	9.8	BH19/02A
Ammoniacal Nitrogen (NH3-N)							4	0	1600	BH19/07C
Nitrate (NO3-)	50000		50000	0		0	4	0	32200	BH19/02A
Cyanide	50	1	70	2	4	2	4	0	190	BH19/02A
Mercury	1		6	0		0	4	4		
Arsenic	10	50	10	2	0	2	4	0	26	BH19/07C
Barium							4	0	67	BH19/02A
Beryllium							4	4		
Boron	1000		2400	0		0	4	0	488	BH19/02A
Cadmium	5	0.08	3	0	0	0	4	4		
Chromium	50	4.7	50	0	2	0	4	2	10	BH19/07C
Copper	2000	1	2000	0	3	0	4	1	7	BH19/07C
Lead	10	1.2	10	0	0	0	4	4		
Nickel	20	4	70	1	2	0	4	0	21	BH19/02A
Selenium	10		40	0		0	4	2	7	BH19/07C
Vanadium							4	2	10	BH19/07C
Zinc		10.9			2		4	0	29	BH19/02A
Naphthalene		2			0		4	4		
Acenaphthene							4	4		
Acenaphthylene							4	4		
Fluoranthene		0.0063			0		4	4		
Anthracene		0.1			0		4	4		
Phenanthrene							4	4		
Fluorene							4	4		
Chrysene							4	4		
Pyrene							4	4		
Benzo(a)anthracene							4	4		
Benzo(b)fluoranthene							4	4		
Benzo(k)fluoranthene							4	4		
Benzo(a)pyrene	0.01	0.00017	0.7	0	0	0	4	4		
Dibenzo(a,h)anthracene							4	4		
Benzo(g,h,i)perylene							4	4		
Indeno(1,2,3-cd)pyrene							4	4		
Methyl tertiary butyl ether (MTBE)							4	4		
Benzene	1	10	10	0	0	0	4	3	1	BH19/02A
Toluene		74	700		0	0	4	4		
Ethylbenzene			300			0	4	4		
m,p-Xylene							4	4		
o-Xylene							4	4		
Aliphatics >C5-C6							4	4		
Aliphatics >C6-C8							4	4		
Aliphatics >C8-C10							4	3	132	BH19/02A
Aliphatics >C10-C12							4	2	275	BH19/02A
Aliphatics >C12-C16							4	1	55	BH19/02A
Aliphatics >C16-C21							4	1	55	BH19/02A
Aliphatics >C21-C35							4	1	490	BH19/02A
Total Aliphatics >C12-C35							4	1	925	BH19/02A
Aromatics >EC5-EC7							4	4		
Aromatics >EC7-EC8							4	4		
Aromatics >EC8-EC10							4	2	55	BH19/02A
Aromatics >EC10-EC12		0.4			3		4	1	132	BH19/02A
Aromatics >EC12-EC16							4	1	104	BH19/02A
Aromatics >EC16-EC21							4	1	45	BH19/02A
Aromatics >EC21-EC35							4	3	47	BH19/02A
Total Aromatics >EC12-EC35							4	1	384	BH19/02A
Total Aliphatics & Aromatics >C5-35	10			3			4	1	1308	BH19/02A
Phenols		7.7			0		4	0	6	BH19/07C
Tetrachloroethylene (PCE)	10	10	40	0	0					
Trichloroethylene (TCE)	10		40	0						
Dichloroethylene (DCE)			50							
1,2 - Dichloroethane (DCA)	3	10	30	0	0					
Vinyl choride (VC)	0.5		0.3	0		0	4	4		
Carbon tetrachloride / tetrachloromethane		12	4		0	0	4	4		

Appendix H Ground Gas Data

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Gas Risk Assessment Spreadsheet

Data entered by: F Gould

Site Name: OVG Manchester
Job Number: O042841

Methodology based on Wilson et al, 2006, Assessing Risks Posed by Hazardous Ground Gases to Buildings, CIRIA Report C665

Step 1: Summary of Monitoring Data

Table 1

Borehole	Maximum Flow rate (l/hr)	Minimum flow rate (inc Negative) (l/hr)	Peak Methane concentrations* (%)	Peak Carbon Dioxide concentrations* (%)	Minimum Oxygen concentrations (%)	Peak Carbon Monoxide concentrations (ppm)	Peak Hydrogen Sulphide concentrations (ppm)
BH19/06	0.10	-0.10	0.20	8.90	2.70	1.00	0.05
BH19/10	0.10	0.05	10.10	0.20	0.00	3.00	1.00
BH19/14	0.10	0.05	0.40	5.60	0.00	1.00	0.05
BH19/19	0.10	0.05	0.50	0.30	0.00	18.00	1.00
BH19/20	0.10	0.05	8.20	0.20	0.00	2.00	2.00
BH19/21	0.10	0.05	1.60	1.90	0.00	5.00	1.00
BH19/22	0.10	0.05	0.30	8.00	4.40	0.05	0.05
BH19/23	0.10	0.05	10.90	1.20	0.00	3.00	0.05
BH19/24	0.10	0.05	0.10	2.00	8.10	7.00	0.05
BH19/25	0.10	0.05	0.10	3.20	10.90	2.00	1.00
BH19/26	0.20	0.05	0.20	0.30	10.00	4.00	3.00
Worst Case Example+	0.2	-0.1	10.9	8.9	0	18	3

*Using 0.05% instead of 0% as this is half the minimum detection limit of the monitoring instrument used

+ Using highest concentration and highest flow rate

Situation A: All other development excluding low rise housing with gardens

Ref. 1 defines gas screening value (GSV) of gas = Chg/100 x q
Where: C_{hg} = hazardous gas concentrations (% v/v)
q = flow rate (litres/hour)

Table 2

Borehole	Peak CH4 GSV (l/hr)	CH4 GSV for peak gas concentration and flow rate (Table 8.5 - Ref. 1)	Peak CO2 GSV (l/hr)	CO2 GSV for peak gas concentration and flow rate (Table 8.5 - Ref. 1)
BH19/06	0.0002	1	0.0089	1
BH19/10	0.0101	1	0.0002	1
BH19/14	0.0004	1	0.0056	1
BH19/19	0.0005	1	0.0003	1
BH19/20	0.0082	1	0.0002	1
BH19/21	0.0016	1	0.0019	1
BH19/22	0.0003	1	0.0080	1
BH19/23	0.0109	1	0.0012	1
BH19/24	0.0001	1	0.0020	1
BH19/25	0.0001	1	0.0032	1
BH19/26	0.0004	1	0.0006	1
Worst Case Example+	0.0218	1	0.0178	1

Lower limit (l/hr)		Upper limit (l/hr)
0	1	0.07
0.07	2	0.7
0.7	3	3.5
3.5	4	15
15	5	70
70	6	

Based on Wilson *et al*, 1999, Reliability and Risk in Gas Protection Design

Situation B: Low rise housing with gardens

Ref. 1 defines gas screening value (GSV) of gas = Chg/100 x q
Where: C_{hg} = hazardous gas concentrations (% v/v)
q = flow rate (litres/hour)

Table 3

Borehole	CH4 Peak GSV (l/hr)	CH4 GSV for peak gas concentration and flow rate (Table 8.7 - Ref. 1)	CO2 Peak GSV (l/hr)	CO2 GSV for peak gas concentration and flow rate (Table 8.7 - Ref. 1)
BH19/06	0.00	Green	0.0089	Green
BH19/10	0.01	Green	0.0002	Green
BH19/14	0.00	Green	0.0056	Green
BH19/19	0.00	Green	0.0003	Green
BH19/20	0.01	Green	0.0002	Green
BH19/21	0.00	Green	0.0019	Green
BH19/22	0.00	Green	0.008	Green
BH19/23	0.01	Green	0.0012	Green
BH19/24	0.00	Green	0.002	Green
BH19/25	0.00	Green	0.0032	Green
BH19/26	0.00	Green	0.0006	Green
Worst Case Example+	0.02	Green	0.02	Green

CH4

Lower limit (l/hr)	Upper limit (l/hr)		Typical Maximum
0	Green	0.16	1
0.16	Amber 1	0.63	5
0.63	Amber 2	1.56	20
1.56	Red		

CO2

Lower limit (l/hr)	Upper limit (l/hr)		Typical Maximum
0	Green	0.78	5
0.78	Amber 1	1.56	10
1.56	Amber 2	3.13	30
3.13	Red		

Based on Boyle and Witherington, 2006, Guidance on Evaluation of Development Proposals on Sites Where Methane and Carbon Dioxide are Present, Incorporating 'Traffic Lights'

Ref. 1: Wilson et al, 2007, Assessing Risks Posed by Hazardous Ground Gases to Buildings, CIRIA Report C665

Appendix I HazWaste Online reports (Zones 1-3)

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Waste Classification Report

UCQUS-354VW-PRSMT

Job name

0042841 GL-2.0m

Description/Comments

GL - 2.0m BGL site wide

Project

Project Bradford

Site

Manchester

Related Documents

#	Name	Description
None		

Waste Stream Template

2019 Geoff

Classified by

Name:
Francesca Gould
Date:
26 Nov 2019 11:48 GMT
Telephone:
020 7927 9700

Company:
Buro Happold
17 Newman Street
London
W1T 1PD

Report

Created by: Francesca Gould
Created date: 26 Nov 2019 11:48 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	BH19/02	1	Non Hazardous		3
2	BH19/02A	0.5	Non Hazardous		5
3	BH19/03	1	Non Hazardous		7
4	BH19/03[2]	2	Non Hazardous		9
5	BH19/05	0.5	Non Hazardous		12
6	BH19/07A	1	Non Hazardous		14
7	BH19/07A[2]	2	Hazardous	HP 3(i), HP 7, HP 11	17
8	BH1907C	0.5	Non Hazardous		20
9	BH19/08	0.2	Non Hazardous		22
10	BH19/09	1	Non Hazardous		24
11	BH19/10	1	Hazardous	HP 3(i), HP 7, HP 11	26
12	BH19/11	1	Hazardous	HP 3(i), HP 7, HP 11	29

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
13	BH19/12	1	Non Hazardous		32
14	BH19/13	0.5	Non Hazardous		34
15	BH19/13[2]	2	Hazardous	HP 3(i), HP 7, HP 11	37
16	BH19/14	1	Non Hazardous		40
17	BH19/16	0.1	Hazardous	HP 3(i), HP 7, HP 8, HP 11	43
18	BH19/17	0.5	Non Hazardous		46
19	BH19/18	0.2	Non Hazardous		48
20	BH19/18[2]	1	Non Hazardous		50
21	BH19/19	2	Hazardous	HP 3(i), HP 7, HP 11	52
22	BH19/20	2	Non Hazardous		55
23	BH19/21	2	Non Hazardous		58
24	BH19/24	0.2	Hazardous	HP 3(i), HP 7, HP 11	61
25	BH19/24[2]	2	Non Hazardous		64
26	BH19/25	2	Non Hazardous		66
27	TP19/01	1	Hazardous	HP 3(i), HP 7, HP 11	69
28	TP19/01[2]	2	Non Hazardous		72
29	TP19/02	1	Non Hazardous		75
30	TP19/02[2]	2	Non Hazardous		78
31	TP19/03	0.7	Non Hazardous		80
32	TP19/04	1	Non Hazardous		82
33	TP19/04[2]	2	Non Hazardous		85
34	TP19/05	1	Non Hazardous		88
35	TP19/06	2	Non Hazardous		91
36	TP19/07	0.2	Hazardous	HP 3(i), HP 7, HP 11	94
37	TP19/07[2]	1	Non Hazardous		97
38	TP19/08	0.2	Hazardous	HP 3(i), HP 7, HP 11	99
39	TP19/08[2]	1	Non Hazardous		102
40	TP19/10	0.5	Non Hazardous		105
41	TP19/11	0.5	Hazardous	HP 3(i), HP 7, HP 11	108
42	TP19/11[2]	1	Non Hazardous		111
43	TP19/12	0.5	Non Hazardous		113
44	TP19/12[2]	1.2	Non Hazardous		115
45	TP19/12[3]	1.6	Non Hazardous		118
46	TP19/13	0.5	Non Hazardous		121
47	TP19/13[2]	2	Hazardous	HP 8	123
48	TP19/14	1	Non Hazardous		126

Appendices	Page
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Appendix B: Rationale for selection of metal species	130
Appendix C: Version	131

Classification of sample: BH19/02

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

Sample details

Sample Name:	LoW Code:
BH19/02	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% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15	mg/kg	1.32	19.805	mg/kg	0.00198 %		
2	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 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.4	mg/kg	1.142	1.599	mg/kg	0.00016 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				32	mg/kg	1.923	61.538	mg/kg	0.00615 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		82	mg/kg	1.126	92.323	mg/kg	0.00923 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	175	mg/kg	1.56	272.968	mg/kg	0.0175 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.22	mg/kg	1.353	0.298	mg/kg	0.0000298 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		23	mg/kg	2.976	68.454	mg/kg	0.00685 %		
9	zinc { zinc chromate }	024-007-00-3				198	mg/kg	2.774	549.281	mg/kg	0.0549 %		
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 }	006-007-00-5				2	mg/kg	1.884	3.768	mg/kg	0.000377 %		
11	TPH (C6 to C40) petroleum group			TPH		110	mg/kg		110	mg/kg	0.011 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		10.3	mg/kg		10.3	mg/kg	0.00103 %		
13	acenaphthylene		205-917-1	208-96-8		0.23	mg/kg		0.23	mg/kg	0.000023 %		
14	acenaphthene		201-469-6	83-32-9		3.05	mg/kg		3.05	mg/kg	0.000305 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		fluorene				2.69	mg/kg		2.69	mg/kg	0.000269 %		
			201-695-5	86-73-7									
16		phenanthrene				19.3	mg/kg		19.3	mg/kg	0.00193 %		
			201-581-5	85-01-8									
17		anthracene				4.28	mg/kg		4.28	mg/kg	0.000428 %		
			204-371-1	120-12-7									
18		fluoranthene				17.5	mg/kg		17.5	mg/kg	0.00175 %		
			205-912-4	206-44-0									
19		pyrene				15.8	mg/kg		15.8	mg/kg	0.00158 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				7.01	mg/kg		7.01	mg/kg	0.000701 %		
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				7.08	mg/kg		7.08	mg/kg	0.000708 %		
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				6.36	mg/kg		6.36	mg/kg	0.000636 %		
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				2.23	mg/kg		2.23	mg/kg	0.000223 %		
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				5.92	mg/kg		5.92	mg/kg	0.000592 %		
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				3.67	mg/kg		3.67	mg/kg	0.000367 %		
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				1.04	mg/kg		1.04	mg/kg	0.000104 %		
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				3.41	mg/kg		3.41	mg/kg	0.000341 %		
			205-883-8	191-24-2									
28		pH				11.38	pH		11.38	pH	11.38 pH		
				PH									
29		phenol				0.3	mg/kg		0.3	mg/kg	0.00003 %		
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.12 %		

Key

	User supplied data
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.011%)

Classification of sample: BH19/02A

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

Sample details

Sample Name:	LoW Code:	
BH19/02A	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% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	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	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2	mg/kg	3.22	6.44	mg/kg	0.000644 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.8	mg/kg	1.142	0.914	mg/kg	0.0000914 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				26	mg/kg	1.923	50	mg/kg	0.005 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		53	mg/kg	1.126	59.672	mg/kg	0.00597 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	108	mg/kg	1.56	168.46	mg/kg	0.0108 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.23	mg/kg	1.353	0.311	mg/kg	0.0000311 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		19	mg/kg	2.976	56.549	mg/kg	0.00565 %		
9	zinc { zinc chromate }	024-007-00-3				111	mg/kg	2.774	307.93	mg/kg	0.0308 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		**<LOD**
11	TPH (C6 to C40) petroleum group			TPH		28.3	mg/kg		28.3	mg/kg	0.00283 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		0.64	mg/kg		0.64	mg/kg	0.000064 %		
13	acenaphthylene		205-917-1	208-96-8		0.06	mg/kg		0.06	mg/kg	0.000006 %		
14	acenaphthene		201-469-6	83-32-9		0.6	mg/kg		0.6	mg/kg	0.00006 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		fluorene				0.46	mg/kg		0.46	mg/kg	0.000046 %		
			201-695-5	86-73-7									
16		phenanthrene				3.8	mg/kg		3.8	mg/kg	0.00038 %		
			201-581-5	85-01-8									
17		anthracene				0.86	mg/kg		0.86	mg/kg	0.000086 %		
			204-371-1	120-12-7									
18		fluoranthene				4.82	mg/kg		4.82	mg/kg	0.000482 %		
			205-912-4	206-44-0									
19		pyrene				4.6	mg/kg		4.6	mg/kg	0.00046 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				2.23	mg/kg		2.23	mg/kg	0.000223 %		
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				2.36	mg/kg		2.36	mg/kg	0.000236 %		
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				2.22	mg/kg		2.22	mg/kg	0.000222 %		
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				0.8	mg/kg		0.8	mg/kg	0.00008 %		
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				2	mg/kg		2	mg/kg	0.0002 %		
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				1.31	mg/kg		1.31	mg/kg	0.000131 %		
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.34	mg/kg		0.34	mg/kg	0.000034 %		
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				1.16	mg/kg		1.16	mg/kg	0.000116 %		
			205-883-8	191-24-2									
28		pH				11.06	pH		11.06	pH	11.06 pH		
				PH									
29		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0662 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00283%)

Classification of sample: BH19/03

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

Sample details

Sample Name:	LoW Code:
BH19/03	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% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		17	mg/kg	1.32	22.446	mg/kg	0.00224 %		
2	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 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.9	mg/kg	1.142	1.028	mg/kg	0.000103 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				26	mg/kg	1.923	50	mg/kg	0.005 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		59	mg/kg	1.126	66.427	mg/kg	0.00664 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	137	mg/kg	1.56	213.695	mg/kg	0.0137 %		
7	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		19	mg/kg	2.976	56.549	mg/kg	0.00565 %		
8	zinc { zinc chromate }	024-007-00-3				122	mg/kg	2.774	338.446	mg/kg	0.0338 %		
9	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				20	mg/kg	1.884	37.68	mg/kg	0.00377 %		
10	TPH (C6 to C40) petroleum group			TPH		910	mg/kg		910	mg/kg	0.091 %		
11	naphthalene	601-052-00-2	202-049-5	91-20-3		1.65	mg/kg		1.65	mg/kg	0.000165 %		
12	acenaphthylene		205-917-1	208-96-8		0.26	mg/kg		0.26	mg/kg	0.000026 %		
13	acenaphthene		201-469-6	83-32-9		1.72	mg/kg		1.72	mg/kg	0.000172 %		
14	fluorene		201-695-5	86-73-7		1.55	mg/kg		1.55	mg/kg	0.000155 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		phenanthrene											
			201-581-5	85-01-8		13.2	mg/kg		13.2	mg/kg	0.00132 %		
16		anthracene											
			204-371-1	120-12-7		2.86	mg/kg		2.86	mg/kg	0.000286 %		
17		fluoranthene											
			205-912-4	206-44-0		12.6	mg/kg		12.6	mg/kg	0.00126 %		
18		pyrene											
			204-927-3	129-00-0		13	mg/kg		13	mg/kg	0.0013 %		
19		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		7.15	mg/kg		7.15	mg/kg	0.000715 %		
20		chrysene											
		601-048-00-0	205-923-4	218-01-9		6.87	mg/kg		6.87	mg/kg	0.000687 %		
21		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		1.95	mg/kg		1.95	mg/kg	0.000195 %		
22		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		6.07	mg/kg		6.07	mg/kg	0.000607 %		
23		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		5.17	mg/kg		5.17	mg/kg	0.000517 %		
24		indeno[123-cd]pyrene											
			205-893-2	193-39-5		3.78	mg/kg		3.78	mg/kg	0.000378 %		
25		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.72	mg/kg		0.72	mg/kg	0.000072 %		
26		benzo[ghi]perylene											
			205-883-8	191-24-2		3.36	mg/kg		3.36	mg/kg	0.000336 %		
27		pH											
				PH		10.19	pH		10.19	pH	10.19 pH		
28		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
29		1,1-dichloroethane and 1,2-dichloroethane (combined)											
			203-458-1, 200-863-5	107-06-2, 75-34-3		<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
30		carbon tetrachloride; tetrachloromethane											
		602-008-00-5	200-262-8	56-23-5		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
31		trichloroethylene; trichloroethene											
		602-027-00-9	201-167-4	79-01-6		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
32		vinyl chloride; chloroethylene											
		602-023-00-7	200-831-0	75-01-4		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
										Total:	0.171 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.091%)

Classification of sample: BH19/03[2]

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

Sample details

Sample Name:
BH19/03[2]
Sample Depth:
2 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15	mg/kg	1.32	19.805	mg/kg	0.00198 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		1.8	mg/kg	3.22	5.796	mg/kg	0.00058 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.1	mg/kg	1.142	1.257	mg/kg	0.000126 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				32	mg/kg	1.923	61.538	mg/kg	0.00615 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		53	mg/kg	1.126	59.672	mg/kg	0.00597 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	171	mg/kg	1.56	266.728	mg/kg	0.0171 %		
7	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		22	mg/kg	2.976	65.478	mg/kg	0.00655 %		
8	zinc { zinc chromate }	024-007-00-3				125	mg/kg	2.774	346.768	mg/kg	0.0347 %		
9	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				13	mg/kg	1.884	24.492	mg/kg	0.00245 %		
10	benzene	601-020-00-8	200-753-7	71-43-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
11	toluene	601-021-00-3	203-625-9	108-88-3		0.02	mg/kg		0.02	mg/kg	0.000002 %		
12	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<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	TPH (C6 to C40) petroleum group			TPH		733	mg/kg		733	mg/kg	0.0733 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		naphthalene				2.15	mg/kg		2.15	mg/kg	0.000215 %		
		601-052-00-2	202-049-5	91-20-3									
16	●	acenaphthylene				0.32	mg/kg		0.32	mg/kg	0.000032 %		
			205-917-1	208-96-8									
17	●	acenaphthene				1.37	mg/kg		1.37	mg/kg	0.000137 %		
			201-469-6	83-32-9									
18	●	fluorene				1.35	mg/kg		1.35	mg/kg	0.000135 %		
			201-695-5	86-73-7									
19	●	phenanthrene				11.8	mg/kg		11.8	mg/kg	0.00118 %		
			201-581-5	85-01-8									
20	●	anthracene				2.68	mg/kg		2.68	mg/kg	0.000268 %		
			204-371-1	120-12-7									
21	●	fluoranthene				12.1	mg/kg		12.1	mg/kg	0.00121 %		
			205-912-4	206-44-0									
22	●	pyrene				12.7	mg/kg		12.7	mg/kg	0.00127 %		
			204-927-3	129-00-0									
23		benzo[a]anthracene				7.14	mg/kg		7.14	mg/kg	0.000714 %		
		601-033-00-9	200-280-6	56-55-3									
24		chrysene				6.72	mg/kg		6.72	mg/kg	0.000672 %		
		601-048-00-0	205-923-4	218-01-9									
25		benzo[b]fluoranthene				1.77	mg/kg		1.77	mg/kg	0.000177 %		
		601-034-00-4	205-911-9	205-99-2									
26		benzo[k]fluoranthene				5.93	mg/kg		5.93	mg/kg	0.000593 %		
		601-036-00-5	205-916-6	207-08-9									
27		benzo[a]pyrene; benzo[def]chrysene				4.98	mg/kg		4.98	mg/kg	0.000498 %		
		601-032-00-3	200-028-5	50-32-8									
28	●	indeno[123-cd]pyrene				3.75	mg/kg		3.75	mg/kg	0.000375 %		
			205-893-2	193-39-5									
29		dibenz[a,h]anthracene				0.73	mg/kg		0.73	mg/kg	0.000073 %		
		601-041-00-2	200-181-8	53-70-3									
30	●	benzo[ghi]perylene				3.32	mg/kg		3.32	mg/kg	0.000332 %		
			205-883-8	191-24-2									
31	●	pH				10.35	pH		10.35	pH	10.35 pH		
				PH									
32		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
33	●	1,1-dichloroethane and 1,2-dichloroethane (combined)				<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
			203-458-1, 200-863-5	107-06-2, 75-34-3									
34		carbon tetrachloride; tetrachloromethane				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		602-008-00-5	200-262-8	56-23-5									
35		trichloroethylene; trichloroethene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		602-027-00-9	201-167-4	79-01-6									
36		vinyl chloride; chloroethylene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		602-023-00-7	200-831-0	75-01-4									
										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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

toluene: (conc.: 2.0e-06%)

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0733%)

Classification of sample: BH19/05

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

Sample details

Sample Name:
BH19/05
Sample Depth:
0.5 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No 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	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							
3	cadmium { cadmium oxide }		0.9 mg/kg	1.142	1.028 mg/kg	0.000103 %		
	048-002-00-0 / 215-146-2 / 1306-19-0							
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }		120 mg/kg	1.923	230.769 mg/kg	0.0231 %		
	024-017-00-8							
5	copper { dicopper oxide; copper (I) oxide }		57 mg/kg	1.126	64.176 mg/kg	0.00642 %		
	029-002-00-X / 215-270-7 / 1317-39-1							
6	lead { lead chromate }	1	238 mg/kg	1.56	371.236 mg/kg	0.0238 %		
	082-004-00-2 / 231-846-0 / 7758-97-6							
7	mercury { mercury dichloride }		<0.17 mg/kg	1.353	<0.23 mg/kg	<0.000023 %		<LOD
	080-010-00-X / 231-299-8 / 7487-94-7							
8	nickel { nickel chromate }		26 mg/kg	2.976	77.383 mg/kg	0.00774 %		
	028-035-00-7 / 238-766-5 / 14721-18-7							
9	zinc { zinc chromate }		92 mg/kg	2.774	255.221 mg/kg	0.0255 %		
	024-007-00-3							
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 }		2 mg/kg	1.884	3.768 mg/kg	0.000377 %		
	006-007-00-5							
11	TPH (C6 to C40) petroleum group		469 mg/kg		469 mg/kg	0.0469 %		
	TPH							
12	naphthalene		0.31 mg/kg		0.31 mg/kg	0.000031 %		
	601-052-00-2 / 202-049-5 / 91-20-3							
13	acenaphthylene		0.07 mg/kg		0.07 mg/kg	0.000007 %		
	205-917-1 / 208-96-8							
14	acenaphthene		0.61 mg/kg		0.61 mg/kg	0.000061 %		
	201-469-6 / 83-32-9							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		fluorene				0.42	mg/kg		0.42	mg/kg	0.000042 %		
			201-695-5	86-73-7									
16		phenanthrene				4.8	mg/kg		4.8	mg/kg	0.00048 %		
			201-581-5	85-01-8									
17		anthracene				0.97	mg/kg		0.97	mg/kg	0.000097 %		
			204-371-1	120-12-7									
18		fluoranthene				8.06	mg/kg		8.06	mg/kg	0.000806 %		
			205-912-4	206-44-0									
19		pyrene				8.16	mg/kg		8.16	mg/kg	0.000816 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				3.93	mg/kg		3.93	mg/kg	0.000393 %		
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				4.24	mg/kg		4.24	mg/kg	0.000424 %		
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				5.27	mg/kg		5.27	mg/kg	0.000527 %		
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				1.64	mg/kg		1.64	mg/kg	0.000164 %		
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				4.02	mg/kg		4.02	mg/kg	0.000402 %		
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				2.01	mg/kg		2.01	mg/kg	0.000201 %		
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.54	mg/kg		0.54	mg/kg	0.000054 %		
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				1.56	mg/kg		1.56	mg/kg	0.000156 %		
			205-883-8	191-24-2									
28		pH				8.52	pH		8.52	pH	8.52 pH		
				PH									
29		phenol				0.4	mg/kg		0.4	mg/kg	0.00004 %		
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.141 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0469%)

Classification of sample: BH19/07A

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

Sample details

Sample Name:
BH19/07A
Sample Depth:
1 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8	mg/kg	1.32	10.563	mg/kg	0.00106 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		1.4	mg/kg	3.22	4.508	mg/kg	0.000451 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.8	mg/kg	1.142	0.914	mg/kg	0.0000914 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				33	mg/kg	1.923	63.462	mg/kg	0.00635 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		42	mg/kg	1.126	47.287	mg/kg	0.00473 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	89	mg/kg	1.56	138.824	mg/kg	0.0089 %		
7	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 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		17	mg/kg	2.976	50.597	mg/kg	0.00506 %		
9	zinc { zinc chromate }	024-007-00-3				97	mg/kg	2.774	269.092	mg/kg	0.0269 %		
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 }	006-007-00-5				24	mg/kg	1.884	45.216	mg/kg	0.00452 %		
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<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									
15		TPH (C6 to C40) petroleum group		TPH		867	mg/kg		867	mg/kg	0.0867 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		3.83	mg/kg		3.83	mg/kg	0.000383 %		
17		acenaphthylene											
			205-917-1	208-96-8		0.29	mg/kg		0.29	mg/kg	0.000029 %		
18		acenaphthene											
			201-469-6	83-32-9		2.77	mg/kg		2.77	mg/kg	0.000277 %		
19		fluorene											
			201-695-5	86-73-7		2.42	mg/kg		2.42	mg/kg	0.000242 %		
20		phenanthrene											
			201-581-5	85-01-8		15.1	mg/kg		15.1	mg/kg	0.00151 %		
21		anthracene											
			204-371-1	120-12-7		3.24	mg/kg		3.24	mg/kg	0.000324 %		
22		fluoranthene											
			205-912-4	206-44-0		13.7	mg/kg		13.7	mg/kg	0.00137 %		
23		pyrene											
			204-927-3	129-00-0		14.2	mg/kg		14.2	mg/kg	0.00142 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		6.45	mg/kg		6.45	mg/kg	0.000645 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		6.64	mg/kg		6.64	mg/kg	0.000664 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		6.06	mg/kg		6.06	mg/kg	0.000606 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		1.98	mg/kg		1.98	mg/kg	0.000198 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		5.17	mg/kg		5.17	mg/kg	0.000517 %		
29		indeno[123-cd]pyrene											
			205-893-2	193-39-5		2.9	mg/kg		2.9	mg/kg	0.00029 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.7	mg/kg		0.7	mg/kg	0.00007 %		
31		benzo[ghi]perylene											
			205-883-8	191-24-2		2.91	mg/kg		2.91	mg/kg	0.000291 %		
32		pH											
				PH		10.1	pH		10.1	pH	10.1 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
										Total:	0.154 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0867%)

Classification of sample: BH19/07A[2]

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

Sample details

Sample Name:	LoW Code:	
BH19/07A[2]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:		
2 m	Entry:	17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to hazardous because Elevated TPHs over 1000mg/kg. Free product recorded in occasional samples during post-investgation monitoring. Loss on ignition tests carried out within top 2m across the site. Of those samples, 50% recorded elevated loss of ignition above the hazardous waste threshold.

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.112%)

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

Hazard Statements hit:

Carc. 1B; 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:

TPH (C6 to C40) petroleum group: (conc.: 0.112%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.112%)

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		19	mg/kg	1.32	25.086	mg/kg	0.00251 %		
2	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 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.1	mg/kg	1.142	1.257	mg/kg	0.000126 %		

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				29	mg/kg	1.923	55.769	mg/kg	0.00558 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		98	mg/kg	1.126	110.337	mg/kg	0.011 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	169	mg/kg	1.56	263.609	mg/kg	0.0169 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17	mg/kg	1.353	<0.23	mg/kg	<0.000023 %		<LOD
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		24	mg/kg	2.976	71.43	mg/kg	0.00714 %		
9	zinc { zinc chromate }	024-007-00-3				149	mg/kg	2.774	413.348	mg/kg	0.0413 %		
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 }	006-007-00-5				42	mg/kg	1.884	79.128	mg/kg	0.00791 %		
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
15	TPH (C6 to C40) petroleum group			TPH		1120	mg/kg		1120	mg/kg	0.112 %		
16	naphthalene	601-052-00-2	202-049-5	91-20-3		3.07	mg/kg		3.07	mg/kg	0.000307 %		
17	acenaphthylene		205-917-1	208-96-8		0.33	mg/kg		0.33	mg/kg	0.000033 %		
18	acenaphthene		201-469-6	83-32-9		2.45	mg/kg		2.45	mg/kg	0.000245 %		
19	fluorene		201-695-5	86-73-7		2.21	mg/kg		2.21	mg/kg	0.000221 %		
20	phenanthrene		201-581-5	85-01-8		14.8	mg/kg		14.8	mg/kg	0.00148 %		
21	anthracene		204-371-1	120-12-7		3.34	mg/kg		3.34	mg/kg	0.000334 %		
22	fluoranthene		205-912-4	206-44-0		15	mg/kg		15	mg/kg	0.0015 %		
23	pyrene		204-927-3	129-00-0		15.6	mg/kg		15.6	mg/kg	0.00156 %		
24	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		7.34	mg/kg		7.34	mg/kg	0.000734 %		
25	chrysene	601-048-00-0	205-923-4	218-01-9		7.35	mg/kg		7.35	mg/kg	0.000735 %		
26	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		6.71	mg/kg		6.71	mg/kg	0.000671 %		
27	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		2.46	mg/kg		2.46	mg/kg	0.000246 %		
28	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		5.97	mg/kg		5.97	mg/kg	0.000597 %		
29	indeno[123-cd]pyrene		205-893-2	193-39-5		3.43	mg/kg		3.43	mg/kg	0.000343 %		
30	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		0.82	mg/kg		0.82	mg/kg	0.000082 %		

#		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[ghi]perylene				3.48	mg/kg		3.48	mg/kg	0.000348 %		
			205-883-8	191-24-2									
32		pH				10.5	pH		10.5	pH	10.5 pH		
				PH									
33		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.215 %		

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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: BH1907C

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

Sample details

Sample Name:
BH1907C
Sample Depth:
0.5 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	asbestos	650-013-00-6	- - - - - - -	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5		0.003 mg/kg		0.003 mg/kg	0.0000003 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		28 mg/kg	1.32	36.969 mg/kg	0.0037 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2.1 mg/kg	3.22	6.762 mg/kg	0.000676 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.5 mg/kg	1.142	2.856 mg/kg	0.000286 %		
5	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				27 mg/kg	1.923	51.923 mg/kg	0.00519 %		
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		101 mg/kg	1.126	113.715 mg/kg	0.0114 %		
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	186 mg/kg	1.56	290.126 mg/kg	0.0186 %		
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17 mg/kg	1.353	<0.23 mg/kg	<0.000023 %		<LOD
9	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		30 mg/kg	2.976	89.288 mg/kg	0.00893 %		
10	zinc { zinc chromate }	024-007-00-3				307 mg/kg	2.774	851.663 mg/kg	0.0852 %		
11	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				20 mg/kg	1.884	37.68 mg/kg	0.00377 %		
12	TPH (C6 to C40) petroleum group			TPH		945 mg/kg		945 mg/kg	0.0945 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
13		naphthalene				5.15	mg/kg		5.15	mg/kg	0.000515 %		
		601-052-00-2	202-049-5	91-20-3									
14		acenaphthylene				0.3	mg/kg		0.3	mg/kg	0.00003 %		
			205-917-1	208-96-8									
15		acenaphthene				3.41	mg/kg		3.41	mg/kg	0.000341 %		
			201-469-6	83-32-9									
16		fluorene				3.16	mg/kg		3.16	mg/kg	0.000316 %		
			201-695-5	86-73-7									
17		phenanthrene				19.7	mg/kg		19.7	mg/kg	0.00197 %		
			201-581-5	85-01-8									
18		anthracene				4.38	mg/kg		4.38	mg/kg	0.000438 %		
			204-371-1	120-12-7									
19		fluoranthene				18.9	mg/kg		18.9	mg/kg	0.00189 %		
			205-912-4	206-44-0									
20		pyrene				18.7	mg/kg		18.7	mg/kg	0.00187 %		
			204-927-3	129-00-0									
21		benzo[a]anthracene				9.12	mg/kg		9.12	mg/kg	0.000912 %		
		601-033-00-9	200-280-6	56-55-3									
22		chrysene				8.36	mg/kg		8.36	mg/kg	0.000836 %		
		601-048-00-0	205-923-4	218-01-9									
23		benzo[b]fluoranthene				6.78	mg/kg		6.78	mg/kg	0.000678 %		
		601-034-00-4	205-911-9	205-99-2									
24		benzo[k]fluoranthene				2.38	mg/kg		2.38	mg/kg	0.000238 %		
		601-036-00-5	205-916-6	207-08-9									
25		benzo[a]pyrene; benzo[def]chrysene				6.22	mg/kg		6.22	mg/kg	0.000622 %		
		601-032-00-3	200-028-5	50-32-8									
26		indeno[123-cd]pyrene				3.29	mg/kg		3.29	mg/kg	0.000329 %		
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				0.68	mg/kg		0.68	mg/kg	0.000068 %		
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				2.95	mg/kg		2.95	mg/kg	0.000295 %		
			205-883-8	191-24-2									
29		pH				11.16	pH		11.16	pH	11.16 pH		
				PH									
30		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.244 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0945%)

Classification of sample: BH19/08

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

Sample details

Sample Name:
BH19/08
Sample Depth:
0.2 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No 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	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							
3	cadmium { cadmium oxide }		0.8 mg/kg	1.142	0.914 mg/kg	0.0000914 %		
	048-002-00-0 / 215-146-2 / 1306-19-0							
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }		23 mg/kg	1.923	44.231 mg/kg	0.00442 %		
	024-017-00-8							
5	copper { dicopper oxide; copper (I) oxide }		55 mg/kg	1.126	61.924 mg/kg	0.00619 %		
	029-002-00-X / 215-270-7 / 1317-39-1							
6	lead { lead chromate }	1	113 mg/kg	1.56	176.259 mg/kg	0.0113 %		
	082-004-00-2 / 231-846-0 / 7758-97-6							
7	mercury { mercury dichloride }		0.58 mg/kg	1.353	0.785 mg/kg	0.0000785 %		
	080-010-00-X / 231-299-8 / 7487-94-7							
8	nickel { nickel chromate }		21 mg/kg	2.976	62.502 mg/kg	0.00625 %		
	028-035-00-7 / 238-766-5 / 14721-18-7							
9	zinc { zinc chromate }		111 mg/kg	2.774	307.93 mg/kg	0.0308 %		
	024-007-00-3							
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 }		<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5							
11	TPH (C6 to C40) petroleum group		680 mg/kg		680 mg/kg	0.068 %		
	TPH							
12	naphthalene		1.25 mg/kg		1.25 mg/kg	0.000125 %		
	601-052-00-2 / 202-049-5 / 91-20-3							
13	acenaphthylene		0.07 mg/kg		0.07 mg/kg	0.000007 %		
	205-917-1 / 208-96-8							
14	acenaphthene		1.19 mg/kg		1.19 mg/kg	0.000119 %		
	201-469-6 / 83-32-9							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		fluorene				0.84	mg/kg		0.84	mg/kg	0.000084 %		
			201-695-5	86-73-7									
16		phenanthrene				5.47	mg/kg		5.47	mg/kg	0.000547 %		
			201-581-5	85-01-8									
17		anthracene				1.44	mg/kg		1.44	mg/kg	0.000144 %		
			204-371-1	120-12-7									
18		fluoranthene				6.04	mg/kg		6.04	mg/kg	0.000604 %		
			205-912-4	206-44-0									
19		pyrene				6.07	mg/kg		6.07	mg/kg	0.000607 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				3.09	mg/kg		3.09	mg/kg	0.000309 %		
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				3.07	mg/kg		3.07	mg/kg	0.000307 %		
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				2.72	mg/kg		2.72	mg/kg	0.000272 %		
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				0.78	mg/kg		0.78	mg/kg	0.000078 %		
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				2.22	mg/kg		2.22	mg/kg	0.000222 %		
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				1.9	mg/kg		1.9	mg/kg	0.00019 %		
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.33	mg/kg		0.33	mg/kg	0.000033 %		
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				1.6	mg/kg		1.6	mg/kg	0.00016 %		
			205-883-8	191-24-2									
28		pH				10.63	pH		10.63	pH	10.63 pH		
				PH									
29		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.133 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.068%)

Classification of sample: BH19/09

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

Sample details

Sample Name:
BH19/09
Sample Depth:
1 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	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	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		3.8	mg/kg	3.22	12.236	mg/kg	0.00122 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.5	mg/kg	1.142	1.713	mg/kg	0.000171 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				46	mg/kg	1.923	88.462	mg/kg	0.00885 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		62	mg/kg	1.126	69.805	mg/kg	0.00698 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	135	mg/kg	1.56	210.575	mg/kg	0.0135 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.54	mg/kg	1.353	0.731	mg/kg	0.0000731 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		26	mg/kg	2.976	77.383	mg/kg	0.00774 %		
9	zinc { zinc chromate }	024-007-00-3				130	mg/kg	2.774	360.639	mg/kg	0.0361 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	TPH (C6 to C40) petroleum group			TPH		801	mg/kg		801	mg/kg	0.0801 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		1.8	mg/kg		1.8	mg/kg	0.00018 %		
13	acenaphthylene		205-917-1	208-96-8		0.17	mg/kg		0.17	mg/kg	0.000017 %		
14	acenaphthene		201-469-6	83-32-9		2.18	mg/kg		2.18	mg/kg	0.000218 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15	●	fluorene				1.91	mg/kg		1.91	mg/kg	0.000191 %		
			201-695-5	86-73-7									
16	●	phenanthrene				16.1	mg/kg		16.1	mg/kg	0.00161 %		
			201-581-5	85-01-8									
17	●	anthracene				4.23	mg/kg		4.23	mg/kg	0.000423 %		
			204-371-1	120-12-7									
18	●	fluoranthene				17.3	mg/kg		17.3	mg/kg	0.00173 %		
			205-912-4	206-44-0									
19	●	pyrene				16.1	mg/kg		16.1	mg/kg	0.00161 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				7.4	mg/kg		7.4	mg/kg	0.00074 %		
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				6.88	mg/kg		6.88	mg/kg	0.000688 %		
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				7.06	mg/kg		7.06	mg/kg	0.000706 %		
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				2.29	mg/kg		2.29	mg/kg	0.000229 %		
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				5.69	mg/kg		5.69	mg/kg	0.000569 %		
		601-032-00-3	200-028-5	50-32-8									
25	●	indeno[123-cd]pyrene				2.96	mg/kg		2.96	mg/kg	0.000296 %		
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.76	mg/kg		0.76	mg/kg	0.000076 %		
		601-041-00-2	200-181-8	53-70-3									
27	●	benzo[ghi]perylene				2.4	mg/kg		2.4	mg/kg	0.00024 %		
			205-883-8	191-24-2									
28	●	pH				10.25	pH		10.25	pH	10.25 pH		
				PH									
29		phenol				0.4	mg/kg		0.4	mg/kg	0.00004 %		
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.166 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0801%)

Classification of sample: BH19/10

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

Sample details

Sample Name:	LoW Code:	
BH19/10	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:		
1 m	Entry:	17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to hazardous because Elevated TPHs over 1000mg/kg. Free product recorded in occasional samples during post-investigation monitoring. Loss on ignition tests carried out within top 2m across the site. Of those samples, 50% recorded elevated loss of ignition above the hazardous waste threshold.

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.104%)

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

Hazard Statements hit:

Carc. 1B; 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:

TPH (C6 to C40) petroleum group: (conc.: 0.104%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.104%)

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	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	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		3.3	mg/kg	3.22	10.626	mg/kg	0.00106 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1	mg/kg	1.142	1.142	mg/kg	0.000114 %		

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				31	mg/kg	1.923	59.615	mg/kg	0.00596 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		55	mg/kg	1.126	61.924	mg/kg	0.00619 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	154	mg/kg	1.56	240.212	mg/kg	0.0154 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.69	mg/kg	1.353	0.934	mg/kg	0.0000934 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		28	mg/kg	2.976	83.335	mg/kg	0.00833 %		
9	zinc { zinc chromate }	024-007-00-3				151	mg/kg	2.774	418.896	mg/kg	0.0419 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
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	TPH (C6 to C40) petroleum group			TPH		1040	mg/kg		1040	mg/kg	0.104 %		
16	naphthalene	601-052-00-2	202-049-5	91-20-3		1.42	mg/kg		1.42	mg/kg	0.000142 %		
17	acenaphthylene		205-917-1	208-96-8		0.1	mg/kg		0.1	mg/kg	0.00001 %		
18	acenaphthene		201-469-6	83-32-9		1.2	mg/kg		1.2	mg/kg	0.00012 %		
19	fluorene		201-695-5	86-73-7		0.94	mg/kg		0.94	mg/kg	0.000094 %		
20	phenanthrene		201-581-5	85-01-8		6.66	mg/kg		6.66	mg/kg	0.000666 %		
21	anthracene		204-371-1	120-12-7		1.63	mg/kg		1.63	mg/kg	0.000163 %		
22	fluoranthene		205-912-4	206-44-0		7.49	mg/kg		7.49	mg/kg	0.000749 %		
23	pyrene		204-927-3	129-00-0		7.57	mg/kg		7.57	mg/kg	0.000757 %		
24	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		3.9	mg/kg		3.9	mg/kg	0.00039 %		
25	chrysene	601-048-00-0	205-923-4	218-01-9		3.75	mg/kg		3.75	mg/kg	0.000375 %		
26	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		3.38	mg/kg		3.38	mg/kg	0.000338 %		
27	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		1.07	mg/kg		1.07	mg/kg	0.000107 %		
28	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		2.84	mg/kg		2.84	mg/kg	0.000284 %		
29	indeno[123-cd]pyrene		205-893-2	193-39-5		2.23	mg/kg		2.23	mg/kg	0.000223 %		
30	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		0.38	mg/kg		0.38	mg/kg	0.000038 %		

#		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[ghi]perylene				1.85	mg/kg		1.85	mg/kg	0.000185 %		
			205-883-8	191-24-2									
32		pH				10.26	pH		10.26	pH	10.26 pH		
				PH									
33		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
34		1,1-dichloroethane and 1,2-dichloroethane (combined)				<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
			203-458-1, 200-863-5	107-06-2, 75-34-3									
35		carbon tetrachloride; tetrachloromethane				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		602-008-00-5	200-262-8	56-23-5									
36		trichloroethylene; trichloroethene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		602-027-00-9	201-167-4	79-01-6									
37		vinyl chloride; chloroethylene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		602-023-00-7	200-831-0	75-01-4									
										Total:	0.19 %		

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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: BH19/11

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

Sample details

Sample Name:	LoW Code:	
BH19/11	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:		
1 m	Entry:	17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to hazardous because Elevated TPHs over 1000mg/kg. Free product recorded in occasional samples during post-investigation monitoring. Loss on ignition tests carried out within top 2m across the site. Of those samples, 50% recorded elevated loss of ignition above the hazardous waste threshold.

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.104%)

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

Hazard Statements hit:

Carc. 1B; 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:

TPH (C6 to C40) petroleum group: (conc.: 0.104%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.104%)

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		13	mg/kg	1.32	17.164	mg/kg	0.00172 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		1.8	mg/kg	3.22	5.796	mg/kg	0.00058 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.1	mg/kg	1.142	1.257	mg/kg	0.000126 %		

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				48	mg/kg	1.923	92.308	mg/kg	0.00923 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		63	mg/kg	1.126	70.931	mg/kg	0.00709 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	129	mg/kg	1.56	201.216	mg/kg	0.0129 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17	mg/kg	1.353	<0.23	mg/kg	<0.000023 %		**<LOD**
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		31	mg/kg	2.976	92.264	mg/kg	0.00923 %		
9	zinc { zinc chromate }	024-007-00-3				102	mg/kg	2.774	282.963	mg/kg	0.0283 %		
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 }	006-007-00-5				1	mg/kg	1.884	1.884	mg/kg	0.000188 %		
11	TPH (C6 to C40) petroleum group			TPH		1040	mg/kg		1040	mg/kg	0.104 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		0.57	mg/kg		0.57	mg/kg	0.000057 %		
13	acenaphthylene		205-917-1	208-96-8		0.05	mg/kg		0.05	mg/kg	0.000005 %		
14	acenaphthene		201-469-6	83-32-9		0.42	mg/kg		0.42	mg/kg	0.000042 %		
15	fluorene		201-695-5	86-73-7		0.34	mg/kg		0.34	mg/kg	0.000034 %		
16	phenanthrene		201-581-5	85-01-8		2.58	mg/kg		2.58	mg/kg	0.000258 %		
17	anthracene		204-371-1	120-12-7		0.56	mg/kg		0.56	mg/kg	0.000056 %		
18	fluoranthene		205-912-4	206-44-0		2.86	mg/kg		2.86	mg/kg	0.000286 %		
19	pyrene		204-927-3	129-00-0		2.94	mg/kg		2.94	mg/kg	0.000294 %		
20	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		1.15	mg/kg		1.15	mg/kg	0.000115 %		
21	chrysene	601-048-00-0	205-923-4	218-01-9		1.24	mg/kg		1.24	mg/kg	0.000124 %		
22	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		1.12	mg/kg		1.12	mg/kg	0.000112 %		
23	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		0.41	mg/kg		0.41	mg/kg	0.000041 %		
24	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		0.86	mg/kg		0.86	mg/kg	0.000086 %		
25	indeno[123-cd]pyrene		205-893-2	193-39-5		0.48	mg/kg		0.48	mg/kg	0.000048 %		
26	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		0.11	mg/kg		0.11	mg/kg	0.000011 %		
27	benzo[ghi]perylene		205-883-8	191-24-2		0.45	mg/kg		0.45	mg/kg	0.000045 %		
28	pH			PH		8.84	pH		8.84	pH	8.84 pH		
29	phenol	604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
										Total:	0.175 %		

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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: BH19/12

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

Sample details

Sample Name:
BH19/12
Sample Depth:
1 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		14	mg/kg	1.32	18.485	mg/kg	0.00185 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2.4	mg/kg	3.22	7.728	mg/kg	0.000773 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.2	mg/kg	1.142	1.371	mg/kg	0.000137 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				29	mg/kg	1.923	55.769	mg/kg	0.00558 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		62	mg/kg	1.126	69.805	mg/kg	0.00698 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	214	mg/kg	1.56	333.8	mg/kg	0.0214 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.56	mg/kg	1.353	0.758	mg/kg	0.0000758 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		25	mg/kg	2.976	74.407	mg/kg	0.00744 %		
9	zinc { zinc chromate }	024-007-00-3				111	mg/kg	2.774	307.93	mg/kg	0.0308 %		
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 }	006-007-00-5				1	mg/kg	1.884	1.884	mg/kg	0.000188 %		
11	TPH (C6 to C40) petroleum group			TPH		956	mg/kg		956	mg/kg	0.0956 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		5.01	mg/kg		5.01	mg/kg	0.000501 %		
13	acenaphthylene		205-917-1	208-96-8		0.43	mg/kg		0.43	mg/kg	0.000043 %		
14	acenaphthene		201-469-6	83-32-9		10.3	mg/kg		10.3	mg/kg	0.00103 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		fluorene				9.97	mg/kg		9.97	mg/kg	0.000997 %		
			201-695-5	86-73-7									
16		phenanthrene				63.2	mg/kg		63.2	mg/kg	0.00632 %		
			201-581-5	85-01-8									
17		anthracene				14.4	mg/kg		14.4	mg/kg	0.00144 %		
			204-371-1	120-12-7									
18		fluoranthene				47	mg/kg		47	mg/kg	0.0047 %		
			205-912-4	206-44-0									
19		pyrene				38.8	mg/kg		38.8	mg/kg	0.00388 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				17.4	mg/kg		17.4	mg/kg	0.00174 %		
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				18.2	mg/kg		18.2	mg/kg	0.00182 %		
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				14.2	mg/kg		14.2	mg/kg	0.00142 %		
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				5.5	mg/kg		5.5	mg/kg	0.00055 %		
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				10.9	mg/kg		10.9	mg/kg	0.00109 %		
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				5.14	mg/kg		5.14	mg/kg	0.000514 %		
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				1.18	mg/kg		1.18	mg/kg	0.000118 %		
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				4.63	mg/kg		4.63	mg/kg	0.000463 %		
			205-883-8	191-24-2									
28		pH				9.55	pH		9.55	pH	9.55 pH		
				PH									
29		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.197 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0956%)

Classification of sample: BH19/13

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

Sample details

Sample Name:
BH19/13
Sample Depth:
0.5 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7	mg/kg	1.32	9.242	mg/kg	0.000924 %		
2	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 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.5	mg/kg	1.142	0.571	mg/kg	0.0000571 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				21	mg/kg	1.923	40.385	mg/kg	0.00404 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		43	mg/kg	1.126	48.413	mg/kg	0.00484 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	87	mg/kg	1.56	135.704	mg/kg	0.0087 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17	mg/kg	1.353	<0.23	mg/kg	<0.000023 %		<LOD
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		16	mg/kg	2.976	47.62	mg/kg	0.00476 %		
9	zinc { zinc chromate }	024-007-00-3				104	mg/kg	2.774	288.511	mg/kg	0.0289 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
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

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		TPH (C6 to C40) petroleum group		TPH		639	mg/kg		639	mg/kg	0.0639 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		0.8	mg/kg		0.8	mg/kg	0.00008 %		
17		acenaphthylene											
			205-917-1	208-96-8		0.06	mg/kg		0.06	mg/kg	0.000006 %		
18		acenaphthene											
			201-469-6	83-32-9		0.93	mg/kg		0.93	mg/kg	0.000093 %		
19		fluorene											
			201-695-5	86-73-7		0.63	mg/kg		0.63	mg/kg	0.000063 %		
20		phenanthrene											
			201-581-5	85-01-8		5.73	mg/kg		5.73	mg/kg	0.000573 %		
21		anthracene											
			204-371-1	120-12-7		1.47	mg/kg		1.47	mg/kg	0.000147 %		
22		fluoranthene											
			205-912-4	206-44-0		9.12	mg/kg		9.12	mg/kg	0.000912 %		
23		pyrene											
			204-927-3	129-00-0		8.73	mg/kg		8.73	mg/kg	0.000873 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		4.14	mg/kg		4.14	mg/kg	0.000414 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		4.21	mg/kg		4.21	mg/kg	0.000421 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		3.82	mg/kg		3.82	mg/kg	0.000382 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		1.49	mg/kg		1.49	mg/kg	0.000149 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		3.33	mg/kg		3.33	mg/kg	0.000333 %		
29		indeno[123-cd]pyrene											
			205-893-2	193-39-5		2.26	mg/kg		2.26	mg/kg	0.000226 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.55	mg/kg		0.55	mg/kg	0.000055 %		
31		benzo[ghi]perylene											
			205-883-8	191-24-2		2.11	mg/kg		2.11	mg/kg	0.000211 %		
32		pH											
				PH		9.12	pH		9.12	pH	9.12 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
										Total:	0.122 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0639%)

Classification of sample: BH19/13[2]

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

Sample details

Sample Name:	LoW Code:	
BH19/13[2]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:		
2 m	Entry:	17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to hazardous because Elevated over 1000mg/kg. Free product recorded in occasional samples during post-investgation monitoring. Loss on ignition tests carried out within top 2m across the site. Of those samples, 50% recorded elevated loss of ignition above the hazardous waste threshold.

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.147%)

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

Hazard Statements hit:

Carc. 1B; 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:

TPH (C6 to C40) petroleum group: (conc.: 0.147%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.147%)

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9	mg/kg	1.32	11.883	mg/kg	0.00119 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2.4	mg/kg	3.22	7.728	mg/kg	0.000773 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.3	mg/kg	1.142	1.485	mg/kg	0.000149 %		

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				30	mg/kg	1.923	57.692	mg/kg	0.00577 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		59	mg/kg	1.126	66.427	mg/kg	0.00664 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	117	mg/kg	1.56	182.498	mg/kg	0.0117 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.56	mg/kg	1.353	0.758	mg/kg	0.0000758 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		25	mg/kg	2.976	74.407	mg/kg	0.00744 %		
9	zinc { zinc chromate }	024-007-00-3				138	mg/kg	2.774	382.832	mg/kg	0.0383 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
15	TPH (C6 to C40) petroleum group			TPH		1470	mg/kg		1470	mg/kg	0.147 %		
16	naphthalene	601-052-00-2	202-049-5	91-20-3		2.42	mg/kg		2.42	mg/kg	0.000242 %		
17	acenaphthylene		205-917-1	208-96-8		0.17	mg/kg		0.17	mg/kg	0.000017 %		
18	acenaphthene		201-469-6	83-32-9		2.19	mg/kg		2.19	mg/kg	0.000219 %		
19	fluorene		201-695-5	86-73-7		1.9	mg/kg		1.9	mg/kg	0.00019 %		
20	phenanthrene		201-581-5	85-01-8		12.3	mg/kg		12.3	mg/kg	0.00123 %		
21	anthracene		204-371-1	120-12-7		3.15	mg/kg		3.15	mg/kg	0.000315 %		
22	fluoranthene		205-912-4	206-44-0		12.3	mg/kg		12.3	mg/kg	0.00123 %		
23	pyrene		204-927-3	129-00-0		10.9	mg/kg		10.9	mg/kg	0.00109 %		
24	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		4.75	mg/kg		4.75	mg/kg	0.000475 %		
25	chrysene	601-048-00-0	205-923-4	218-01-9		4.47	mg/kg		4.47	mg/kg	0.000447 %		
26	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		4.15	mg/kg		4.15	mg/kg	0.000415 %		
27	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		1.4	mg/kg		1.4	mg/kg	0.00014 %		
28	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		3.46	mg/kg		3.46	mg/kg	0.000346 %		
29	indeno[123-cd]pyrene		205-893-2	193-39-5		1.97	mg/kg		1.97	mg/kg	0.000197 %		
30	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		0.5	mg/kg		0.5	mg/kg	0.00005 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
31		benzo[ghi]perylene				1.58	mg/kg		1.58	mg/kg	0.000158 %		
			205-883-8	191-24-2									
32		pH				9.32	pH		9.32	pH	9.32 pH		
				PH									
33		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.226 %		

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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: BH19/14

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

Sample details

Sample Name:
BH19/14
Sample Depth:
1 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7	mg/kg	1.32	9.242	mg/kg	0.000924 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		1.6	mg/kg	3.22	5.152	mg/kg	0.000515 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.1	mg/kg	1.142	1.257	mg/kg	0.000126 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				20	mg/kg	1.923	38.462	mg/kg	0.00385 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		46	mg/kg	1.126	51.791	mg/kg	0.00518 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	111	mg/kg	1.56	173.139	mg/kg	0.0111 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.22	mg/kg	1.353	0.298	mg/kg	0.0000298 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		16	mg/kg	2.976	47.62	mg/kg	0.00476 %		
9	zinc { zinc chromate }	024-007-00-3				121	mg/kg	2.774	335.672	mg/kg	0.0336 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
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

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		TPH (C6 to C40) petroleum group		TPH		186	mg/kg		186	mg/kg	0.0186 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		0.54	mg/kg		0.54	mg/kg	0.000054 %		
17		acenaphthylene											
			205-917-1	208-96-8		0.02	mg/kg		0.02	mg/kg	0.000002 %		
18		acenaphthene											
			201-469-6	83-32-9		0.6	mg/kg		0.6	mg/kg	0.00006 %		
19		fluorene											
			201-695-5	86-73-7		0.46	mg/kg		0.46	mg/kg	0.000046 %		
20		phenanthrene											
			201-581-5	85-01-8		2.64	mg/kg		2.64	mg/kg	0.000264 %		
21		anthracene											
			204-371-1	120-12-7		0.56	mg/kg		0.56	mg/kg	0.000056 %		
22		fluoranthene											
			205-912-4	206-44-0		2.72	mg/kg		2.72	mg/kg	0.000272 %		
23		pyrene											
			204-927-3	129-00-0		2.41	mg/kg		2.41	mg/kg	0.000241 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		1.06	mg/kg		1.06	mg/kg	0.000106 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		1.13	mg/kg		1.13	mg/kg	0.000113 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		0.89	mg/kg		0.89	mg/kg	0.000089 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		0.31	mg/kg		0.31	mg/kg	0.000031 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		0.73	mg/kg		0.73	mg/kg	0.000073 %		
29		indeno[123-cd]pyrene											
			205-893-2	193-39-5		0.46	mg/kg		0.46	mg/kg	0.000046 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.12	mg/kg		0.12	mg/kg	0.000012 %		
31		benzo[ghi]perylene											
			205-883-8	191-24-2		0.37	mg/kg		0.37	mg/kg	0.000037 %		
32		pH		PH		10.6	pH		10.6	pH	10.6 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		0.3	mg/kg		0.3	mg/kg	0.00003 %		
										Total:	0.0804 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0186%)

Classification of sample: BH19/16

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

Sample details

Sample Name:	LoW Code:	
BH19/16	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:		
0.1 m	Entry:	17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to hazardous because Elevated TPHs over 1000mg/kg. Free product recorded in occasional samples during post-investigation monitoring. Loss on ignition tests carried out within top 2m across the site. Of those samples, 50% recorded elevated loss of ignition above the hazardous waste threshold.

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.154%)

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

Hazard Statements hit:

Carc. 1B; 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:

TPH (C6 to C40) petroleum group: (conc.: 0.154%)

HP 8: Corrosive "waste which on application can cause skin corrosion"

pH; pH "Assumed to be irritant/corrosive because of pH value"

Because of determinand:

pH: (conc.: 11.87 pH)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.154%)

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	asbestos	650-013-00-6	- - - - - - -	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5		<0.001	mg/kg		<0.001	mg/kg	<0.0000001 %		**<LOD**
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		6	mg/kg	1.32	7.922	mg/kg	0.000792 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		1.8	mg/kg	3.22	5.796	mg/kg	0.00058 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.9	mg/kg	1.142	1.028	mg/kg	0.000103 %		
5	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				21	mg/kg	1.923	40.385	mg/kg	0.00404 %		
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		31	mg/kg	1.126	34.903	mg/kg	0.00349 %		
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	57	mg/kg	1.56	88.909	mg/kg	0.0057 %		
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.47	mg/kg	1.353	0.636	mg/kg	0.0000636 %		
9	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		15	mg/kg	2.976	44.644	mg/kg	0.00446 %		
10	zinc { zinc chromate }	024-007-00-3				177	mg/kg	2.774	491.024	mg/kg	0.0491 %		
11	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		**<LOD**
12	TPH (C6 to C40) petroleum group			TPH		1540	mg/kg		1540	mg/kg	0.154 %		
13	naphthalene	601-052-00-2	202-049-5	91-20-3		0.14	mg/kg		0.14	mg/kg	0.000014 %		
14	acenaphthylene		205-917-1	208-96-8		0.09	mg/kg		0.09	mg/kg	0.000009 %		
15	acenaphthene		201-469-6	83-32-9		0.26	mg/kg		0.26	mg/kg	0.000026 %		
16	fluorene		201-695-5	86-73-7		3.79	mg/kg		3.79	mg/kg	0.000379 %		
17	phenanthrene		201-581-5	85-01-8		1.65	mg/kg		1.65	mg/kg	0.000165 %		
18	anthracene		204-371-1	120-12-7		0.45	mg/kg		0.45	mg/kg	0.000045 %		
19	fluoranthene		205-912-4	206-44-0		3.36	mg/kg		3.36	mg/kg	0.000336 %		
20	pyrene		204-927-3	129-00-0		3.79	mg/kg		3.79	mg/kg	0.000379 %		
21	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		1.72	mg/kg		1.72	mg/kg	0.000172 %		
22	chrysene	601-048-00-0	205-923-4	218-01-9		2.09	mg/kg		2.09	mg/kg	0.000209 %		
23	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		1.7	mg/kg		1.7	mg/kg	0.00017 %		
24	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		0.64	mg/kg		0.64	mg/kg	0.000064 %		
25	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		1.66	mg/kg		1.66	mg/kg	0.000166 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
26		indeno[123-cd]pyrene				1.29	mg/kg		1.29	mg/kg	0.000129 %		
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				0.43	mg/kg		0.43	mg/kg	0.000043 %		
		601-041-00-2	200-181-8	53-70-3									
28		benzo[ghi]perylene				1.28	mg/kg		1.28	mg/kg	0.000128 %		
			205-883-8	191-24-2									
29		pH				11.87	pH		11.87	pH	11.87 pH		
				PH									
30		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.225 %		

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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: BH19/17

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

Sample details

Sample Name:
BH19/17
Sample Depth:
0.5 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		6	mg/kg	1.32	7.922	mg/kg	0.000792 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2.6	mg/kg	3.22	8.372	mg/kg	0.000837 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1	mg/kg	1.142	1.142	mg/kg	0.000114 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				64	mg/kg	1.923	123.077	mg/kg	0.0123 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		32	mg/kg	1.126	36.028	mg/kg	0.0036 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	81	mg/kg	1.56	126.345	mg/kg	0.0081 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.44	mg/kg	1.353	0.596	mg/kg	0.0000596 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		15	mg/kg	2.976	44.644	mg/kg	0.00446 %		
9	zinc { zinc chromate }	024-007-00-3				91	mg/kg	2.774	252.447	mg/kg	0.0252 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	TPH (C6 to C40) petroleum group			TPH		801	mg/kg		801	mg/kg	0.0801 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		0.22	mg/kg		0.22	mg/kg	0.000022 %		
13	acenaphthylene		205-917-1	208-96-8		0.1	mg/kg		0.1	mg/kg	0.00001 %		
14	acenaphthene		201-469-6	83-32-9		0.37	mg/kg		0.37	mg/kg	0.000037 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		fluorene				0.37	mg/kg		0.37	mg/kg	0.000037 %		
			201-695-5	86-73-7									
16		phenanthrene				2.95	mg/kg		2.95	mg/kg	0.000295 %		
			201-581-5	85-01-8									
17		anthracene				0.72	mg/kg		0.72	mg/kg	0.000072 %		
			204-371-1	120-12-7									
18		fluoranthene				4.41	mg/kg		4.41	mg/kg	0.000441 %		
			205-912-4	206-44-0									
19		pyrene				4.25	mg/kg		4.25	mg/kg	0.000425 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				2.19	mg/kg		2.19	mg/kg	0.000219 %		
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				2.26	mg/kg		2.26	mg/kg	0.000226 %		
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				2.34	mg/kg		2.34	mg/kg	0.000234 %		
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				0.84	mg/kg		0.84	mg/kg	0.000084 %		
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				1.89	mg/kg		1.89	mg/kg	0.000189 %		
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				0.93	mg/kg		0.93	mg/kg	0.000093 %		
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.23	mg/kg		0.23	mg/kg	0.000023 %		
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				0.76	mg/kg		0.76	mg/kg	0.000076 %		
			205-883-8	191-24-2									
28		pH				9.71	pH		9.71	pH	9.71 pH		
				PH									
29		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.138 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0801%)

Classification of sample: BH19/18

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

Sample details

Sample Name:
BH19/18
Sample Depth:
0.2 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No 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 }		5 mg/kg	1.32	6.602 mg/kg	0.00066 %		
	033-003-00-0 / 215-481-4 / 1327-53-3							
2	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							
3	cadmium { cadmium oxide }		1.1 mg/kg	1.142	1.257 mg/kg	0.000126 %		
	048-002-00-0 / 215-146-2 / 1306-19-0							
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }		25 mg/kg	1.923	48.077 mg/kg	0.00481 %		
	024-017-00-8							
5	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							
6	lead { lead chromate }	1	68 mg/kg	1.56	106.067 mg/kg	0.0068 %		
	082-004-00-2 / 231-846-0 / 7758-97-6							
7	mercury { mercury dichloride }		0.37 mg/kg	1.353	0.501 mg/kg	0.0000501 %		
	080-010-00-X / 231-299-8 / 7487-94-7							
8	nickel { nickel chromate }		13 mg/kg	2.976	38.691 mg/kg	0.00387 %		
	028-035-00-7 / 238-766-5 / 14721-18-7							
9	zinc { zinc chromate }		138 mg/kg	2.774	382.832 mg/kg	0.0383 %		
	024-007-00-3							
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 }		<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5							
11	TPH (C6 to C40) petroleum group		374 mg/kg		374 mg/kg	0.0374 %		
	TPH							
12	naphthalene		0.32 mg/kg		0.32 mg/kg	0.000032 %		
	601-052-00-2 / 202-049-5 / 91-20-3							
13	acenaphthylene		0.1 mg/kg		0.1 mg/kg	0.00001 %		
	205-917-1 / 208-96-8							
14	acenaphthene		2.2 mg/kg		2.2 mg/kg	0.00022 %		
	201-469-6 / 83-32-9							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		fluorene				1.69	mg/kg		1.69	mg/kg	0.000169 %		
			201-695-5	86-73-7									
16		phenanthrene				11	mg/kg		11	mg/kg	0.0011 %		
			201-581-5	85-01-8									
17		anthracene				2.68	mg/kg		2.68	mg/kg	0.000268 %		
			204-371-1	120-12-7									
18		fluoranthene				9.35	mg/kg		9.35	mg/kg	0.000935 %		
			205-912-4	206-44-0									
19		pyrene				8.65	mg/kg		8.65	mg/kg	0.000865 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				3.74	mg/kg		3.74	mg/kg	0.000374 %		
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				3.43	mg/kg		3.43	mg/kg	0.000343 %		
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				2.62	mg/kg		2.62	mg/kg	0.000262 %		
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				0.91	mg/kg		0.91	mg/kg	0.000091 %		
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				2.46	mg/kg		2.46	mg/kg	0.000246 %		
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				1.61	mg/kg		1.61	mg/kg	0.000161 %		
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.29	mg/kg		0.29	mg/kg	0.000029 %		
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				1.39	mg/kg		1.39	mg/kg	0.000139 %		
			205-883-8	191-24-2									
28		pH				10.78	pH		10.78	pH	10.78 pH		
				PH									
29		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.101 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0374%)

Classification of sample: BH19/18[2]

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

Sample details

Sample Name:
BH19/18[2]
Sample Depth:
1 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		3	mg/kg	1.32	3.961	mg/kg	0.000396 %		
2	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 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.5	mg/kg	1.142	0.571	mg/kg	0.0000571 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				10	mg/kg	1.923	19.231	mg/kg	0.00192 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		33	mg/kg	1.126	37.154	mg/kg	0.00372 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	36	mg/kg	1.56	56.153	mg/kg	0.0036 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		7.07	mg/kg	1.353	9.569	mg/kg	0.000957 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		9	mg/kg	2.976	26.786	mg/kg	0.00268 %		
9	zinc { zinc chromate }	024-007-00-3				61	mg/kg	2.774	169.223	mg/kg	0.0169 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	TPH (C6 to C40) petroleum group			TPH		354	mg/kg		354	mg/kg	0.0354 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		0.14	mg/kg		0.14	mg/kg	0.000014 %		
13	acenaphthylene		205-917-1	208-96-8		0.04	mg/kg		0.04	mg/kg	0.000004 %		
14	acenaphthene		201-469-6	83-32-9		0.43	mg/kg		0.43	mg/kg	0.000043 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		fluorene				0.3	mg/kg		0.3	mg/kg	0.00003 %		
			201-695-5	86-73-7									
16		phenanthrene				2.81	mg/kg		2.81	mg/kg	0.000281 %		
			201-581-5	85-01-8									
17		anthracene				0.61	mg/kg		0.61	mg/kg	0.000061 %		
			204-371-1	120-12-7									
18		fluoranthene				3.68	mg/kg		3.68	mg/kg	0.000368 %		
			205-912-4	206-44-0									
19		pyrene				3.52	mg/kg		3.52	mg/kg	0.000352 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				1.71	mg/kg		1.71	mg/kg	0.000171 %		
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				1.74	mg/kg		1.74	mg/kg	0.000174 %		
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				1.49	mg/kg		1.49	mg/kg	0.000149 %		
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				0.55	mg/kg		0.55	mg/kg	0.000055 %		
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				1.31	mg/kg		1.31	mg/kg	0.000131 %		
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				0.87	mg/kg		0.87	mg/kg	0.000087 %		
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.15	mg/kg		0.15	mg/kg	0.000015 %		
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				0.77	mg/kg		0.77	mg/kg	0.000077 %		
			205-883-8	191-24-2									
28		pH				9.99	pH		9.99	pH	9.99 pH		
				PH									
29		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0683 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0354%)

Classification of sample: BH19/19

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

Sample details

Sample Name:	LoW Code:	
BH19/19	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:		
2 m	Entry:	17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to hazardous because Elevated TPHs over 1000mg/kg. Free product recorded in occasional samples during post-investigation monitoring. Loss on ignition tests carried out within top 2m across the site. Of those samples, 50% recorded elevated loss of ignition above the hazardous waste threshold.

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.114%)

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

Hazard Statements hit:

Carc. 1B; 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:

TPH (C6 to C40) petroleum group: (conc.: 0.114%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.114%)

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	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	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2	mg/kg	3.22	6.44	mg/kg	0.000644 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.9	mg/kg	1.142	1.028	mg/kg	0.000103 %		

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex } 024-017-00-8		28 mg/kg	1.923	53.846 mg/kg	0.00538 %		
5	copper { dicopper oxide; copper (I) oxide } 029-002-00-X / 215-270-7 / 1317-39-1		34 mg/kg	1.126	38.28 mg/kg	0.00383 %		
6	lead { lead chromate } 082-004-00-2 / 231-846-0 / 7758-97-6	1	67 mg/kg	1.56	104.508 mg/kg	0.0067 %		
7	mercury { mercury dichloride } 080-010-00-X / 231-299-8 / 7487-94-7		0.41 mg/kg	1.353	0.555 mg/kg	0.0000555 %		
8	nickel { nickel chromate } 028-035-00-7 / 238-766-5 / 14721-18-7		28 mg/kg	2.976	83.335 mg/kg	0.00833 %		
9	zinc { zinc chromate } 024-007-00-3		81 mg/kg	2.774	224.706 mg/kg	0.0225 %		
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 } 006-007-00-5		<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
11	TPH (C6 to C40) petroleum group TPH		1140 mg/kg		1140 mg/kg	0.114 %		
12	naphthalene 601-052-00-2 / 202-049-5 / 91-20-3		2.07 mg/kg		2.07 mg/kg	0.000207 %		
13	acenaphthylene 205-917-1 / 208-96-8		0.15 mg/kg		0.15 mg/kg	0.000015 %		
14	acenaphthene 201-469-6 / 83-32-9		1.61 mg/kg		1.61 mg/kg	0.000161 %		
15	fluorene 201-695-5 / 86-73-7		1.2 mg/kg		1.2 mg/kg	0.00012 %		
16	phenanthrene 201-581-5 / 85-01-8		7.72 mg/kg		7.72 mg/kg	0.000772 %		
17	anthracene 204-371-1 / 120-12-7		1.84 mg/kg		1.84 mg/kg	0.000184 %		
18	fluoranthene 205-912-4 / 206-44-0		7.77 mg/kg		7.77 mg/kg	0.000777 %		
19	pyrene 204-927-3 / 129-00-0		7.94 mg/kg		7.94 mg/kg	0.000794 %		
20	benzo[a]anthracene 601-033-00-9 / 200-280-6 / 56-55-3		4.02 mg/kg		4.02 mg/kg	0.000402 %		
21	chrysene 601-048-00-0 / 205-923-4 / 218-01-9		3.94 mg/kg		3.94 mg/kg	0.000394 %		
22	benzo[b]fluoranthene 601-034-00-4 / 205-911-9 / 205-99-2		1.09 mg/kg		1.09 mg/kg	0.000109 %		
23	benzo[k]fluoranthene 601-036-00-5 / 205-916-6 / 207-08-9		3.58 mg/kg		3.58 mg/kg	0.000358 %		
24	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3 / 200-028-5 / 50-32-8		2.93 mg/kg		2.93 mg/kg	0.000293 %		
25	indeno[123-cd]pyrene 205-893-2 / 193-39-5		2.28 mg/kg		2.28 mg/kg	0.000228 %		
26	dibenz[a,h]anthracene 601-041-00-2 / 200-181-8 / 53-70-3		0.4 mg/kg		0.4 mg/kg	0.00004 %		
27	benzo[ghi]perylene 205-883-8 / 191-24-2		1.97 mg/kg		1.97 mg/kg	0.000197 %		
28	pH PH		10.14 pH		10.14 pH	10.14 pH		
29	phenol 604-001-00-2 / 203-632-7 / 108-95-2		<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD
						Total: 0.168 %		

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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: BH19/20

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

Sample details

Sample Name:	LoW Code:	
BH19/20	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% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		21	mg/kg	1.32	27.727	mg/kg	0.00277 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		3.7	mg/kg	3.22	11.914	mg/kg	0.00119 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.2	mg/kg	1.142	1.371	mg/kg	0.000137 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				32	mg/kg	1.923	61.538	mg/kg	0.00615 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		69	mg/kg	1.126	77.686	mg/kg	0.00777 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	132	mg/kg	1.56	205.896	mg/kg	0.0132 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.58	mg/kg	1.353	0.785	mg/kg	0.0000785 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		35	mg/kg	2.976	104.169	mg/kg	0.0104 %		
9	zinc { zinc chromate }	024-007-00-3				132	mg/kg	2.774	366.187	mg/kg	0.0366 %		
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 }	006-007-00-5				2	mg/kg	1.884	3.768	mg/kg	0.000377 %		
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.12	mg/kg		<0.12	mg/kg	<0.000012 %		**<LOD**
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.12	mg/kg		<0.12	mg/kg	<0.000012 %		**<LOD**
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.12	mg/kg		<0.12	mg/kg	<0.000012 %		**<LOD**
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.12	mg/kg		<0.12	mg/kg	<0.000012 %		**<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									
15	●	TPH (C6 to C40) petroleum group		TPH		737	mg/kg		737	mg/kg	0.0737 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		2.33	mg/kg		2.33	mg/kg	0.000233 %		
17	●	acenaphthylene											
			205-917-1	208-96-8		0.18	mg/kg		0.18	mg/kg	0.000018 %		
18	●	acenaphthene											
			201-469-6	83-32-9		1.72	mg/kg		1.72	mg/kg	0.000172 %		
19	●	fluorene											
			201-695-5	86-73-7		1.37	mg/kg		1.37	mg/kg	0.000137 %		
20	●	phenanthrene											
			201-581-5	85-01-8		10.2	mg/kg		10.2	mg/kg	0.00102 %		
21	●	anthracene											
			204-371-1	120-12-7		2.46	mg/kg		2.46	mg/kg	0.000246 %		
22	●	fluoranthene											
			205-912-4	206-44-0		10.2	mg/kg		10.2	mg/kg	0.00102 %		
23	●	pyrene											
			204-927-3	129-00-0		9.91	mg/kg		9.91	mg/kg	0.000991 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		4.98	mg/kg		4.98	mg/kg	0.000498 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		4.61	mg/kg		4.61	mg/kg	0.000461 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		4.05	mg/kg		4.05	mg/kg	0.000405 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		1.26	mg/kg		1.26	mg/kg	0.000126 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		3.42	mg/kg		3.42	mg/kg	0.000342 %		
29	●	indeno[123-cd]pyrene											
			205-893-2	193-39-5		2.85	mg/kg		2.85	mg/kg	0.000285 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.48	mg/kg		0.48	mg/kg	0.000048 %		
31	●	benzo[ghi]perylene											
			205-883-8	191-24-2		2.41	mg/kg		2.41	mg/kg	0.000241 %		
32	●	pH		PH		10.38	pH		10.38	pH	10.38 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
										Total:	0.159 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0737%)

Classification of sample: BH19/21

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

Sample details

Sample Name:
BH19/21
Sample Depth:
2 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	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	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2.1	mg/kg	3.22	6.762	mg/kg	0.000676 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.5	mg/kg	1.142	<0.571	mg/kg	<0.0000571 %		<LOD
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				21	mg/kg	1.923	40.385	mg/kg	0.00404 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		40	mg/kg	1.126	45.036	mg/kg	0.0045 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	94	mg/kg	1.56	146.623	mg/kg	0.0094 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.67	mg/kg	1.353	0.907	mg/kg	0.0000907 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		17	mg/kg	2.976	50.597	mg/kg	0.00506 %		
9	zinc { zinc chromate }	024-007-00-3				97	mg/kg	2.774	269.092	mg/kg	0.0269 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<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									
15		TPH (C6 to C40) petroleum group		TPH		407	mg/kg		407	mg/kg	0.0407 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		2.07	mg/kg		2.07	mg/kg	0.000207 %		
17		acenaphthylene											
			205-917-1	208-96-8		0.07	mg/kg		0.07	mg/kg	0.000007 %		
18		acenaphthene											
			201-469-6	83-32-9		1.97	mg/kg		1.97	mg/kg	0.000197 %		
19		fluorene											
			201-695-5	86-73-7		1.61	mg/kg		1.61	mg/kg	0.000161 %		
20		phenanthrene											
			201-581-5	85-01-8		6.91	mg/kg		6.91	mg/kg	0.000691 %		
21		anthracene											
			204-371-1	120-12-7		1.68	mg/kg		1.68	mg/kg	0.000168 %		
22		fluoranthene											
			205-912-4	206-44-0		6.85	mg/kg		6.85	mg/kg	0.000685 %		
23		pyrene											
			204-927-3	129-00-0		6.09	mg/kg		6.09	mg/kg	0.000609 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		2.72	mg/kg		2.72	mg/kg	0.000272 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		2.76	mg/kg		2.76	mg/kg	0.000276 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		2.77	mg/kg		2.77	mg/kg	0.000277 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		1	mg/kg		1	mg/kg	0.0001 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		2.27	mg/kg		2.27	mg/kg	0.000227 %		
29		indeno[123-cd]pyrene											
			205-893-2	193-39-5		1.32	mg/kg		1.32	mg/kg	0.000132 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.29	mg/kg		0.29	mg/kg	0.000029 %		
31		benzo[ghi]perylene											
			205-883-8	191-24-2		1.23	mg/kg		1.23	mg/kg	0.000123 %		
32		pH		PH		10.33	pH		10.33	pH	10.33 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
34		1,1-dichloroethane and 1,2-dichloroethane (combined)											
			203-458-1, 200-863-5	107-06-2, 75-34-3		<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
35		carbon tetrachloride; tetrachloromethane											
		602-008-00-5	200-262-8	56-23-5		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
36		trichloroethylene; trichloroethene											
		602-027-00-9	201-167-4	79-01-6		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
37		vinyl chloride; chloroethylene											
		602-023-00-7	200-831-0	75-01-4		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
										Total:	0.0979 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0407%)

Classification of sample: BH19/24

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

Sample details

Sample Name:	LoW Code:	
BH19/24	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:		
0.2 m	Entry:	17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to hazardous because Elevated TPHs over 1000mg/kg. Free product recorded in occasional samples during post-investigation monitoring. Loss on ignition tests carried out within top 2m across the site. Of those samples, 50% recorded elevated loss of ignition above the hazardous waste threshold.

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.174%)

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

Hazard Statements hit:

Carc. 1B; 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:

TPH (C6 to C40) petroleum group: (conc.: 0.174%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.174%)

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	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	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		1.8	mg/kg	3.22	5.796	mg/kg	0.00058 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.7	mg/kg	1.142	0.8	mg/kg	0.00008 %		

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				19	mg/kg	1.923	36.538	mg/kg	0.00365 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		43	mg/kg	1.126	48.413	mg/kg	0.00484 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	114	mg/kg	1.56	177.819	mg/kg	0.0114 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17	mg/kg	1.353	<0.23	mg/kg	<0.000023 %		<LOD
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		17	mg/kg	2.976	50.597	mg/kg	0.00506 %		
9	zinc { zinc chromate }	024-007-00-3				116	mg/kg	2.774	321.801	mg/kg	0.0322 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	TPH (C6 to C40) petroleum group			TPH		1740	mg/kg		1740	mg/kg	0.174 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		1.22	mg/kg		1.22	mg/kg	0.000122 %		
13	acenaphthylene		205-917-1	208-96-8		0.09	mg/kg		0.09	mg/kg	0.000009 %		
14	acenaphthene		201-469-6	83-32-9		2.85	mg/kg		2.85	mg/kg	0.000285 %		
15	fluorene		201-695-5	86-73-7		1.99	mg/kg		1.99	mg/kg	0.000199 %		
16	phenanthrene		201-581-5	85-01-8		13.6	mg/kg		13.6	mg/kg	0.00136 %		
17	anthracene		204-371-1	120-12-7		3.8	mg/kg		3.8	mg/kg	0.00038 %		
18	fluoranthene		205-912-4	206-44-0		18.5	mg/kg		18.5	mg/kg	0.00185 %		
19	pyrene		204-927-3	129-00-0		15.7	mg/kg		15.7	mg/kg	0.00157 %		
20	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		7.83	mg/kg		7.83	mg/kg	0.000783 %		
21	chrysene	601-048-00-0	205-923-4	218-01-9		7.58	mg/kg		7.58	mg/kg	0.000758 %		
22	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		8.4	mg/kg		8.4	mg/kg	0.00084 %		
23	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		3.02	mg/kg		3.02	mg/kg	0.000302 %		
24	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		7.07	mg/kg		7.07	mg/kg	0.000707 %		
25	indeno[123-cd]pyrene		205-893-2	193-39-5		4.3	mg/kg		4.3	mg/kg	0.00043 %		
26	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		0.92	mg/kg		0.92	mg/kg	0.000092 %		
27	benzo[ghi]perylene		205-883-8	191-24-2		3.45	mg/kg		3.45	mg/kg	0.000345 %		
28	pH			PH		9.37	pH		9.37	pH	9.37 pH		
29	phenol	604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
										Total:	0.243 %		

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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: BH19/24[2]

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

Sample details

Sample Name:
BH19/24[2]
Sample Depth:
2 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	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	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		1.8	mg/kg	3.22	5.796	mg/kg	0.00058 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.5	mg/kg	1.142	0.571	mg/kg	0.0000571 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				22	mg/kg	1.923	42.308	mg/kg	0.00423 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		49	mg/kg	1.126	55.169	mg/kg	0.00552 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	118	mg/kg	1.56	184.058	mg/kg	0.0118 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.19	mg/kg	1.353	0.257	mg/kg	0.0000257 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		19	mg/kg	2.976	56.549	mg/kg	0.00565 %		
9	zinc { zinc chromate }	024-007-00-3				93	mg/kg	2.774	257.996	mg/kg	0.0258 %		
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 }	006-007-00-5				5	mg/kg	1.884	9.42	mg/kg	0.000942 %		
11	TPH (C6 to C40) petroleum group			TPH		453	mg/kg		453	mg/kg	0.0453 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		1.13	mg/kg		1.13	mg/kg	0.000113 %		
13	acenaphthylene		205-917-1	208-96-8		0.2	mg/kg		0.2	mg/kg	0.00002 %		
14	acenaphthene		201-469-6	83-32-9		0.89	mg/kg		0.89	mg/kg	0.000089 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15	●	fluorene				0.74	mg/kg		0.74	mg/kg	0.000074 %		
			201-695-5	86-73-7									
16	●	phenanthrene				4.94	mg/kg		4.94	mg/kg	0.000494 %		
			201-581-5	85-01-8									
17	●	anthracene				1.04	mg/kg		1.04	mg/kg	0.000104 %		
			204-371-1	120-12-7									
18	●	fluoranthene				5.46	mg/kg		5.46	mg/kg	0.000546 %		
			205-912-4	206-44-0									
19	●	pyrene				6.31	mg/kg		6.31	mg/kg	0.000631 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				3.02	mg/kg		3.02	mg/kg	0.000302 %		
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				3.32	mg/kg		3.32	mg/kg	0.000332 %		
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				3.22	mg/kg		3.22	mg/kg	0.000322 %		
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				0.95	mg/kg		0.95	mg/kg	0.000095 %		
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				2.82	mg/kg		2.82	mg/kg	0.000282 %		
		601-032-00-3	200-028-5	50-32-8									
25	●	indeno[123-cd]pyrene				1.69	mg/kg		1.69	mg/kg	0.000169 %		
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.5	mg/kg		0.5	mg/kg	0.00005 %		
		601-041-00-2	200-181-8	53-70-3									
27	●	benzo[ghi]perylene				1.57	mg/kg		1.57	mg/kg	0.000157 %		
			205-883-8	191-24-2									
28	●	pH				9.4	pH		9.4	pH	9.4 pH		
				PH									
29		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.105 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0453%)

Classification of sample: BH19/25

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

Sample details

Sample Name:
BH19/25
Sample Depth:
2 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		14	mg/kg	1.32	18.485	mg/kg	0.00185 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2.5	mg/kg	3.22	8.05	mg/kg	0.000805 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.5	mg/kg	1.142	0.571	mg/kg	0.0000571 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				19	mg/kg	1.923	36.538	mg/kg	0.00365 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		50	mg/kg	1.126	56.294	mg/kg	0.00563 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	69	mg/kg	1.56	107.627	mg/kg	0.0069 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17	mg/kg	1.353	<0.23	mg/kg	<0.000023 %		<LOD
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		31	mg/kg	2.976	92.264	mg/kg	0.00923 %		
9	zinc { zinc chromate }	024-007-00-3				100	mg/kg	2.774	277.415	mg/kg	0.0277 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<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									
15		TPH (C6 to C40) petroleum group		TPH		289	mg/kg		289	mg/kg	0.0289 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		0.22	mg/kg		0.22	mg/kg	0.000022 %		
17		acenaphthylene											
			205-917-1	208-96-8		0.04	mg/kg		0.04	mg/kg	0.000004 %		
18		acenaphthene											
			201-469-6	83-32-9		0.4	mg/kg		0.4	mg/kg	0.00004 %		
19		fluorene											
			201-695-5	86-73-7		0.3	mg/kg		0.3	mg/kg	0.00003 %		
20		phenanthrene											
			201-581-5	85-01-8		2.23	mg/kg		2.23	mg/kg	0.000223 %		
21		anthracene											
			204-371-1	120-12-7		0.54	mg/kg		0.54	mg/kg	0.000054 %		
22		fluoranthene											
			205-912-4	206-44-0		2.65	mg/kg		2.65	mg/kg	0.000265 %		
23		pyrene											
			204-927-3	129-00-0		2.46	mg/kg		2.46	mg/kg	0.000246 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		1.29	mg/kg		1.29	mg/kg	0.000129 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		1.36	mg/kg		1.36	mg/kg	0.000136 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		1.32	mg/kg		1.32	mg/kg	0.000132 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		0.43	mg/kg		0.43	mg/kg	0.000043 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		1.13	mg/kg		1.13	mg/kg	0.000113 %		
29		indeno[123-cd]pyrene											
			205-893-2	193-39-5		0.67	mg/kg		0.67	mg/kg	0.000067 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.19	mg/kg		0.19	mg/kg	0.000019 %		
31		benzo[ghi]perylene											
			205-883-8	191-24-2		0.56	mg/kg		0.56	mg/kg	0.000056 %		
32		pH											
				PH		8.72	pH		8.72	pH	8.72 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
										Total:	0.0866 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0289%)

Classification of sample: TP19/01

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

Sample details

Sample Name:	LoW Code:	
TP19/01	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:		
1 m	Entry:	17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to hazardous because Elevated TPHs over 1000mg/kg. Free product recorded in occasional samples during post-investigation monitoring. Loss on ignition tests carried out within top 2m across the site. Of those samples, 50% recorded elevated loss of ignition above the hazardous waste threshold.

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.242%)

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

Hazard Statements hit:

Carc. 1B; 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:

TPH (C6 to C40) petroleum group: (conc.: 0.242%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.242%)

Determinands

Moisture content: 0% No 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		asbestos 650-013-00-6	- - - - - - -	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5		0.011 mg/kg		0.011 mg/kg	0.0000011 %		

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7	mg/kg	1.32	9.242	mg/kg	0.000924 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		1.8	mg/kg	3.22	5.796	mg/kg	0.00058 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.8	mg/kg	1.142	0.914	mg/kg	0.0000914 %		
5	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				39	mg/kg	1.923	75	mg/kg	0.0075 %		
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		57	mg/kg	1.126	64.176	mg/kg	0.00642 %		
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	104	mg/kg	1.56	162.221	mg/kg	0.0104 %		
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.31	mg/kg	1.353	0.42	mg/kg	0.000042 %		
9	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		21	mg/kg	2.976	62.502	mg/kg	0.00625 %		
10	zinc { zinc chromate }	024-007-00-3				96	mg/kg	2.774	266.318	mg/kg	0.0266 %		
11	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				3	mg/kg	1.884	5.652	mg/kg	0.000565 %		
12	TPH (C6 to C40) petroleum group			TPH		2420	mg/kg		2420	mg/kg	0.242 %		
13	naphthalene	601-052-00-2	202-049-5	91-20-3		1.94	mg/kg		1.94	mg/kg	0.000194 %		
14	acenaphthylene		205-917-1	208-96-8		0.18	mg/kg		0.18	mg/kg	0.000018 %		
15	acenaphthene		201-469-6	83-32-9		2.39	mg/kg		2.39	mg/kg	0.000239 %		
16	fluorene		201-695-5	86-73-7		2.06	mg/kg		2.06	mg/kg	0.000206 %		
17	phenanthrene		201-581-5	85-01-8		17.8	mg/kg		17.8	mg/kg	0.00178 %		
18	anthracene		204-371-1	120-12-7		4.67	mg/kg		4.67	mg/kg	0.000467 %		
19	fluoranthene		205-912-4	206-44-0		20.2	mg/kg		20.2	mg/kg	0.00202 %		
20	pyrene		204-927-3	129-00-0		18.5	mg/kg		18.5	mg/kg	0.00185 %		
21	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		8.74	mg/kg		8.74	mg/kg	0.000874 %		
22	chrysene	601-048-00-0	205-923-4	218-01-9		8.11	mg/kg		8.11	mg/kg	0.000811 %		
23	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		7.51	mg/kg		7.51	mg/kg	0.000751 %		
24	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		2.45	mg/kg		2.45	mg/kg	0.000245 %		
25	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		6.2	mg/kg		6.2	mg/kg	0.00062 %		
26	indeno[123-cd]pyrene		205-893-2	193-39-5		3.78	mg/kg		3.78	mg/kg	0.000378 %		
27	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		0.73	mg/kg		0.73	mg/kg	0.000073 %		
28	benzo[ghi]perylene		205-883-8	191-24-2		3.41	mg/kg		3.41	mg/kg	0.000341 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
29		pH				11.45	pH		11.45	pH	11.45 pH		
				PH									
30		phenol				0.3	mg/kg		0.3	mg/kg	0.00003 %		
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.312 %		

Key

	User supplied data
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP19/01[2]

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

Sample details

Sample Name:
TP19/01[2]
Sample Depth:
2 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	asbestos	650-013-00-6	- - - - - - -	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5		3.619 mg/kg		3.619 mg/kg	0.000362 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		11 mg/kg	1.32	14.524 mg/kg	0.00145 %		
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		1 mg/kg	1.142	1.142 mg/kg	0.000114 %		
5	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				29 mg/kg	1.923	55.769 mg/kg	0.00558 %		
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		58 mg/kg	1.126	65.302 mg/kg	0.00653 %		
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	136 mg/kg	1.56	212.135 mg/kg	0.0136 %		
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.48 mg/kg	1.353	0.65 mg/kg	0.000065 %		
9	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		26 mg/kg	2.976	77.383 mg/kg	0.00774 %		
10	zinc { zinc chromate }	024-007-00-3				158 mg/kg	2.774	438.315 mg/kg	0.0438 %		
11	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				1 mg/kg	1.884	1.884 mg/kg	0.000188 %		
12	benzene	601-020-00-8	200-753-7	71-43-2		<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									
13		toluene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
14		ethylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
15		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									
16		TPH (C6 to C40) petroleum group				735	mg/kg		735	mg/kg	0.0735 %		
				TPH									
17		naphthalene				3.6	mg/kg		3.6	mg/kg	0.00036 %		
		601-052-00-2	202-049-5	91-20-3									
18		acenaphthylene				0.15	mg/kg		0.15	mg/kg	0.000015 %		
			205-917-1	208-96-8									
19		acenaphthene				3.64	mg/kg		3.64	mg/kg	0.000364 %		
			201-469-6	83-32-9									
20		fluorene				2.71	mg/kg		2.71	mg/kg	0.000271 %		
			201-695-5	86-73-7									
21		phenanthrene				15.3	mg/kg		15.3	mg/kg	0.00153 %		
			201-581-5	85-01-8									
22		anthracene				3.91	mg/kg		3.91	mg/kg	0.000391 %		
			204-371-1	120-12-7									
23		fluoranthene				16.6	mg/kg		16.6	mg/kg	0.00166 %		
			205-912-4	206-44-0									
24		pyrene				14.8	mg/kg		14.8	mg/kg	0.00148 %		
			204-927-3	129-00-0									
25		benzo[a]anthracene				7.38	mg/kg		7.38	mg/kg	0.000738 %		
		601-033-00-9	200-280-6	56-55-3									
26		chrysene				6.86	mg/kg		6.86	mg/kg	0.000686 %		
		601-048-00-0	205-923-4	218-01-9									
27		benzo[b]fluoranthene				5.98	mg/kg		5.98	mg/kg	0.000598 %		
		601-034-00-4	205-911-9	205-99-2									
28		benzo[k]fluoranthene				2.02	mg/kg		2.02	mg/kg	0.000202 %		
		601-036-00-5	205-916-6	207-08-9									
29		benzo[a]pyrene; benzo[def]chrysene				4.91	mg/kg		4.91	mg/kg	0.000491 %		
		601-032-00-3	200-028-5	50-32-8									
30		indeno[123-cd]pyrene				3.26	mg/kg		3.26	mg/kg	0.000326 %		
			205-893-2	193-39-5									
31		dibenz[a,h]anthracene				0.63	mg/kg		0.63	mg/kg	0.000063 %		
		601-041-00-2	200-181-8	53-70-3									
32		benzo[ghi]perylene				2.78	mg/kg		2.78	mg/kg	0.000278 %		
			205-883-8	191-24-2									
33		pH				11.2	pH		11.2	pH	11.2 pH		
				PH									
34		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
35		1,1-dichloroethane and 1,2-dichloroethane (combined)				<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
			203-458-1, 200-863-5	107-06-2, 75-34-3									
36		carbon tetrachloride; tetrachloromethane				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		602-008-00-5	200-262-8	56-23-5									
37		trichloroethylene; trichloroethene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		602-027-00-9	201-167-4	79-01-6									
38		vinyl chloride; chloroethylene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		602-023-00-7	200-831-0	75-01-4									
										Total:	0.164 %		

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0735%)

Classification of sample: TP19/02

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

Sample details

Sample Name:	LoW Code:
TP19/02	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% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	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	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		1.8	mg/kg	3.22	5.796	mg/kg	0.00058 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1	mg/kg	1.142	1.142	mg/kg	0.000114 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				37	mg/kg	1.923	71.154	mg/kg	0.00712 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		58	mg/kg	1.126	65.302	mg/kg	0.00653 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	116	mg/kg	1.56	180.939	mg/kg	0.0116 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.61	mg/kg	1.353	0.826	mg/kg	0.0000826 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		25	mg/kg	2.976	74.407	mg/kg	0.00744 %		
9	zinc { zinc chromate }	024-007-00-3				134	mg/kg	2.774	371.736	mg/kg	0.0372 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		**<LOD**
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
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**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15	●	TPH (C6 to C40) petroleum group		TPH		380	mg/kg		380	mg/kg	0.038 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		1.56	mg/kg		1.56	mg/kg	0.000156 %		
17	●	acenaphthylene											
			205-917-1	208-96-8		0.09	mg/kg		0.09	mg/kg	0.000009 %		
18	●	acenaphthene											
			201-469-6	83-32-9		1.47	mg/kg		1.47	mg/kg	0.000147 %		
19	●	fluorene											
			201-695-5	86-73-7		1.09	mg/kg		1.09	mg/kg	0.000109 %		
20	●	phenanthrene											
			201-581-5	85-01-8		6.97	mg/kg		6.97	mg/kg	0.000697 %		
21	●	anthracene											
			204-371-1	120-12-7		1.6	mg/kg		1.6	mg/kg	0.00016 %		
22	●	fluoranthene											
			205-912-4	206-44-0		8.37	mg/kg		8.37	mg/kg	0.000837 %		
23	●	pyrene											
			204-927-3	129-00-0		7.63	mg/kg		7.63	mg/kg	0.000763 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		3.94	mg/kg		3.94	mg/kg	0.000394 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		3.74	mg/kg		3.74	mg/kg	0.000374 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		3.33	mg/kg		3.33	mg/kg	0.000333 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		1.05	mg/kg		1.05	mg/kg	0.000105 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		2.74	mg/kg		2.74	mg/kg	0.000274 %		
29	●	indeno[123-cd]pyrene											
			205-893-2	193-39-5		2.02	mg/kg		2.02	mg/kg	0.000202 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.37	mg/kg		0.37	mg/kg	0.000037 %		
31	●	benzo[ghi]perylene											
			205-883-8	191-24-2		1.7	mg/kg		1.7	mg/kg	0.00017 %		
32	●	pH		PH		10.02	pH		10.02	pH	10.02 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
34	●	1,1-dichloroethane and 1,2-dichloroethane (combined)											
			203-458-1, 200-863-5	107-06-2, 75-34-3		<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
35		carbon tetrachloride; tetrachloromethane											
		602-008-00-5	200-262-8	56-23-5		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
36		trichloroethylene; trichloroethene											
		602-027-00-9	201-167-4	79-01-6		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
37		vinyl chloride; chloroethylene											
		602-023-00-7	200-831-0	75-01-4		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
										Total:	0.116 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.038%)

Classification of sample: TP19/02[2]

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

Sample details

Sample Name:
TP19/02[2]
Sample Depth:
2 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	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	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 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.9	mg/kg	1.142	1.028	mg/kg	0.000103 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				29	mg/kg	1.923	55.769	mg/kg	0.00558 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		126	mg/kg	1.126	141.862	mg/kg	0.0142 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	172	mg/kg	1.56	268.288	mg/kg	0.0172 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.55	mg/kg	1.353	0.744	mg/kg	0.0000744 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		28	mg/kg	2.976	83.335	mg/kg	0.00833 %		
9	zinc { zinc chromate }	024-007-00-3				103	mg/kg	2.774	285.737	mg/kg	0.0286 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	TPH (C6 to C40) petroleum group			TPH		881	mg/kg		881	mg/kg	0.0881 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		2.4	mg/kg		2.4	mg/kg	0.00024 %		
13	acenaphthylene		205-917-1	208-96-8		0.44	mg/kg		0.44	mg/kg	0.000044 %		
14	acenaphthene		201-469-6	83-32-9		1.86	mg/kg		1.86	mg/kg	0.000186 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		fluorene				1.78	mg/kg		1.78	mg/kg	0.000178 %		
			201-695-5	86-73-7									
16		phenanthrene				12.2	mg/kg		12.2	mg/kg	0.00122 %		
			201-581-5	85-01-8									
17		anthracene				2.79	mg/kg		2.79	mg/kg	0.000279 %		
			204-371-1	120-12-7									
18		fluoranthene				11.4	mg/kg		11.4	mg/kg	0.00114 %		
			205-912-4	206-44-0									
19		pyrene				12.4	mg/kg		12.4	mg/kg	0.00124 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				6.31	mg/kg		6.31	mg/kg	0.000631 %		
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				6	mg/kg		6	mg/kg	0.0006 %		
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				4.93	mg/kg		4.93	mg/kg	0.000493 %		
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				1.5	mg/kg		1.5	mg/kg	0.00015 %		
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				4.23	mg/kg		4.23	mg/kg	0.000423 %		
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				2.75	mg/kg		2.75	mg/kg	0.000275 %		
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.61	mg/kg		0.61	mg/kg	0.000061 %		
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				2.39	mg/kg		2.39	mg/kg	0.000239 %		
			205-883-8	191-24-2									
28		pH				9.51	pH		9.51	pH	9.51 pH		
				PH									
29		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.172 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0881%)

Classification of sample: TP19/03

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

Sample details

Sample Name:
TP19/03
Sample Depth:
0.7 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		6	mg/kg	1.32	7.922	mg/kg	0.000792 %		
2	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 %		<LOD
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.8	mg/kg	1.142	0.914	mg/kg	0.0000914 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				24	mg/kg	1.923	46.154	mg/kg	0.00462 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		33	mg/kg	1.126	37.154	mg/kg	0.00372 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	93	mg/kg	1.56	145.063	mg/kg	0.0093 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.41	mg/kg	1.353	0.555	mg/kg	0.0000555 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		20	mg/kg	2.976	59.525	mg/kg	0.00595 %		
9	zinc { zinc chromate }	024-007-00-3				95	mg/kg	2.774	263.544	mg/kg	0.0264 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	TPH (C6 to C40) petroleum group			TPH		742	mg/kg		742	mg/kg	0.0742 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		0.3	mg/kg		0.3	mg/kg	0.00003 %		
13	acenaphthylene		205-917-1	208-96-8		0.04	mg/kg		0.04	mg/kg	0.000004 %		
14	acenaphthene		201-469-6	83-32-9		1.54	mg/kg		1.54	mg/kg	0.000154 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		fluorene											
			201-695-5	86-73-7		0.88	mg/kg		0.88	mg/kg	0.000088 %		
16		phenanthrene											
			201-581-5	85-01-8		7.76	mg/kg		7.76	mg/kg	0.000776 %		
17		anthracene											
			204-371-1	120-12-7		1.8	mg/kg		1.8	mg/kg	0.00018 %		
18		fluoranthene											
			205-912-4	206-44-0		12	mg/kg		12	mg/kg	0.0012 %		
19		pyrene											
			204-927-3	129-00-0		10.3	mg/kg		10.3	mg/kg	0.00103 %		
20		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		5.78	mg/kg		5.78	mg/kg	0.000578 %		
21		chrysene											
		601-048-00-0	205-923-4	218-01-9		5.25	mg/kg		5.25	mg/kg	0.000525 %		
22		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		5.31	mg/kg		5.31	mg/kg	0.000531 %		
23		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		1.74	mg/kg		1.74	mg/kg	0.000174 %		
24		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		4.06	mg/kg		4.06	mg/kg	0.000406 %		
25		indeno[123-cd]pyrene											
			205-893-2	193-39-5		2.67	mg/kg		2.67	mg/kg	0.000267 %		
26		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.48	mg/kg		0.48	mg/kg	0.000048 %		
27		benzo[ghi]perylene											
			205-883-8	191-24-2		2.13	mg/kg		2.13	mg/kg	0.000213 %		
28		pH											
				PH		9.26	pH		9.26	pH	9.26 pH		
29		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
										Total:	0.132 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0742%)

Classification of sample: TP19/04

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

Sample details

Sample Name:
TP19/04
Sample Depth:
1 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9	mg/kg	1.32	11.883	mg/kg	0.00119 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		1.6	mg/kg	3.22	5.152	mg/kg	0.000515 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.1	mg/kg	1.142	1.257	mg/kg	0.000126 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				23	mg/kg	1.923	44.231	mg/kg	0.00442 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		50	mg/kg	1.126	56.294	mg/kg	0.00563 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	106	mg/kg	1.56	165.34	mg/kg	0.0106 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.27	mg/kg	1.353	0.365	mg/kg	0.0000365 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		24	mg/kg	2.976	71.43	mg/kg	0.00714 %		
9	zinc { zinc chromate }	024-007-00-3				94	mg/kg	2.774	260.77	mg/kg	0.0261 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
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

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		TPH (C6 to C40) petroleum group		TPH		808	mg/kg		808	mg/kg	0.0808 %		
16		naphthalene				2.19	mg/kg		2.19	mg/kg	0.000219 %		
		601-052-00-2	202-049-5	91-20-3									
17		acenaphthylene				0.14	mg/kg		0.14	mg/kg	0.000014 %		
			205-917-1	208-96-8									
18		acenaphthene				2.19	mg/kg		2.19	mg/kg	0.000219 %		
			201-469-6	83-32-9									
19		fluorene				2.69	mg/kg		2.69	mg/kg	0.000269 %		
			201-695-5	86-73-7									
20		phenanthrene				10.3	mg/kg		10.3	mg/kg	0.00103 %		
			201-581-5	85-01-8									
21		anthracene				6.41	mg/kg		6.41	mg/kg	0.000641 %		
			204-371-1	120-12-7									
22		fluoranthene				11.7	mg/kg		11.7	mg/kg	0.00117 %		
			205-912-4	206-44-0									
23		pyrene				10.4	mg/kg		10.4	mg/kg	0.00104 %		
			204-927-3	129-00-0									
24		benzo[a]anthracene				5.06	mg/kg		5.06	mg/kg	0.000506 %		
		601-033-00-9	200-280-6	56-55-3									
25		chrysene				4.97	mg/kg		4.97	mg/kg	0.000497 %		
		601-048-00-0	205-923-4	218-01-9									
26		benzo[b]fluoranthene				4.87	mg/kg		4.87	mg/kg	0.000487 %		
		601-034-00-4	205-911-9	205-99-2									
27		benzo[k]fluoranthene				1.83	mg/kg		1.83	mg/kg	0.000183 %		
		601-036-00-5	205-916-6	207-08-9									
28		benzo[a]pyrene; benzo[def]chrysene				4.17	mg/kg		4.17	mg/kg	0.000417 %		
		601-032-00-3	200-028-5	50-32-8									
29		indeno[123-cd]pyrene				2.61	mg/kg		2.61	mg/kg	0.000261 %		
			205-893-2	193-39-5									
30		dibenz[a,h]anthracene				0.58	mg/kg		0.58	mg/kg	0.000058 %		
		601-041-00-2	200-181-8	53-70-3									
31		benzo[ghi]perylene				2.3	mg/kg		2.3	mg/kg	0.00023 %		
			205-883-8	191-24-2									
32		pH		PH		9.21	pH		9.21	pH	9.21 pH		
33		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.144 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0808%)

Classification of sample: TP19/04[2]

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

Sample details

Sample Name:
TP19/04[2]
Sample Depth:
2 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15	mg/kg	1.32	19.805	mg/kg	0.00198 %		
2	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 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1	mg/kg	1.142	1.142	mg/kg	0.000114 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				25	mg/kg	1.923	48.077	mg/kg	0.00481 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		49	mg/kg	1.126	55.169	mg/kg	0.00552 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	105	mg/kg	1.56	163.781	mg/kg	0.0105 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.47	mg/kg	1.353	0.636	mg/kg	0.0000636 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		26	mg/kg	2.976	77.383	mg/kg	0.00774 %		
9	zinc { zinc chromate }	024-007-00-3				119	mg/kg	2.774	330.123	mg/kg	0.033 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
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

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15	●	TPH (C6 to C40) petroleum group		TPH		658	mg/kg		658	mg/kg	0.0658 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		2.91	mg/kg		2.91	mg/kg	0.000291 %		
17	●	acenaphthylene											
			205-917-1	208-96-8		0.26	mg/kg		0.26	mg/kg	0.000026 %		
18	●	acenaphthene											
			201-469-6	83-32-9		3.02	mg/kg		3.02	mg/kg	0.000302 %		
19	●	fluorene											
			201-695-5	86-73-7		2.8	mg/kg		2.8	mg/kg	0.00028 %		
20	●	phenanthrene											
			201-581-5	85-01-8		18.2	mg/kg		18.2	mg/kg	0.00182 %		
21	●	anthracene											
			204-371-1	120-12-7		4.2	mg/kg		4.2	mg/kg	0.00042 %		
22	●	fluoranthene											
			205-912-4	206-44-0		16	mg/kg		16	mg/kg	0.0016 %		
23	●	pyrene											
			204-927-3	129-00-0		15.1	mg/kg		15.1	mg/kg	0.00151 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		6.34	mg/kg		6.34	mg/kg	0.000634 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		5.77	mg/kg		5.77	mg/kg	0.000577 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		5.07	mg/kg		5.07	mg/kg	0.000507 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		1.91	mg/kg		1.91	mg/kg	0.000191 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		4.76	mg/kg		4.76	mg/kg	0.000476 %		
29	●	indeno[123-cd]pyrene											
			205-893-2	193-39-5		2.9	mg/kg		2.9	mg/kg	0.00029 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.63	mg/kg		0.63	mg/kg	0.000063 %		
31	●	benzo[ghi]perylene											
			205-883-8	191-24-2		2.6	mg/kg		2.6	mg/kg	0.00026 %		
32	●	pH		PH		11.49	pH		11.49	pH	11.49 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
34	●	1,1-dichloroethane and 1,2-dichloroethane (combined)											
			203-458-1, 200-863-5	107-06-2, 75-34-3		<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
35		carbon tetrachloride; tetrachloromethane											
		602-008-00-5	200-262-8	56-23-5		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
36		trichloroethylene; trichloroethene											
		602-027-00-9	201-167-4	79-01-6		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
37		vinyl chloride; chloroethylene											
		602-023-00-7	200-831-0	75-01-4		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
										Total:	0.14 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0658%)

Classification of sample: TP19/05

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

Sample details

Sample Name:
TP19/05
Sample Depth:
1 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	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	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2.4	mg/kg	3.22	7.728	mg/kg	0.000773 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.2	mg/kg	1.142	1.371	mg/kg	0.000137 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				30	mg/kg	1.923	57.692	mg/kg	0.00577 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		52	mg/kg	1.126	58.546	mg/kg	0.00585 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	165	mg/kg	1.56	257.37	mg/kg	0.0165 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.53	mg/kg	1.353	0.717	mg/kg	0.0000717 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		26	mg/kg	2.976	77.383	mg/kg	0.00774 %		
9	zinc { zinc chromate }	024-007-00-3				117	mg/kg	2.774	324.575	mg/kg	0.0325 %		
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 }	006-007-00-5				1	mg/kg	1.884	1.884	mg/kg	0.000188 %		
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<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									
15		TPH (C6 to C40) petroleum group		TPH		583	mg/kg		583	mg/kg	0.0583 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		1.91	mg/kg		1.91	mg/kg	0.000191 %		
17		acenaphthylene											
			205-917-1	208-96-8		0.17	mg/kg		0.17	mg/kg	0.000017 %		
18		acenaphthene											
			201-469-6	83-32-9		2.69	mg/kg		2.69	mg/kg	0.000269 %		
19		fluorene											
			201-695-5	86-73-7		2.16	mg/kg		2.16	mg/kg	0.000216 %		
20		phenanthrene											
			201-581-5	85-01-8		12.8	mg/kg		12.8	mg/kg	0.00128 %		
21		anthracene											
			204-371-1	120-12-7		3.25	mg/kg		3.25	mg/kg	0.000325 %		
22		fluoranthene											
			205-912-4	206-44-0		13.1	mg/kg		13.1	mg/kg	0.00131 %		
23		pyrene											
			204-927-3	129-00-0		11.5	mg/kg		11.5	mg/kg	0.00115 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		5.29	mg/kg		5.29	mg/kg	0.000529 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		4.96	mg/kg		4.96	mg/kg	0.000496 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		4.73	mg/kg		4.73	mg/kg	0.000473 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		1.81	mg/kg		1.81	mg/kg	0.000181 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		4.01	mg/kg		4.01	mg/kg	0.000401 %		
29		indeno[123-cd]pyrene											
			205-893-2	193-39-5		2.85	mg/kg		2.85	mg/kg	0.000285 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.62	mg/kg		0.62	mg/kg	0.000062 %		
31		benzo[ghi]perylene											
			205-883-8	191-24-2		2.53	mg/kg		2.53	mg/kg	0.000253 %		
32		pH											
				PH		10.17	pH		10.17	pH	10.17 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
										Total:	0.137 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0583%)

Classification of sample: TP19/06

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

Sample details

Sample Name:	LoW Code:
TP19/06	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% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7	mg/kg	1.32	9.242	mg/kg	0.000924 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2	mg/kg	3.22	6.44	mg/kg	0.000644 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.8	mg/kg	1.142	0.914	mg/kg	0.0000914 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				22	mg/kg	1.923	42.308	mg/kg	0.00423 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		32	mg/kg	1.126	36.028	mg/kg	0.0036 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	49	mg/kg	1.56	76.431	mg/kg	0.0049 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17	mg/kg	1.353	<0.23	mg/kg	<0.000023 %		<LOD
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		31	mg/kg	2.976	92.264	mg/kg	0.00923 %		
9	zinc { zinc chromate }	024-007-00-3				52	mg/kg	2.774	144.256	mg/kg	0.0144 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<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									
15	●	TPH (C6 to C40) petroleum group		TPH		262	mg/kg		262	mg/kg	0.0262 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		0.26	mg/kg		0.26	mg/kg	0.000026 %		
17	●	acenaphthylene											
			205-917-1	208-96-8		0.02	mg/kg		0.02	mg/kg	0.000002 %		
18	●	acenaphthene											
			201-469-6	83-32-9		0.37	mg/kg		0.37	mg/kg	0.000037 %		
19	●	fluorene											
			201-695-5	86-73-7		0.28	mg/kg		0.28	mg/kg	0.000028 %		
20	●	phenanthrene											
			201-581-5	85-01-8		2.02	mg/kg		2.02	mg/kg	0.000202 %		
21	●	anthracene											
			204-371-1	120-12-7		0.57	mg/kg		0.57	mg/kg	0.000057 %		
22	●	fluoranthene											
			205-912-4	206-44-0		2.93	mg/kg		2.93	mg/kg	0.000293 %		
23	●	pyrene											
			204-927-3	129-00-0		2.75	mg/kg		2.75	mg/kg	0.000275 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		1.45	mg/kg		1.45	mg/kg	0.000145 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		1.58	mg/kg		1.58	mg/kg	0.000158 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		1.62	mg/kg		1.62	mg/kg	0.000162 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		0.54	mg/kg		0.54	mg/kg	0.000054 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		1.31	mg/kg		1.31	mg/kg	0.000131 %		
29	●	indeno[123-cd]pyrene											
			205-893-2	193-39-5		0.84	mg/kg		0.84	mg/kg	0.000084 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.19	mg/kg		0.19	mg/kg	0.000019 %		
31	●	benzo[ghi]perylene											
			205-883-8	191-24-2		0.74	mg/kg		0.74	mg/kg	0.000074 %		
32	●	pH		PH		7.97	pH		7.97	pH	7.97 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
34	●	1,1-dichloroethane and 1,2-dichloroethane (combined)											
			203-458-1, 200-863-5	107-06-2, 75-34-3		<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
35		carbon tetrachloride; tetrachloromethane											
		602-008-00-5	200-262-8	56-23-5		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
36		trichloroethylene; trichloroethene											
		602-027-00-9	201-167-4	79-01-6		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
37		vinyl chloride; chloroethylene											
		602-023-00-7	200-831-0	75-01-4		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
										Total:	0.0667 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0262%)

Classification of sample: TP19/07

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

Sample details

Sample Name:	LoW Code:	
TP19/07	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:		
0.2 m	Entry:	17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to hazardous because Elevated TPHs over 1000mg/kg. Free product recorded in occasional samples during post-investigation monitoring. Loss on ignition tests carried out within top 2m across the site. Of those samples, 50% recorded elevated loss of ignition above the hazardous waste threshold.

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.129%)

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

Hazard Statements hit:

Carc. 1B; 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:

TPH (C6 to C40) petroleum group: (conc.: 0.129%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.129%)

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		4	mg/kg	1.32	5.281	mg/kg	0.000528 %		
2	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 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.6	mg/kg	1.142	0.685	mg/kg	0.0000685 %		

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex } 024-017-00-8		28 mg/kg	1.923	53.846 mg/kg	0.00538 %		
5	copper { dicopper oxide; copper (I) oxide } 029-002-00-X / 215-270-7 / 1317-39-1		40 mg/kg	1.126	45.036 mg/kg	0.0045 %		
6	lead { lead chromate } 082-004-00-2 / 231-846-0 / 7758-97-6	1	49 mg/kg	1.56	76.431 mg/kg	0.0049 %		
7	mercury { mercury dichloride } 080-010-00-X / 231-299-8 / 7487-94-7		0.37 mg/kg	1.353	0.501 mg/kg	0.0000501 %		
8	nickel { nickel chromate } 028-035-00-7 / 238-766-5 / 14721-18-7		21 mg/kg	2.976	62.502 mg/kg	0.00625 %		
9	zinc { zinc chromate } 024-007-00-3		64 mg/kg	2.774	177.545 mg/kg	0.0178 %		
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 } 006-007-00-5		<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		**<LOD**
11	TPH (C6 to C40) petroleum group TPH		1290 mg/kg		1290 mg/kg	0.129 %		
12	naphthalene 601-052-00-2 / 202-049-5 / 91-20-3		0.3 mg/kg		0.3 mg/kg	0.00003 %		
13	acenaphthylene 205-917-1 / 208-96-8		0.05 mg/kg		0.05 mg/kg	0.000005 %		
14	acenaphthene 201-469-6 / 83-32-9		1.59 mg/kg		1.59 mg/kg	0.000159 %		
15	fluorene 201-695-5 / 86-73-7		1.11 mg/kg		1.11 mg/kg	0.000111 %		
16	phenanthrene 201-581-5 / 85-01-8		9.46 mg/kg		9.46 mg/kg	0.000946 %		
17	anthracene 204-371-1 / 120-12-7		2.62 mg/kg		2.62 mg/kg	0.000262 %		
18	fluoranthene 205-912-4 / 206-44-0		13.3 mg/kg		13.3 mg/kg	0.00133 %		
19	pyrene 204-927-3 / 129-00-0		11.6 mg/kg		11.6 mg/kg	0.00116 %		
20	benzo[a]anthracene 601-033-00-9 / 200-280-6 / 56-55-3		6.08 mg/kg		6.08 mg/kg	0.000608 %		
21	chrysene 601-048-00-0 / 205-923-4 / 218-01-9		5.67 mg/kg		5.67 mg/kg	0.000567 %		
22	benzo[b]fluoranthene 601-034-00-4 / 205-911-9 / 205-99-2		5.91 mg/kg		5.91 mg/kg	0.000591 %		
23	benzo[k]fluoranthene 601-036-00-5 / 205-916-6 / 207-08-9		2.15 mg/kg		2.15 mg/kg	0.000215 %		
24	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3 / 200-028-5 / 50-32-8		4.94 mg/kg		4.94 mg/kg	0.000494 %		
25	indeno[123-cd]pyrene 205-893-2 / 193-39-5		3.1 mg/kg		3.1 mg/kg	0.00031 %		
26	dibenz[a,h]anthracene 601-041-00-2 / 200-181-8 / 53-70-3		0.71 mg/kg		0.71 mg/kg	0.000071 %		
27	benzo[ghi]perylene 205-883-8 / 191-24-2		2.94 mg/kg		2.94 mg/kg	0.000294 %		
28	pH PH		10.28 pH		10.28 pH	10.28 pH		
29	phenol 604-001-00-2 / 203-632-7 / 108-95-2		<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		**<LOD**
						Total: 0.176 %		

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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP19/07[2]

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

Sample details

Sample Name:	LoW Code:
TP19/07[2]	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% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		26 mg/kg	1.32	34.328 mg/kg	0.00343 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2 mg/kg	3.22	6.44 mg/kg	0.000644 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.8 mg/kg	1.142	0.914 mg/kg	0.0000914 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				24 mg/kg	1.923	46.154 mg/kg	0.00462 %		
5	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 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	188 mg/kg	1.56	293.245 mg/kg	0.0188 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.71 mg/kg	1.353	0.961 mg/kg	0.0000961 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		28 mg/kg	2.976	83.335 mg/kg	0.00833 %		
9	zinc { zinc chromate }	024-007-00-3				84 mg/kg	2.774	233.028 mg/kg	0.0233 %		
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 }	006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		**<LOD**
11	TPH (C6 to C40) petroleum group			TPH		608 mg/kg		608 mg/kg	0.0608 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		0.3 mg/kg		0.3 mg/kg	0.00003 %		
13	acenaphthylene		205-917-1	208-96-8		0.04 mg/kg		0.04 mg/kg	0.000004 %		
14	acenaphthene		201-469-6	83-32-9		0.41 mg/kg		0.41 mg/kg	0.000041 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15	●	fluorene				0.41	mg/kg		0.41	mg/kg	0.000041 %		
			201-695-5	86-73-7									
16	●	phenanthrene				2.9	mg/kg		2.9	mg/kg	0.00029 %		
			201-581-5	85-01-8									
17	●	anthracene				0.62	mg/kg		0.62	mg/kg	0.000062 %		
			204-371-1	120-12-7									
18	●	fluoranthene				3.61	mg/kg		3.61	mg/kg	0.000361 %		
			205-912-4	206-44-0									
19	●	pyrene				3.7	mg/kg		3.7	mg/kg	0.00037 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				1.91	mg/kg		1.91	mg/kg	0.000191 %		
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				1.96	mg/kg		1.96	mg/kg	0.000196 %		
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				1.79	mg/kg		1.79	mg/kg	0.000179 %		
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				0.66	mg/kg		0.66	mg/kg	0.000066 %		
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				1.49	mg/kg		1.49	mg/kg	0.000149 %		
		601-032-00-3	200-028-5	50-32-8									
25	●	indeno[123-cd]pyrene				0.8	mg/kg		0.8	mg/kg	0.00008 %		
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.21	mg/kg		0.21	mg/kg	0.000021 %		
		601-041-00-2	200-181-8	53-70-3									
27	●	benzo[ghi]perylene				0.73	mg/kg		0.73	mg/kg	0.000073 %		
			205-883-8	191-24-2									
28	●	pH				8.9	pH		8.9	pH	8.9 pH		
				PH									
29		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.129 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0608%)

Classification of sample: TP19/08

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

Sample details

Sample Name:	LoW Code:	
TP19/08	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:		
0.2 m	Entry:	17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to hazardous because Elevated TPHs over 1000mg/kg. Free product recorded in occasional samples during post-investigation monitoring. Loss on ignition tests carried out within top 2m across the site. Of those samples, 50% recorded elevated loss of ignition above the hazardous waste threshold.

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.168%)

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

Hazard Statements hit:

Carc. 1B; 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:

TPH (C6 to C40) petroleum group: (conc.: 0.168%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.168%)

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		5 mg/kg	1.32	6.602 mg/kg	0.00066 %		
2	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 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.6 mg/kg	1.142	0.685 mg/kg	0.0000685 %		

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				26	mg/kg	1.923	50	mg/kg	0.005 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		28	mg/kg	1.126	31.525	mg/kg	0.00315 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	61	mg/kg	1.56	95.149	mg/kg	0.0061 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.39	mg/kg	1.353	0.528	mg/kg	0.0000528 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		30	mg/kg	2.976	89.288	mg/kg	0.00893 %		
9	zinc { zinc chromate }	024-007-00-3				70	mg/kg	2.774	194.19	mg/kg	0.0194 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	TPH (C6 to C40) petroleum group			TPH		1680	mg/kg		1680	mg/kg	0.168 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		0.39	mg/kg		0.39	mg/kg	0.000039 %		
13	acenaphthylene		205-917-1	208-96-8		0.1	mg/kg		0.1	mg/kg	0.00001 %		
14	acenaphthene		201-469-6	83-32-9		1.5	mg/kg		1.5	mg/kg	0.00015 %		
15	fluorene		201-695-5	86-73-7		1.08	mg/kg		1.08	mg/kg	0.000108 %		
16	phenanthrene		201-581-5	85-01-8		11.1	mg/kg		11.1	mg/kg	0.00111 %		
17	anthracene		204-371-1	120-12-7		3.19	mg/kg		3.19	mg/kg	0.000319 %		
18	fluoranthene		205-912-4	206-44-0		22	mg/kg		22	mg/kg	0.0022 %		
19	pyrene		204-927-3	129-00-0		22.7	mg/kg		22.7	mg/kg	0.00227 %		
20	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		11.6	mg/kg		11.6	mg/kg	0.00116 %		
21	chrysene	601-048-00-0	205-923-4	218-01-9		10.8	mg/kg		10.8	mg/kg	0.00108 %		
22	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		9.7	mg/kg		9.7	mg/kg	0.00097 %		
23	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		3.59	mg/kg		3.59	mg/kg	0.000359 %		
24	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		10.1	mg/kg		10.1	mg/kg	0.00101 %		
25	indeno[123-cd]pyrene		205-893-2	193-39-5		6.63	mg/kg		6.63	mg/kg	0.000663 %		
26	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		1.35	mg/kg		1.35	mg/kg	0.000135 %		
27	benzo[ghi]perylene		205-883-8	191-24-2		5.64	mg/kg		5.64	mg/kg	0.000564 %		
28	pH			PH		9.93	pH		9.93	pH	9.93 pH		
29	phenol	604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
										Total:	0.224 %		

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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP19/08[2]

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

Sample details

Sample Name:
TP19/08[2]
Sample Depth:
1 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		14	mg/kg	1.32	18.485	mg/kg	0.00185 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2	mg/kg	3.22	6.44	mg/kg	0.000644 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.9	mg/kg	1.142	1.028	mg/kg	0.000103 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				39	mg/kg	1.923	75	mg/kg	0.0075 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		50	mg/kg	1.126	56.294	mg/kg	0.00563 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	117	mg/kg	1.56	182.498	mg/kg	0.0117 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.37	mg/kg	1.353	0.501	mg/kg	0.0000501 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		31	mg/kg	2.976	92.264	mg/kg	0.00923 %		
9	zinc { zinc chromate }	024-007-00-3				90	mg/kg	2.774	249.673	mg/kg	0.025 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
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

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		TPH (C6 to C40) petroleum group		TPH		461	mg/kg		461	mg/kg	0.0461 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		1.61	mg/kg		1.61	mg/kg	0.000161 %		
17		acenaphthylene											
			205-917-1	208-96-8		0.13	mg/kg		0.13	mg/kg	0.000013 %		
18		acenaphthene											
			201-469-6	83-32-9		1.71	mg/kg		1.71	mg/kg	0.000171 %		
19		fluorene											
			201-695-5	86-73-7		1.79	mg/kg		1.79	mg/kg	0.000179 %		
20		phenanthrene											
			201-581-5	85-01-8		10.2	mg/kg		10.2	mg/kg	0.00102 %		
21		anthracene											
			204-371-1	120-12-7		2.52	mg/kg		2.52	mg/kg	0.000252 %		
22		fluoranthene											
			205-912-4	206-44-0		12.1	mg/kg		12.1	mg/kg	0.00121 %		
23		pyrene											
			204-927-3	129-00-0		11.2	mg/kg		11.2	mg/kg	0.00112 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		5.58	mg/kg		5.58	mg/kg	0.000558 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		5.18	mg/kg		5.18	mg/kg	0.000518 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		5.08	mg/kg		5.08	mg/kg	0.000508 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		2	mg/kg		2	mg/kg	0.0002 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		4.43	mg/kg		4.43	mg/kg	0.000443 %		
29		indeno[123-cd]pyrene											
			205-893-2	193-39-5		2.79	mg/kg		2.79	mg/kg	0.000279 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.6	mg/kg		0.6	mg/kg	0.00006 %		
31		benzo[ghi]perylene											
			205-883-8	191-24-2		2.42	mg/kg		2.42	mg/kg	0.000242 %		
32		pH											
				PH		8.5	pH		8.5	pH	8.5 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		0.4	mg/kg		0.4	mg/kg	0.00004 %		
34		1,1-dichloroethane and 1,2-dichloroethane (combined)											
			203-458-1, 200-863-5	107-06-2, 75-34-3		<2	mg/kg		<2	mg/kg	<0.0002 %		**<LOD**
35		carbon tetrachloride; tetrachloromethane											
		602-008-00-5	200-262-8	56-23-5		<1	mg/kg		<1	mg/kg	<0.0001 %		**<LOD**
36		trichloroethylene; trichloroethene											
		602-027-00-9	201-167-4	79-01-6		<1	mg/kg		<1	mg/kg	<0.0001 %		**<LOD**
37		vinyl chloride; chloroethylene											
		602-023-00-7	200-831-0	75-01-4		<1	mg/kg		<1	mg/kg	<0.0001 %		**<LOD**
										Total:	0.115 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0461%)

Classification of sample: TP19/10

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

Sample details

Sample Name:	LoW Code:
TP19/10	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% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9	mg/kg	1.32	11.883	mg/kg	0.00119 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2.1	mg/kg	3.22	6.762	mg/kg	0.000676 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.1	mg/kg	1.142	1.257	mg/kg	0.000126 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				27	mg/kg	1.923	51.923	mg/kg	0.00519 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		55	mg/kg	1.126	61.924	mg/kg	0.00619 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	122	mg/kg	1.56	190.297	mg/kg	0.0122 %		
7	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 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		24	mg/kg	2.976	71.43	mg/kg	0.00714 %		
9	zinc { zinc chromate }	024-007-00-3				130	mg/kg	2.774	360.639	mg/kg	0.0361 %		
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 }	006-007-00-5				4	mg/kg	1.884	7.536	mg/kg	0.000754 %		
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
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**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15	●	TPH (C6 to C40) petroleum group		TPH		437	mg/kg		437	mg/kg	0.0437 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		1.42	mg/kg		1.42	mg/kg	0.000142 %		
17	●	acenaphthylene											
			205-917-1	208-96-8		0.14	mg/kg		0.14	mg/kg	0.000014 %		
18	●	acenaphthene											
			201-469-6	83-32-9		1.3	mg/kg		1.3	mg/kg	0.00013 %		
19	●	fluorene											
			201-695-5	86-73-7		1.21	mg/kg		1.21	mg/kg	0.000121 %		
20	●	phenanthrene											
			201-581-5	85-01-8		7.68	mg/kg		7.68	mg/kg	0.000768 %		
21	●	anthracene											
			204-371-1	120-12-7		2.29	mg/kg		2.29	mg/kg	0.000229 %		
22	●	fluoranthene											
			205-912-4	206-44-0		11.8	mg/kg		11.8	mg/kg	0.00118 %		
23	●	pyrene											
			204-927-3	129-00-0		10.9	mg/kg		10.9	mg/kg	0.00109 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		4.37	mg/kg		4.37	mg/kg	0.000437 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		4.26	mg/kg		4.26	mg/kg	0.000426 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		4.08	mg/kg		4.08	mg/kg	0.000408 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		1.53	mg/kg		1.53	mg/kg	0.000153 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		3.55	mg/kg		3.55	mg/kg	0.000355 %		
29	●	indeno[123-cd]pyrene											
			205-893-2	193-39-5		2.23	mg/kg		2.23	mg/kg	0.000223 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.5	mg/kg		0.5	mg/kg	0.00005 %		
31	●	benzo[ghi]perylene											
			205-883-8	191-24-2		1.97	mg/kg		1.97	mg/kg	0.000197 %		
32	●	pH		PH		9.45	pH		9.45	pH	9.45 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
										Total:	0.119 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0437%)

Classification of sample: TP19/11

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

Sample details

Sample Name:	LoW Code:	
TP19/11	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:		
0.5 m	Entry:	17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to hazardous because Elevated TPHs over 1000mg/kg. Free product recorded in occasional samples during post-investigation monitoring. Loss on ignition tests carried out within top 2m across the site. Of those samples, 50% recorded elevated loss of ignition above the hazardous waste threshold.

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.108%)

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

Hazard Statements hit:

Carc. 1B; 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:

TPH (C6 to C40) petroleum group: (conc.: 0.108%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.108%)

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	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	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 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1	mg/kg	1.142	1.142	mg/kg	0.000114 %		

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				30	mg/kg	1.923	57.692	mg/kg	0.00577 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		56	mg/kg	1.126	63.05	mg/kg	0.0063 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	102	mg/kg	1.56	159.101	mg/kg	0.0102 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.58	mg/kg	1.353	0.785	mg/kg	0.0000785 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		27	mg/kg	2.976	80.359	mg/kg	0.00804 %		
9	zinc { zinc chromate }	024-007-00-3				128	mg/kg	2.774	355.091	mg/kg	0.0355 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	TPH (C6 to C40) petroleum group			TPH		1080	mg/kg		1080	mg/kg	0.108 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		1.37	mg/kg		1.37	mg/kg	0.000137 %		
13	acenaphthylene		205-917-1	208-96-8		0.09	mg/kg		0.09	mg/kg	0.000009 %		
14	acenaphthene		201-469-6	83-32-9		1.17	mg/kg		1.17	mg/kg	0.000117 %		
15	fluorene		201-695-5	86-73-7		0.77	mg/kg		0.77	mg/kg	0.000077 %		
16	phenanthrene		201-581-5	85-01-8		6.32	mg/kg		6.32	mg/kg	0.000632 %		
17	anthracene		204-371-1	120-12-7		1.58	mg/kg		1.58	mg/kg	0.000158 %		
18	fluoranthene		205-912-4	206-44-0		10.2	mg/kg		10.2	mg/kg	0.00102 %		
19	pyrene		204-927-3	129-00-0		9.38	mg/kg		9.38	mg/kg	0.000938 %		
20	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		4.06	mg/kg		4.06	mg/kg	0.000406 %		
21	chrysene	601-048-00-0	205-923-4	218-01-9		3.91	mg/kg		3.91	mg/kg	0.000391 %		
22	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		3.86	mg/kg		3.86	mg/kg	0.000386 %		
23	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		1.36	mg/kg		1.36	mg/kg	0.000136 %		
24	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		3.31	mg/kg		3.31	mg/kg	0.000331 %		
25	indeno[123-cd]pyrene		205-893-2	193-39-5		2.22	mg/kg		2.22	mg/kg	0.000222 %		
26	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		0.5	mg/kg		0.5	mg/kg	0.00005 %		
27	benzo[ghi]perylene		205-883-8	191-24-2		2	mg/kg		2	mg/kg	0.0002 %		
28	pH			PH		9.94	pH		9.94	pH	9.94 pH		
29	phenol	604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
										Total:	0.181 %		

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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP19/11[2]

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

Sample details

Sample Name:	LoW Code:
TP19/11[2]	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% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9	mg/kg	1.32	11.883	mg/kg	0.00119 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2.1	mg/kg	3.22	6.762	mg/kg	0.000676 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.1	mg/kg	1.142	1.257	mg/kg	0.000126 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				31	mg/kg	1.923	59.615	mg/kg	0.00596 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		63	mg/kg	1.126	70.931	mg/kg	0.00709 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	140	mg/kg	1.56	218.374	mg/kg	0.014 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.53	mg/kg	1.353	0.717	mg/kg	0.0000717 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		27	mg/kg	2.976	80.359	mg/kg	0.00804 %		
9	zinc { zinc chromate }	024-007-00-3				161	mg/kg	2.774	446.638	mg/kg	0.0447 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		**<LOD**
11	TPH (C6 to C40) petroleum group			TPH		853	mg/kg		853	mg/kg	0.0853 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		1.14	mg/kg		1.14	mg/kg	0.000114 %		
13	acenaphthylene		205-917-1	208-96-8		0.09	mg/kg		0.09	mg/kg	0.000009 %		
14	acenaphthene		201-469-6	83-32-9		1.27	mg/kg		1.27	mg/kg	0.000127 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		fluorene				0.82	mg/kg		0.82	mg/kg	0.000082 %		
			201-695-5	86-73-7									
16		phenanthrene				6.63	mg/kg		6.63	mg/kg	0.000663 %		
			201-581-5	85-01-8									
17		anthracene				1.65	mg/kg		1.65	mg/kg	0.000165 %		
			204-371-1	120-12-7									
18		fluoranthene				8.37	mg/kg		8.37	mg/kg	0.000837 %		
			205-912-4	206-44-0									
19		pyrene				7.74	mg/kg		7.74	mg/kg	0.000774 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				4.05	mg/kg		4.05	mg/kg	0.000405 %		
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				3.98	mg/kg		3.98	mg/kg	0.000398 %		
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				3.89	mg/kg		3.89	mg/kg	0.000389 %		
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				1.45	mg/kg		1.45	mg/kg	0.000145 %		
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				3.35	mg/kg		3.35	mg/kg	0.000335 %		
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				2.11	mg/kg		2.11	mg/kg	0.000211 %		
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.47	mg/kg		0.47	mg/kg	0.000047 %		
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				1.88	mg/kg		1.88	mg/kg	0.000188 %		
			205-883-8	191-24-2									
28		pH				10.15	pH		10.15	pH	10.15 pH		
				PH									
29		phenol				0.4	mg/kg		0.4	mg/kg	0.00004 %		
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.172 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0853%)

Classification of sample: TP19/12

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

Sample details

Sample Name:
TP19/12
Sample Depth:
0.5 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7	mg/kg	1.32	9.242	mg/kg	0.000924 %		
2	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 %		<LOD
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.8	mg/kg	1.142	0.914	mg/kg	0.0000914 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				22	mg/kg	1.923	42.308	mg/kg	0.00423 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		39	mg/kg	1.126	43.91	mg/kg	0.00439 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	71	mg/kg	1.56	110.747	mg/kg	0.0071 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.36	mg/kg	1.353	0.487	mg/kg	0.0000487 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		20	mg/kg	2.976	59.525	mg/kg	0.00595 %		
9	zinc { zinc chromate }	024-007-00-3				91	mg/kg	2.774	252.447	mg/kg	0.0252 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	TPH (C6 to C40) petroleum group			TPH		761	mg/kg		761	mg/kg	0.0761 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		0.12	mg/kg		0.12	mg/kg	0.000012 %		
13	acenaphthylene		205-917-1	208-96-8		0.05	mg/kg		0.05	mg/kg	0.000005 %		
14	acenaphthene		201-469-6	83-32-9		0.45	mg/kg		0.45	mg/kg	0.000045 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15	●	fluorene				0.25	mg/kg		0.25	mg/kg	0.000025 %		
			201-695-5	86-73-7									
16	●	phenanthrene				3.23	mg/kg		3.23	mg/kg	0.000323 %		
			201-581-5	85-01-8									
17	●	anthracene				0.76	mg/kg		0.76	mg/kg	0.000076 %		
			204-371-1	120-12-7									
18	●	fluoranthene				5.23	mg/kg		5.23	mg/kg	0.000523 %		
			205-912-4	206-44-0									
19	●	pyrene				5.11	mg/kg		5.11	mg/kg	0.000511 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				2.73	mg/kg		2.73	mg/kg	0.000273 %		
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				2.71	mg/kg		2.71	mg/kg	0.000271 %		
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				2.58	mg/kg		2.58	mg/kg	0.000258 %		
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				0.95	mg/kg		0.95	mg/kg	0.000095 %		
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				2.33	mg/kg		2.33	mg/kg	0.000233 %		
		601-032-00-3	200-028-5	50-32-8									
25	●	indeno[123-cd]pyrene				1.68	mg/kg		1.68	mg/kg	0.000168 %		
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.39	mg/kg		0.39	mg/kg	0.000039 %		
		601-041-00-2	200-181-8	53-70-3									
27	●	benzo[ghi]perylene				1.58	mg/kg		1.58	mg/kg	0.000158 %		
			205-883-8	191-24-2									
28	●	pH				8.98	pH		8.98	pH	8.98 pH		
				PH									
29		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.128 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0761%)

Classification of sample: TP19/12[2]

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

Sample details

Sample Name:	LoW Code:
TP19/12[2]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
1.2 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		5	mg/kg	1.32	6.602	mg/kg	0.00066 %		
2	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 %		<LOD
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.7	mg/kg	1.142	0.8	mg/kg	0.00008 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				15	mg/kg	1.923	28.846	mg/kg	0.00288 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		21	mg/kg	1.126	23.644	mg/kg	0.00236 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	37	mg/kg	1.56	57.713	mg/kg	0.0037 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.22	mg/kg	1.353	0.298	mg/kg	0.0000298 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		13	mg/kg	2.976	38.691	mg/kg	0.00387 %		
9	zinc { zinc chromate }	024-007-00-3				91	mg/kg	2.774	252.447	mg/kg	0.0252 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
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

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15	●	TPH (C6 to C40) petroleum group		TPH		44	mg/kg		44	mg/kg	0.0044 %		
16		naphthalene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
17	●	acenaphthylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			205-917-1	208-96-8									
18	●	acenaphthene				0.02	mg/kg		0.02	mg/kg	0.000002 %		
			201-469-6	83-32-9									
19	●	fluorene				0.02	mg/kg		0.02	mg/kg	0.000002 %		
			201-695-5	86-73-7									
20	●	phenanthrene				0.17	mg/kg		0.17	mg/kg	0.000017 %		
			201-581-5	85-01-8									
21	●	anthracene				0.04	mg/kg		0.04	mg/kg	0.000004 %		
			204-371-1	120-12-7									
22	●	fluoranthene				0.24	mg/kg		0.24	mg/kg	0.000024 %		
			205-912-4	206-44-0									
23	●	pyrene				0.22	mg/kg		0.22	mg/kg	0.000022 %		
			204-927-3	129-00-0									
24		benzo[a]anthracene				0.12	mg/kg		0.12	mg/kg	0.000012 %		
		601-033-00-9	200-280-6	56-55-3									
25		chrysene				0.12	mg/kg		0.12	mg/kg	0.000012 %		
		601-048-00-0	205-923-4	218-01-9									
26		benzo[b]fluoranthene				0.12	mg/kg		0.12	mg/kg	0.000012 %		
		601-034-00-4	205-911-9	205-99-2									
27		benzo[k]fluoranthene				<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<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 %		
		601-032-00-3	200-028-5	50-32-8									
29	●	indeno[123-cd]pyrene				0.08	mg/kg		0.08	mg/kg	0.000008 %		
			205-893-2	193-39-5									
30		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
31	●	benzo[ghi]perylene				0.07	mg/kg		0.07	mg/kg	0.000007 %		
			205-883-8	191-24-2									
32	●	pH		PH		9.3	pH		9.3	pH	9.3 pH		
33		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0439 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0044%)

Classification of sample: TP19/12[3]

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

Sample details

Sample Name:
TP19/12[3]
Sample Depth:
1.6 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		16	mg/kg	1.32	21.125	mg/kg	0.00211 %		
2	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 %		<LOD
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.9	mg/kg	1.142	1.028	mg/kg	0.000103 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				19	mg/kg	1.923	36.538	mg/kg	0.00365 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		57	mg/kg	1.126	64.176	mg/kg	0.00642 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	83	mg/kg	1.56	129.465	mg/kg	0.0083 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.21	mg/kg	1.353	0.284	mg/kg	0.0000284 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		40	mg/kg	2.976	119.051	mg/kg	0.0119 %		
9	zinc { zinc chromate }	024-007-00-3				105	mg/kg	2.774	291.285	mg/kg	0.0291 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	TPH (C6 to C40) petroleum group			TPH		109	mg/kg		109	mg/kg	0.0109 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		0.16	mg/kg		0.16	mg/kg	0.000016 %		
13	acenaphthylene		205-917-1	208-96-8		0.02	mg/kg		0.02	mg/kg	0.000002 %		
14	acenaphthene		201-469-6	83-32-9		0.29	mg/kg		0.29	mg/kg	0.000029 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15	●	fluorene				0.21	mg/kg		0.21	mg/kg	0.000021 %		
			201-695-5	86-73-7									
16	●	phenanthrene				1.26	mg/kg		1.26	mg/kg	0.000126 %		
			201-581-5	85-01-8									
17	●	anthracene				0.26	mg/kg		0.26	mg/kg	0.000026 %		
			204-371-1	120-12-7									
18	●	fluoranthene				0.94	mg/kg		0.94	mg/kg	0.000094 %		
			205-912-4	206-44-0									
19	●	pyrene				1.01	mg/kg		1.01	mg/kg	0.000101 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				0.5	mg/kg		0.5	mg/kg	0.00005 %		
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				0.52	mg/kg		0.52	mg/kg	0.000052 %		
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				0.39	mg/kg		0.39	mg/kg	0.000039 %		
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				0.13	mg/kg		0.13	mg/kg	0.000013 %		
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				0.31	mg/kg		0.31	mg/kg	0.000031 %		
		601-032-00-3	200-028-5	50-32-8									
25	●	indeno[123-cd]pyrene				0.17	mg/kg		0.17	mg/kg	0.000017 %		
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.04	mg/kg		0.04	mg/kg	0.000004 %		
		601-041-00-2	200-181-8	53-70-3									
27	●	benzo[ghi]perylene				0.16	mg/kg		0.16	mg/kg	0.000016 %		
			205-883-8	191-24-2									
28	●	pH				8.24	pH		8.24	pH	8.24 pH		
				PH									
29		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
30	●	1,1-dichloroethane and 1,2-dichloroethane (combined)				<2	mg/kg		<2	mg/kg	<0.0002 %		**<LOD**
			203-458-1, 200-863-5	107-06-2, 75-34-3									
31		carbon tetrachloride; tetrachloromethane				<1	mg/kg		<1	mg/kg	<0.0001 %		**<LOD**
		602-008-00-5	200-262-8	56-23-5									
32		trichloroethylene; trichloroethene				<1	mg/kg		<1	mg/kg	<0.0001 %		**<LOD**
		602-027-00-9	201-167-4	79-01-6									
33		vinyl chloride; chloroethylene				<1	mg/kg		<1	mg/kg	<0.0001 %		**<LOD**
		602-023-00-7	200-831-0	75-01-4									
										Total:	0.0742 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0109%)

Classification of sample: TP19/13

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

Sample details

Sample Name:
TP19/13
Sample Depth:
0.5 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9	mg/kg	1.32	11.883	mg/kg	0.00119 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2	mg/kg	3.22	6.44	mg/kg	0.000644 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1	mg/kg	1.142	1.142	mg/kg	0.000114 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				32	mg/kg	1.923	61.538	mg/kg	0.00615 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		58	mg/kg	1.126	65.302	mg/kg	0.00653 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	133	mg/kg	1.56	207.455	mg/kg	0.0133 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.45	mg/kg	1.353	0.609	mg/kg	0.0000609 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		26	mg/kg	2.976	77.383	mg/kg	0.00774 %		
9	zinc { zinc chromate }	024-007-00-3				189	mg/kg	2.774	524.314	mg/kg	0.0524 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		**<LOD**
11	TPH (C6 to C40) petroleum group			TPH		827	mg/kg		827	mg/kg	0.0827 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		2.01	mg/kg		2.01	mg/kg	0.000201 %		
13	acenaphthylene		205-917-1	208-96-8		0.11	mg/kg		0.11	mg/kg	0.000011 %		
14	acenaphthene		201-469-6	83-32-9		1.5	mg/kg		1.5	mg/kg	0.00015 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15	●	fluorene				1.04	mg/kg		1.04	mg/kg	0.000104 %		
			201-695-5	86-73-7									
16	●	phenanthrene				7.07	mg/kg		7.07	mg/kg	0.000707 %		
			201-581-5	85-01-8									
17	●	anthracene				1.73	mg/kg		1.73	mg/kg	0.000173 %		
			204-371-1	120-12-7									
18	●	fluoranthene				8	mg/kg		8	mg/kg	0.0008 %		
			205-912-4	206-44-0									
19	●	pyrene				7.35	mg/kg		7.35	mg/kg	0.000735 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				3.61	mg/kg		3.61	mg/kg	0.000361 %		
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				3.43	mg/kg		3.43	mg/kg	0.000343 %		
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				2.86	mg/kg		2.86	mg/kg	0.000286 %		
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				1.02	mg/kg		1.02	mg/kg	0.000102 %		
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				2.4	mg/kg		2.4	mg/kg	0.00024 %		
		601-032-00-3	200-028-5	50-32-8									
25	●	indeno[123-cd]pyrene				1.64	mg/kg		1.64	mg/kg	0.000164 %		
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.33	mg/kg		0.33	mg/kg	0.000033 %		
		601-041-00-2	200-181-8	53-70-3									
27	●	benzo[ghi]perylene				1.39	mg/kg		1.39	mg/kg	0.000139 %		
			205-883-8	191-24-2									
28	●	pH				10.04	pH		10.04	pH	10.04 pH		
				PH									
29		phenol				0.4	mg/kg		0.4	mg/kg	0.00004 %		
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.176 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0827%)

Classification of sample: TP19/13[2]

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

Sample details

Sample Name:	LoW Code:	
TP19/13[2]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:		
2 m	Entry:	17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 8: Corrosive "waste which on application can cause skin corrosion"

pH; pH "Assumed to be irritant/corrosive because of pH value"

Because of determinand:

pH: (conc.: 11.51 pH)

Determinands

Moisture content: 0% No 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		7 mg/kg	1.32	9.242 mg/kg	0.000924 %		
2	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 %		
3	cadmium { cadmium oxide } 048-002-00-0 / 215-146-2 / 1306-19-0		0.9 mg/kg	1.142	1.028 mg/kg	0.000103 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex } 024-017-00-8		22 mg/kg	1.923	42.308 mg/kg	0.00423 %		
5	copper { dicopper oxide; copper (I) oxide } 029-002-00-X / 215-270-7 / 1317-39-1		80 mg/kg	1.126	90.071 mg/kg	0.00901 %		
6	lead { lead chromate } 082-004-00-2 / 231-846-0 / 7758-97-6	1	125 mg/kg	1.56	194.977 mg/kg	0.0125 %		
7	mercury { mercury dichloride } 080-010-00-X / 231-299-8 / 7487-94-7		0.54 mg/kg	1.353	0.731 mg/kg	0.0000731 %		
8	nickel { nickel chromate } 028-035-00-7 / 238-766-5 / 14721-18-7		23 mg/kg	2.976	68.454 mg/kg	0.00685 %		
9	zinc { zinc chromate } 024-007-00-3		121 mg/kg	2.774	335.672 mg/kg	0.0336 %		
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 } 006-007-00-5		<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		**<LOD**
11	benzene 601-020-00-8 / 200-753-7 / 71-43-2		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		**<LOD**
12	toluene 601-021-00-3 / 203-625-9 / 108-88-3		<0.03 mg/kg		<0.03 mg/kg	<0.000003 %		**<LOD**

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
15	TPH (C6 to C40) petroleum group			TPH		788	mg/kg		788	mg/kg	0.0788 %		
16	naphthalene	601-052-00-2	202-049-5	91-20-3		1.14	mg/kg		1.14	mg/kg	0.000114 %		
17	acenaphthylene		205-917-1	208-96-8		0.1	mg/kg		0.1	mg/kg	0.00001 %		
18	acenaphthene		201-469-6	83-32-9		2.07	mg/kg		2.07	mg/kg	0.000207 %		
19	fluorene		201-695-5	86-73-7		1.49	mg/kg		1.49	mg/kg	0.000149 %		
20	phenanthrene		201-581-5	85-01-8		9.95	mg/kg		9.95	mg/kg	0.000995 %		
21	anthracene		204-371-1	120-12-7		2.45	mg/kg		2.45	mg/kg	0.000245 %		
22	fluoranthene		205-912-4	206-44-0		11.7	mg/kg		11.7	mg/kg	0.00117 %		
23	pyrene		204-927-3	129-00-0		10.5	mg/kg		10.5	mg/kg	0.00105 %		
24	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		5.5	mg/kg		5.5	mg/kg	0.00055 %		
25	chrysene	601-048-00-0	205-923-4	218-01-9		4.98	mg/kg		4.98	mg/kg	0.000498 %		
26	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		4.03	mg/kg		4.03	mg/kg	0.000403 %		
27	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		1.37	mg/kg		1.37	mg/kg	0.000137 %		
28	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		3.32	mg/kg		3.32	mg/kg	0.000332 %		
29	indeno[123-cd]pyrene		205-893-2	193-39-5		2.17	mg/kg		2.17	mg/kg	0.000217 %		
30	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		0.44	mg/kg		0.44	mg/kg	0.000044 %		
31	benzo[ghi]perylene		205-883-8	191-24-2		1.74	mg/kg		1.74	mg/kg	0.000174 %		
32	pH			PH		11.51	pH		11.51	pH	11.51 pH		
33	phenol	604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
34	1,1-dichloroethane and 1,2-dichloroethane (combined)		203-458-1, 200-863-5	107-06-2, 75-34-3		<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
35	carbon tetrachloride; tetrachloromethane	602-008-00-5	200-262-8	56-23-5		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
36	trichloroethylene; trichloroethene	602-027-00-9	201-167-4	79-01-6		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
37	vinyl chloride; chloroethylene	602-023-00-7	200-831-0	75-01-4		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
										Total:	0.153 %		

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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0788%)

Classification of sample: TP19/14

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

Sample details

Sample Name:
TP19/14
Sample Depth:
1 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9	mg/kg	1.32	11.883	mg/kg	0.00119 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		1.7	mg/kg	3.22	5.474	mg/kg	0.000547 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.2	mg/kg	1.142	1.371	mg/kg	0.000137 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				36	mg/kg	1.923	69.231	mg/kg	0.00692 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		64	mg/kg	1.126	72.057	mg/kg	0.00721 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	181	mg/kg	1.56	282.327	mg/kg	0.0181 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.64	mg/kg	1.353	0.866	mg/kg	0.0000866 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		24	mg/kg	2.976	71.43	mg/kg	0.00714 %		
9	zinc { zinc chromate }	024-007-00-3				199	mg/kg	2.774	552.055	mg/kg	0.0552 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<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									
15		TPH (C6 to C40) petroleum group		TPH		651	mg/kg		651	mg/kg	0.0651 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		1.55	mg/kg		1.55	mg/kg	0.000155 %		
17		acenaphthylene											
			205-917-1	208-96-8		0.09	mg/kg		0.09	mg/kg	0.000009 %		
18		acenaphthene											
			201-469-6	83-32-9		2.11	mg/kg		2.11	mg/kg	0.000211 %		
19		fluorene											
			201-695-5	86-73-7		1.51	mg/kg		1.51	mg/kg	0.000151 %		
20		phenanthrene											
			201-581-5	85-01-8		11.5	mg/kg		11.5	mg/kg	0.00115 %		
21		anthracene											
			204-371-1	120-12-7		2.92	mg/kg		2.92	mg/kg	0.000292 %		
22		fluoranthene											
			205-912-4	206-44-0		13	mg/kg		13	mg/kg	0.0013 %		
23		pyrene											
			204-927-3	129-00-0		11.4	mg/kg		11.4	mg/kg	0.00114 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		5.38	mg/kg		5.38	mg/kg	0.000538 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		5.16	mg/kg		5.16	mg/kg	0.000516 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		5.04	mg/kg		5.04	mg/kg	0.000504 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		1.75	mg/kg		1.75	mg/kg	0.000175 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		4.28	mg/kg		4.28	mg/kg	0.000428 %		
29		indeno[123-cd]pyrene											
			205-893-2	193-39-5		2.52	mg/kg		2.52	mg/kg	0.000252 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.55	mg/kg		0.55	mg/kg	0.000055 %		
31		benzo[ghi]perylene											
			205-883-8	191-24-2		2.2	mg/kg		2.2	mg/kg	0.00022 %		
32		pH											
				PH		9.55	pH		9.55	pH	9.55 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		0.3	mg/kg		0.3	mg/kg	0.00003 %		
34		1,1-dichloroethane and 1,2-dichloroethane (combined)											
			203-458-1, 200-863-5	107-06-2, 75-34-3		<2	mg/kg		<2	mg/kg	<0.0002 %		**<LOD**
35		carbon tetrachloride; tetrachloromethane											
		602-008-00-5	200-262-8	56-23-5		<1	mg/kg		<1	mg/kg	<0.0001 %		**<LOD**
36		trichloroethylene; trichloroethene											
		602-027-00-9	201-167-4	79-01-6		<1	mg/kg		<1	mg/kg	<0.0001 %		**<LOD**
37		vinyl chloride; chloroethylene											
		602-023-00-7	200-831-0	75-01-4		<1	mg/kg		<1	mg/kg	<0.0001 %		**<LOD**
										Total:	0.169 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0651%)

Appendix A: Classifier defined and non CLP determinands

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

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

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

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

- **pH** (CAS Number: PH)

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

- **1,1-dichloroethane and 1,2-dichloroethane (combined)** (EC Number: 203-458-1, 200-863-5, CAS Number: 107-06-2, 75-34-3)

Description/Comments: Combines the hazard statements and risk phrases for 1,1-dichloroethane and 1,2-dichloroethane
Data source: N/a
Data source date: 14 Oct 2016
Hazard Statements: Aquatic Chronic 3 H412 , Carc. 1B H350 , STOT SE 3 H335 , Eye Irrit. 2 H319 , Skin Irrit. 2 H315 , Acute Tox. 4 H302 , Flam. Liq. 2 H225

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)

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 {chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex}

Worst case scenario

copper {dicopper oxide; copper (I) oxide}

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

lead {lead chromate}

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

mercury {mercury dichloride}

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

nickel {nickel chromate}

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

zinc {zinc chromate}

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

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)

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018
HazWasteOnline Classification Engine Version: 2019.316.4053.8153 (12 Nov 2019)
HazWasteOnline Database: 2019.316.4053.8153 (12 Nov 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

Waste Classification Report

KCU5A-EYDTX-HFKW9

Job name

0042841 >2.0m WEST

Description/Comments

Samples from west of site, former gas works

Project

Project Bradford

Site

Manchester

Related Documents

#	Name	Description
None		

Waste Stream Template

2019 Geoff

Classified by

Name:
Francesca Gould
Date:
26 Nov 2019 14:58 GMT
Telephone:
020 7927 9700

Company:
Buro Happold
17 Newman Street
London
W1T 1PD

Report

Created by: Francesca Gould
Created date: 26 Nov 2019 14:58 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	BH19/02A	3	Hazardous	HP 3(i), HP 7, HP 11	3
2	BH19/04	3.5	Non Hazardous		6
3	BH19/04[2]	4.5	Non Hazardous		9
4	BH19/04[3]	6.5	Hazardous	HP 3(i), HP 7, HP 11	12
5	BH19/04[4]	8	Non Hazardous		15
6	BH19/04[5]	10	Non Hazardous		18
7	BH1907C	3	Hazardous	HP 3(i), HP 7, HP 11	20
8	BH19/07C	5	Hazardous	HP 3(i), HP 7, HP 11	23
9	BH19/08	6	Non Hazardous		26
10	BH19/09	3	Non Hazardous		28
11	BH19/09[2]	7	Non Hazardous		31
12	BH19/10	5	Non Hazardous		33

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
13	BH19/10[2]	8	Non Hazardous		35
14	BH19/13	4	Hazardous	HP 3(i), HP 7, HP 11	38
15	BH19/13[2]	6	Hazardous	HP 3(i), HP 7, HP 11	41
16	BH19/14	3	Hazardous	HP 3(i), HP 7, HP 11	44
17	BH19/14[2]	7	Non Hazardous		47
18	BH19/19	5	Non Hazardous		50
19	BH19/19[2]	9	Non Hazardous		53
20	BH19/19[3]	12	Non Hazardous		56
21	BH19/20	4	Hazardous	HP 3(i), HP 7, HP 11	58
22	BH19/20[2]	6	Non Hazardous		61
23	BH19/21	4	Hazardous	HP 3(i), HP 7, HP 11	64
24	BH19/21[2]	7	Non Hazardous		67
25	BH19/23	3	Non Hazardous		70
26	BH19/23[2]	5	Non Hazardous		73
27	BH19/23[3]	7	Non Hazardous		76
28	BH19/26	3	Non Hazardous		79
29	BH19/26[2]	5	Non Hazardous		82
30	BH19/26[3]	6	Non Hazardous		84
31	TP19/04	4	Non Hazardous		87
32	TP19/06	4	Non Hazardous		90
33	TP19/08	3.8	Hazardous	HP 3(i), HP 7, HP 11	92
34	TP19/10	3.5	Non Hazardous		95
35	TP19/11	3	Hazardous	HP 3(i), HP 7, HP 11	98
36	TP19/14	3	Non Hazardous		101

Appendices	Page
Appendix A: Classifier defined and non CLP determinands	104
Appendix B: Rationale for selection of metal species	105
Appendix C: Version	106

Classification of sample: BH19/02A

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

Sample details

Sample Name:	LoW Code:	
BH19/02A	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 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to hazardous because Elevated TPHs over 1000mg/kg. Free product recorded in occasional samples during post-investgation monitoring. Loss on ignition tests carried out within 33% recorded elevated loss of ignition above the hazardous waste threshold.

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.106%)

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

Hazard Statements hit:

Carc. 1B; 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:

TPH (C6 to C40) petroleum group: (conc.: 0.106%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.106%)

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		21	mg/kg	1.32	27.727	mg/kg	0.00277 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		1.4	mg/kg	3.22	4.508	mg/kg	0.000451 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2	mg/kg	1.142	2.285	mg/kg	0.000228 %		

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				47	mg/kg	1.923	90.385	mg/kg	0.00904 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		112	mg/kg	1.126	126.099	mg/kg	0.0126 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	253	mg/kg	1.56	394.633	mg/kg	0.0253 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.31	mg/kg	1.353	0.42	mg/kg	0.000042 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		28	mg/kg	2.976	83.335	mg/kg	0.00833 %		
9	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		212	mg/kg	1.245	263.879	mg/kg	0.0264 %		
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 }	006-007-00-5				2	mg/kg	1.884	3.768	mg/kg	0.000377 %		
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
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	TPH (C6 to C40) petroleum group			TPH		1060	mg/kg		1060	mg/kg	0.106 %		
16	naphthalene	601-052-00-2	202-049-5	91-20-3		0.95	mg/kg		0.95	mg/kg	0.000095 %		
17	acenaphthylene		205-917-1	208-96-8		0.11	mg/kg		0.11	mg/kg	0.000011 %		
18	acenaphthene		201-469-6	83-32-9		1.85	mg/kg		1.85	mg/kg	0.000185 %		
19	fluorene		201-695-5	86-73-7		1.34	mg/kg		1.34	mg/kg	0.000134 %		
20	phenanthrene		201-581-5	85-01-8		9.31	mg/kg		9.31	mg/kg	0.000931 %		
21	anthracene		204-371-1	120-12-7		2.34	mg/kg		2.34	mg/kg	0.000234 %		
22	fluoranthene		205-912-4	206-44-0		12.2	mg/kg		12.2	mg/kg	0.00122 %		
23	pyrene		204-927-3	129-00-0		11	mg/kg		11	mg/kg	0.0011 %		
24	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		5.69	mg/kg		5.69	mg/kg	0.000569 %		
25	chrysene	601-048-00-0	205-923-4	218-01-9		5.63	mg/kg		5.63	mg/kg	0.000563 %		
26	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		5.99	mg/kg		5.99	mg/kg	0.000599 %		
27	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		2.03	mg/kg		2.03	mg/kg	0.000203 %		
28	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		5.14	mg/kg		5.14	mg/kg	0.000514 %		
29	indeno[123-cd]pyrene		205-893-2	193-39-5		3.17	mg/kg		3.17	mg/kg	0.000317 %		
30	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		0.8	mg/kg		0.8	mg/kg	0.00008 %		

#		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[ghi]perylene				2.65	mg/kg		2.65	mg/kg	0.000265 %		
			205-883-8	191-24-2									
32		pH				8.3	pH		8.3	pH	8.3 pH		
				PH									
33		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.199 %		

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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: BH19/04

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

Sample details

Sample Name:
BH19/04
Sample Depth:
3.5 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		14	mg/kg	1.32	18.485	mg/kg	0.00185 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		1.8	mg/kg	3.22	5.796	mg/kg	0.00058 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.8	mg/kg	1.142	0.914	mg/kg	0.0000914 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				23	mg/kg	1.923	44.231	mg/kg	0.00442 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		63	mg/kg	1.126	70.931	mg/kg	0.00709 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	147	mg/kg	1.56	229.293	mg/kg	0.0147 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17	mg/kg	1.353	<0.23	mg/kg	<0.000023 %		<LOD
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		20	mg/kg	2.976	59.525	mg/kg	0.00595 %		
9	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		112	mg/kg	1.245	139.408	mg/kg	0.0139 %		
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 }	006-007-00-5				3	mg/kg	1.884	5.652	mg/kg	0.000565 %		
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
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

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		TPH (C6 to C40) petroleum group		TPH		318	mg/kg		318	mg/kg	0.0318 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		2.25	mg/kg		2.25	mg/kg	0.000225 %		
17		acenaphthylene											
			205-917-1	208-96-8		0.13	mg/kg		0.13	mg/kg	0.000013 %		
18		acenaphthene											
			201-469-6	83-32-9		2.41	mg/kg		2.41	mg/kg	0.000241 %		
19		fluorene											
			201-695-5	86-73-7		1.73	mg/kg		1.73	mg/kg	0.000173 %		
20		phenanthrene											
			201-581-5	85-01-8		11.6	mg/kg		11.6	mg/kg	0.00116 %		
21		anthracene											
			204-371-1	120-12-7		2.72	mg/kg		2.72	mg/kg	0.000272 %		
22		fluoranthene											
			205-912-4	206-44-0		13.1	mg/kg		13.1	mg/kg	0.00131 %		
23		pyrene											
			204-927-3	129-00-0		12	mg/kg		12	mg/kg	0.0012 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		5.71	mg/kg		5.71	mg/kg	0.000571 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		5.64	mg/kg		5.64	mg/kg	0.000564 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		5.59	mg/kg		5.59	mg/kg	0.000559 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		1.97	mg/kg		1.97	mg/kg	0.000197 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		5.18	mg/kg		5.18	mg/kg	0.000518 %		
29		indeno[123-cd]pyrene											
			205-893-2	193-39-5		3.49	mg/kg		3.49	mg/kg	0.000349 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.98	mg/kg		0.98	mg/kg	0.000098 %		
31		benzo[ghi]perylene											
			205-883-8	191-24-2		3.19	mg/kg		3.19	mg/kg	0.000319 %		
32		pH											
				PH		10.71	pH		10.71	pH	10.71 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
34		1,1-dichloroethane and 1,2-dichloroethane (combined)											
			203-458-1, 200-863-5	107-06-2, 75-34-3		<2	mg/kg		<2	mg/kg	<0.0002 %		**<LOD**
35		carbon tetrachloride; tetrachloromethane											
		602-008-00-5	200-262-8	56-23-5		<1	mg/kg		<1	mg/kg	<0.0001 %		**<LOD**
36		trichloroethylene; trichloroethene											
		602-027-00-9	201-167-4	79-01-6		<1	mg/kg		<1	mg/kg	<0.0001 %		**<LOD**
37		vinyl chloride; chloroethylene											
		602-023-00-7	200-831-0	75-01-4		<1	mg/kg		<1	mg/kg	<0.0001 %		**<LOD**
										Total:	0.0893 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0318%)

Classification of sample: BH19/04[2]

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

Sample details

Sample Name:	LoW Code:
BH19/04[2]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
4.5 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	asbestos	650-013-00-6	- - - - - - -	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		**<LOD**
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7 mg/kg	1.32	9.242 mg/kg	0.000924 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		1.6 mg/kg	3.22	5.152 mg/kg	0.000515 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.9 mg/kg	1.142	1.028 mg/kg	0.000103 %		
5	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				13 mg/kg	1.923	25 mg/kg	0.0025 %		
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		18 mg/kg	1.126	20.266 mg/kg	0.00203 %		
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	57 mg/kg	1.56	88.909 mg/kg	0.0057 %		
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17 mg/kg	1.353	<0.23 mg/kg	<0.000023 %		**<LOD**
9	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		16 mg/kg	2.976	47.62 mg/kg	0.00476 %		
10	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		55 mg/kg	1.245	68.459 mg/kg	0.00685 %		
11	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		**<LOD**
12	benzene	601-020-00-8	200-753-7	71-43-2		<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									
13		toluene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
14		ethylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
15		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									
16		TPH (C6 to C40) petroleum group				39	mg/kg		39	mg/kg	0.0039 %		
				TPH									
17		naphthalene				2.17	mg/kg		2.17	mg/kg	0.000217 %		
		601-052-00-2	202-049-5	91-20-3									
18		acenaphthylene				0.1	mg/kg		0.1	mg/kg	0.00001 %		
			205-917-1	208-96-8									
19		acenaphthene				0.45	mg/kg		0.45	mg/kg	0.000045 %		
			201-469-6	83-32-9									
20		fluorene				0.49	mg/kg		0.49	mg/kg	0.000049 %		
			201-695-5	86-73-7									
21		phenanthrene				2.72	mg/kg		2.72	mg/kg	0.000272 %		
			201-581-5	85-01-8									
22		anthracene				0.59	mg/kg		0.59	mg/kg	0.000059 %		
			204-371-1	120-12-7									
23		fluoranthene				1.86	mg/kg		1.86	mg/kg	0.000186 %		
			205-912-4	206-44-0									
24		pyrene				1.75	mg/kg		1.75	mg/kg	0.000175 %		
			204-927-3	129-00-0									
25		benzo[a]anthracene				0.84	mg/kg		0.84	mg/kg	0.000084 %		
		601-033-00-9	200-280-6	56-55-3									
26		chrysene				0.91	mg/kg		0.91	mg/kg	0.000091 %		
		601-048-00-0	205-923-4	218-01-9									
27		benzo[b]fluoranthene				0.76	mg/kg		0.76	mg/kg	0.000076 %		
		601-034-00-4	205-911-9	205-99-2									
28		benzo[k]fluoranthene				0.24	mg/kg		0.24	mg/kg	0.000024 %		
		601-036-00-5	205-916-6	207-08-9									
29		benzo[a]pyrene; benzo[def]chrysene				0.67	mg/kg		0.67	mg/kg	0.000067 %		
		601-032-00-3	200-028-5	50-32-8									
30		indeno[123-cd]pyrene				0.34	mg/kg		0.34	mg/kg	0.000034 %		
			205-893-2	193-39-5									
31		dibenz[a,h]anthracene				0.08	mg/kg		0.08	mg/kg	0.000008 %		
		601-041-00-2	200-181-8	53-70-3									
32		benzo[ghi]perylene				0.3	mg/kg		0.3	mg/kg	0.00003 %		
			205-883-8	191-24-2									
33		pH				10.03	pH		10.03	pH	10.03 pH		
				PH									
34		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0289 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0039%)

Classification of sample: BH19/04[3]

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

Sample details

Sample Name:	LoW Code:	
BH19/04[3]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:		
6.5 m	Entry:	17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to hazardous because Elevated TPHs over 1000mg/kg. Free product recorded in occasional samples during post-investgation monitoring. Loss on ignition tests carried out within 33% recorded elevated loss of ignition above the hazardous waste threshold.

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.183%)

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

Hazard Statements hit:

Carc. 1B; 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:

TPH (C6 to C40) petroleum group: (conc.: 0.183%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.183%)

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		31	mg/kg	1.32	40.93	mg/kg	0.00409 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		5.6	mg/kg	3.22	18.031	mg/kg	0.0018 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.7	mg/kg	1.142	0.8	mg/kg	0.00008 %		

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				27	mg/kg	1.923	51.923	mg/kg	0.00519 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		54	mg/kg	1.126	60.798	mg/kg	0.00608 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	64	mg/kg	1.56	99.828	mg/kg	0.0064 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17	mg/kg	1.353	<0.23	mg/kg	<0.000023 %		<LOD
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		36	mg/kg	2.976	107.146	mg/kg	0.0107 %		
9	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		105	mg/kg	1.245	130.695	mg/kg	0.0131 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	TPH (C6 to C40) petroleum group			TPH		1830	mg/kg		1830	mg/kg	0.183 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		1.81	mg/kg		1.81	mg/kg	0.000181 %		
13	acenaphthylene		205-917-1	208-96-8		0.11	mg/kg		0.11	mg/kg	0.000011 %		
14	acenaphthene		201-469-6	83-32-9		0.68	mg/kg		0.68	mg/kg	0.000068 %		
15	fluorene		201-695-5	86-73-7		0.63	mg/kg		0.63	mg/kg	0.000063 %		
16	phenanthrene		201-581-5	85-01-8		4.31	mg/kg		4.31	mg/kg	0.000431 %		
17	anthracene		204-371-1	120-12-7		0.92	mg/kg		0.92	mg/kg	0.000092 %		
18	fluoranthene		205-912-4	206-44-0		4.14	mg/kg		4.14	mg/kg	0.000414 %		
19	pyrene		204-927-3	129-00-0		3.82	mg/kg		3.82	mg/kg	0.000382 %		
20	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		1.79	mg/kg		1.79	mg/kg	0.000179 %		
21	chrysene	601-048-00-0	205-923-4	218-01-9		1.91	mg/kg		1.91	mg/kg	0.000191 %		
22	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		1.8	mg/kg		1.8	mg/kg	0.00018 %		
23	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		0.59	mg/kg		0.59	mg/kg	0.000059 %		
24	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		1.61	mg/kg		1.61	mg/kg	0.000161 %		
25	indeno[123-cd]pyrene		205-893-2	193-39-5		0.92	mg/kg		0.92	mg/kg	0.000092 %		
26	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		0.23	mg/kg		0.23	mg/kg	0.000023 %		
27	benzo[ghi]perylene		205-883-8	191-24-2		0.77	mg/kg		0.77	mg/kg	0.000077 %		
28	pH			PH		10.74	pH		10.74	pH	10.74 pH		
29	phenol	604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
										Total:	0.233 %		

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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: BH19/04[4]

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

Sample details

Sample Name:	LoW Code:
BH19/04[4]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
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% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		41 mg/kg	1.32	54.133 mg/kg	0.00541 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2.6 mg/kg	3.22	8.372 mg/kg	0.000837 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1 mg/kg	1.142	1.142 mg/kg	0.000114 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				25 mg/kg	1.923	48.077 mg/kg	0.00481 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		99 mg/kg	1.126	111.463 mg/kg	0.0111 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	90 mg/kg	1.56	140.383 mg/kg	0.009 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.23 mg/kg	1.353	0.311 mg/kg	0.0000311 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		45 mg/kg	2.976	133.932 mg/kg	0.0134 %		
9	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		107 mg/kg	1.245	133.184 mg/kg	0.0133 %		
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 }	006-007-00-5				54 mg/kg	1.884	101.736 mg/kg	0.0102 %		
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		**<LOD**
12	toluene	601-021-00-3	203-625-9	108-88-3		0.14 mg/kg		0.14 mg/kg	0.000014 %		
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		**<LOD**
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		**<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									
15	●	TPH (C6 to C40) petroleum group		TPH		700	mg/kg		700	mg/kg	0.07 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		1.64	mg/kg		1.64	mg/kg	0.000164 %		
17	●	acenaphthylene											
			205-917-1	208-96-8		1.3	mg/kg		1.3	mg/kg	0.00013 %		
18	●	acenaphthene											
			201-469-6	83-32-9		0.39	mg/kg		0.39	mg/kg	0.000039 %		
19	●	fluorene											
			201-695-5	86-73-7		0.66	mg/kg		0.66	mg/kg	0.000066 %		
20	●	phenanthrene											
			201-581-5	85-01-8		8.05	mg/kg		8.05	mg/kg	0.000805 %		
21	●	anthracene											
			204-371-1	120-12-7		2.37	mg/kg		2.37	mg/kg	0.000237 %		
22	●	fluoranthene											
			205-912-4	206-44-0		11.8	mg/kg		11.8	mg/kg	0.00118 %		
23	●	pyrene											
			204-927-3	129-00-0		12.8	mg/kg		12.8	mg/kg	0.00128 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		6.84	mg/kg		6.84	mg/kg	0.000684 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		7.43	mg/kg		7.43	mg/kg	0.000743 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		9.52	mg/kg		9.52	mg/kg	0.000952 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		3.39	mg/kg		3.39	mg/kg	0.000339 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		6.38	mg/kg		6.38	mg/kg	0.000638 %		
29	●	indeno[123-cd]pyrene											
			205-893-2	193-39-5		4.11	mg/kg		4.11	mg/kg	0.000411 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		1.12	mg/kg		1.12	mg/kg	0.000112 %		
31	●	benzo[ghi]perylene											
			205-883-8	191-24-2		3.44	mg/kg		3.44	mg/kg	0.000344 %		
32	●	pH		PH		8.54	pH		8.54	pH	8.54 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
34	●	1,1-dichloroethane and 1,2-dichloroethane (combined)											
			203-458-1, 200-863-5	107-06-2, 75-34-3		<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
35		carbon tetrachloride; tetrachloromethane											
		602-008-00-5	200-262-8	56-23-5		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
36		trichloroethylene; trichloroethene											
		602-027-00-9	201-167-4	79-01-6		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
37		vinyl chloride; chloroethylene											
		602-023-00-7	200-831-0	75-01-4		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
										Total:	0.147 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

toluene: (conc.: 0.00001%)

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.07%)

Classification of sample: BH19/04[5]

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

Sample details

Sample Name:
BH19/04[5]
Sample Depth:
10 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		20	mg/kg	1.32	26.407	mg/kg	0.00264 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		5	mg/kg	3.22	16.099	mg/kg	0.00161 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.6	mg/kg	1.142	0.685	mg/kg	0.0000685 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				18	mg/kg	1.923	34.615	mg/kg	0.00346 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		74	mg/kg	1.126	83.316	mg/kg	0.00833 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	86	mg/kg	1.56	134.144	mg/kg	0.0086 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17	mg/kg	1.353	<0.23	mg/kg	<0.000023 %		**<LOD**
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		41	mg/kg	2.976	122.027	mg/kg	0.0122 %		
9	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		81	mg/kg	1.245	100.822	mg/kg	0.0101 %		
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 }	006-007-00-5				14	mg/kg	1.884	26.376	mg/kg	0.00264 %		
11	TPH (C6 to C40) petroleum group			TPH		148	mg/kg		148	mg/kg	0.0148 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		0.2	mg/kg		0.2	mg/kg	0.00002 %		
13	acenaphthylene		205-917-1	208-96-8		0.13	mg/kg		0.13	mg/kg	0.000013 %		
14	acenaphthene		201-469-6	83-32-9		0.16	mg/kg		0.16	mg/kg	0.000016 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		fluorene				0.16	mg/kg		0.16	mg/kg	0.000016 %		
			201-695-5	86-73-7									
16		phenanthrene				1.56	mg/kg		1.56	mg/kg	0.000156 %		
			201-581-5	85-01-8									
17		anthracene				0.37	mg/kg		0.37	mg/kg	0.000037 %		
			204-371-1	120-12-7									
18		fluoranthene				1.99	mg/kg		1.99	mg/kg	0.000199 %		
			205-912-4	206-44-0									
19		pyrene				1.87	mg/kg		1.87	mg/kg	0.000187 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				1.05	mg/kg		1.05	mg/kg	0.000105 %		
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				1.09	mg/kg		1.09	mg/kg	0.000109 %		
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				1.28	mg/kg		1.28	mg/kg	0.000128 %		
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				0.46	mg/kg		0.46	mg/kg	0.000046 %		
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				1.14	mg/kg		1.14	mg/kg	0.000114 %		
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				0.85	mg/kg		0.85	mg/kg	0.000085 %		
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.2	mg/kg		0.2	mg/kg	0.00002 %		
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				0.81	mg/kg		0.81	mg/kg	0.000081 %		
			205-883-8	191-24-2									
28		pH				9.33	pH		9.33	pH	9.33 pH		
				PH									
29		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0658 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0148%)

Classification of sample: BH1907C

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

Sample details

Sample Name:	LoW Code:	
BH1907C	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 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to hazardous because Elevated TPHs over 1000mg/kg. Free product recorded in occasional samples during post-investgation monitoring. Loss on ignition tests carried out within 33% recorded elevated loss of ignition above the hazardous waste threshold.

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.105%)

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

Hazard Statements hit:

Carc. 1B; 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:

TPH (C6 to C40) petroleum group: (conc.: 0.105%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.105%)

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		35	mg/kg	1.32	46.211	mg/kg	0.00462 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2	mg/kg	3.22	6.44	mg/kg	0.000644 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.2	mg/kg	1.142	2.513	mg/kg	0.000251 %		

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex } 024-017-00-8		33 mg/kg	1.923	63.462 mg/kg	0.00635 %		
5	copper { dicopper oxide; copper (I) oxide } 029-002-00-X / 215-270-7 / 1317-39-1		173 mg/kg	1.126	194.779 mg/kg	0.0195 %		
6	lead { lead chromate } 082-004-00-2 / 231-846-0 / 7758-97-6	1	259 mg/kg	1.56	403.992 mg/kg	0.0259 %		
7	mercury { mercury dichloride } 080-010-00-X / 231-299-8 / 7487-94-7		<0.17 mg/kg	1.353	<0.23 mg/kg	<0.000023 %		<LOD
8	nickel { nickel chromate } 028-035-00-7 / 238-766-5 / 14721-18-7		34 mg/kg	2.976	101.193 mg/kg	0.0101 %		
9	zinc { zinc oxide } 030-013-00-7 / 215-222-5 / 1314-13-2		202 mg/kg	1.245	251.432 mg/kg	0.0251 %		
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 } 006-007-00-5		16 mg/kg	1.884	30.144 mg/kg	0.00301 %		
11	benzene 601-020-00-8 / 200-753-7 / 71-43-2		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
12	toluene 601-021-00-3 / 203-625-9 / 108-88-3		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
13	ethylbenzene 601-023-00-4 / 202-849-4 / 100-41-4		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
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	TPH (C6 to C40) petroleum group TPH		1050 mg/kg		1050 mg/kg	0.105 %		
16	naphthalene 601-052-00-2 / 202-049-5 / 91-20-3		2.44 mg/kg		2.44 mg/kg	0.000244 %		
17	acenaphthylene 205-917-1 / 208-96-8		0.25 mg/kg		0.25 mg/kg	0.000025 %		
18	acenaphthene 201-469-6 / 83-32-9		2.47 mg/kg		2.47 mg/kg	0.000247 %		
19	fluorene 201-695-5 / 86-73-7		1.92 mg/kg		1.92 mg/kg	0.000192 %		
20	phenanthrene 201-581-5 / 85-01-8		10.7 mg/kg		10.7 mg/kg	0.00107 %		
21	anthracene 204-371-1 / 120-12-7		2.56 mg/kg		2.56 mg/kg	0.000256 %		
22	fluoranthene 205-912-4 / 206-44-0		10.5 mg/kg		10.5 mg/kg	0.00105 %		
23	pyrene 204-927-3 / 129-00-0		10.2 mg/kg		10.2 mg/kg	0.00102 %		
24	benzo[a]anthracene 601-033-00-9 / 200-280-6 / 56-55-3		4.9 mg/kg		4.9 mg/kg	0.00049 %		
25	chrysene 601-048-00-0 / 205-923-4 / 218-01-9		4.48 mg/kg		4.48 mg/kg	0.000448 %		
26	benzo[b]fluoranthene 601-034-00-4 / 205-911-9 / 205-99-2		3.67 mg/kg		3.67 mg/kg	0.000367 %		
27	benzo[k]fluoranthene 601-036-00-5 / 205-916-6 / 207-08-9		1.32 mg/kg		1.32 mg/kg	0.000132 %		
28	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3 / 200-028-5 / 50-32-8		3.29 mg/kg		3.29 mg/kg	0.000329 %		
29	indeno[123-cd]pyrene 205-893-2 / 193-39-5		1.82 mg/kg		1.82 mg/kg	0.000182 %		
30	dibenz[a,h]anthracene 601-041-00-2 / 200-181-8 / 53-70-3		0.37 mg/kg		0.37 mg/kg	0.000037 %		

#		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[ghi]perylene				1.62	mg/kg		1.62	mg/kg	0.000162 %		
			205-883-8	191-24-2									
32		pH				8.69	pH		8.69	pH	8.69 pH		
				PH									
33		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
34		1,1-dichloroethane and 1,2-dichloroethane (combined)				<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
			203-458-1, 200-863-5	107-06-2, 75-34-3									
35		carbon tetrachloride; tetrachloromethane				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		602-008-00-5	200-262-8	56-23-5									
36		trichloroethylene; trichloroethene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		602-027-00-9	201-167-4	79-01-6									
37		vinyl chloride; chloroethylene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		602-023-00-7	200-831-0	75-01-4									
										Total:	0.207 %		

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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: BH19/07C

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

Sample details

Sample Name:	LoW Code:	
BH19/07C	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:		
5 m	Entry:	17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to hazardous because Elevated TPHs over 1000mg/kg. Free product recorded in occasional samples during post-investgation monitoring. Loss on ignition tests carried out within 33% recorded elevated loss of ignition above the hazardous waste threshold.

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

ethylbenzene: (conc.: 0.00003%)

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.113%)

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

Hazard Statements hit:

Carc. 1B; 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:

TPH (C6 to C40) petroleum group: (conc.: 0.113%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.113%)

Determinands

Moisture content: 0% No 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 mg/kg	1.32	11.883 mg/kg	0.00119 %		
		033-003-00-0	215-481-4	1327-53-3							

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
2	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 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.9	mg/kg	1.142	1.028	mg/kg	0.000103 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				19	mg/kg	1.923	36.538	mg/kg	0.00365 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		47	mg/kg	1.126	52.917	mg/kg	0.00529 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	196	mg/kg	1.56	305.724	mg/kg	0.0196 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17	mg/kg	1.353	<0.23	mg/kg	<0.000023 %		<LOD
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		19	mg/kg	2.976	56.549	mg/kg	0.00565 %		
9	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		78	mg/kg	1.245	97.088	mg/kg	0.00971 %		
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 }	006-007-00-5				2	mg/kg	1.884	3.768	mg/kg	0.000377 %		
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		0.36	mg/kg		0.36	mg/kg	0.000036 %		
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	TPH (C6 to C40) petroleum group			TPH		1130	mg/kg		1130	mg/kg	0.113 %		
16	naphthalene	601-052-00-2	202-049-5	91-20-3		1.88	mg/kg		1.88	mg/kg	0.000188 %		
17	acenaphthylene		205-917-1	208-96-8		0.04	mg/kg		0.04	mg/kg	0.000004 %		
18	acenaphthene		201-469-6	83-32-9		1.19	mg/kg		1.19	mg/kg	0.000119 %		
19	fluorene		201-695-5	86-73-7		2.81	mg/kg		2.81	mg/kg	0.000281 %		
20	phenanthrene		201-581-5	85-01-8		3.75	mg/kg		3.75	mg/kg	0.000375 %		
21	anthracene		204-371-1	120-12-7		0.79	mg/kg		0.79	mg/kg	0.000079 %		
22	fluoranthene		205-912-4	206-44-0		3.25	mg/kg		3.25	mg/kg	0.000325 %		
23	pyrene		204-927-3	129-00-0		2.81	mg/kg		2.81	mg/kg	0.000281 %		
24	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		1.11	mg/kg		1.11	mg/kg	0.000111 %		
25	chrysene	601-048-00-0	205-923-4	218-01-9		1.18	mg/kg		1.18	mg/kg	0.000118 %		
26	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		0.95	mg/kg		0.95	mg/kg	0.000095 %		
27	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		0.37	mg/kg		0.37	mg/kg	0.000037 %		
28	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		0.75	mg/kg		0.75	mg/kg	0.000075 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
29		indeno[123-cd]pyrene				0.43	mg/kg		0.43	mg/kg	0.000043 %		
			205-893-2	193-39-5									
30		dibenz[a,h]anthracene				0.09	mg/kg		0.09	mg/kg	0.000009 %		
		601-041-00-2	200-181-8	53-70-3									
31		benzo[ghi]perylene				0.39	mg/kg		0.39	mg/kg	0.000039 %		
			205-883-8	191-24-2									
32		pH				9.23	pH		9.23	pH	9.23 pH		
				PH									
33		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.161 %		

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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: BH19/08

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

Sample details

Sample Name:
BH19/08
Sample Depth:
6 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		5	mg/kg	1.32	6.602	mg/kg	0.00066 %		
2	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 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.5	mg/kg	1.142	0.571	mg/kg	0.0000571 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				27	mg/kg	1.923	51.923	mg/kg	0.00519 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		33	mg/kg	1.126	37.154	mg/kg	0.00372 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	108	mg/kg	1.56	168.46	mg/kg	0.0108 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.28	mg/kg	1.353	0.379	mg/kg	0.0000379 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		19	mg/kg	2.976	56.549	mg/kg	0.00565 %		
9	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		74	mg/kg	1.245	92.109	mg/kg	0.00921 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	TPH (C6 to C40) petroleum group			TPH		692	mg/kg		692	mg/kg	0.0692 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		1.37	mg/kg		1.37	mg/kg	0.000137 %		
13	acenaphthylene		205-917-1	208-96-8		0.06	mg/kg		0.06	mg/kg	0.000006 %		
14	acenaphthene		201-469-6	83-32-9		0.95	mg/kg		0.95	mg/kg	0.000095 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		fluorene				0.77	mg/kg		0.77	mg/kg	0.000077 %		
			201-695-5	86-73-7									
16		phenanthrene				3.54	mg/kg		3.54	mg/kg	0.000354 %		
			201-581-5	85-01-8									
17		anthracene				0.85	mg/kg		0.85	mg/kg	0.000085 %		
			204-371-1	120-12-7									
18		fluoranthene				2.72	mg/kg		2.72	mg/kg	0.000272 %		
			205-912-4	206-44-0									
19		pyrene				2.35	mg/kg		2.35	mg/kg	0.000235 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				0.83	mg/kg		0.83	mg/kg	0.000083 %		
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				0.83	mg/kg		0.83	mg/kg	0.000083 %		
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				0.6	mg/kg		0.6	mg/kg	0.00006 %		
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				0.23	mg/kg		0.23	mg/kg	0.000023 %		
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				0.49	mg/kg		0.49	mg/kg	0.000049 %		
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				0.21	mg/kg		0.21	mg/kg	0.000021 %		
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.04	mg/kg		0.04	mg/kg	0.000004 %		
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				0.19	mg/kg		0.19	mg/kg	0.000019 %		
			205-883-8	191-24-2									
28		pH				9.46	pH		9.46	pH	9.46 pH		
				PH									
29		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.107 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0692%)

Classification of sample: BH19/09

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

Sample details

Sample Name:
BH19/09
Sample Depth:
3 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	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	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2.7	mg/kg	3.22	8.694	mg/kg	0.000869 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.1	mg/kg	1.142	1.257	mg/kg	0.000126 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				34	mg/kg	1.923	65.385	mg/kg	0.00654 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		53	mg/kg	1.126	59.672	mg/kg	0.00597 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	86	mg/kg	1.56	134.144	mg/kg	0.0086 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.56	mg/kg	1.353	0.758	mg/kg	0.0000758 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		24	mg/kg	2.976	71.43	mg/kg	0.00714 %		
9	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		100	mg/kg	1.245	124.471	mg/kg	0.0124 %		
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 }	006-007-00-5				1	mg/kg	1.884	1.884	mg/kg	0.000188 %		
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<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									
15		TPH (C6 to C40) petroleum group		TPH		356	mg/kg		356	mg/kg	0.0356 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		1.01	mg/kg		1.01	mg/kg	0.000101 %		
17		acenaphthylene											
			205-917-1	208-96-8		0.03	mg/kg		0.03	mg/kg	0.000003 %		
18		acenaphthene											
			201-469-6	83-32-9		0.77	mg/kg		0.77	mg/kg	0.000077 %		
19		fluorene											
			201-695-5	86-73-7		0.59	mg/kg		0.59	mg/kg	0.000059 %		
20		phenanthrene											
			201-581-5	85-01-8		3.55	mg/kg		3.55	mg/kg	0.000355 %		
21		anthracene											
			204-371-1	120-12-7		0.87	mg/kg		0.87	mg/kg	0.000087 %		
22		fluoranthene											
			205-912-4	206-44-0		3.48	mg/kg		3.48	mg/kg	0.000348 %		
23		pyrene											
			204-927-3	129-00-0		3.19	mg/kg		3.19	mg/kg	0.000319 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		1.18	mg/kg		1.18	mg/kg	0.000118 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		1.2	mg/kg		1.2	mg/kg	0.00012 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		1.1	mg/kg		1.1	mg/kg	0.00011 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		0.35	mg/kg		0.35	mg/kg	0.000035 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		0.8	mg/kg		0.8	mg/kg	0.00008 %		
29		indeno[123-cd]pyrene											
			205-893-2	193-39-5		0.37	mg/kg		0.37	mg/kg	0.000037 %		
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 %		
31		benzo[ghi]perylene											
			205-883-8	191-24-2		0.31	mg/kg		0.31	mg/kg	0.000031 %		
32		pH											
				PH		11.04	pH		11.04	pH	11.04 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
										Total:	0.0808 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0356%)

Classification of sample: BH19/09[2]

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

Sample details

Sample Name:	LoW Code:	
BH19/09[2]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:		
7 m	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	asbestos	650-013-00-6	- - - - - - -	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5		0.007 mg/kg		0.007 mg/kg	0.0000007 %		
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		13 mg/kg	1.32	17.164 mg/kg	0.00172 %		
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		0.9 mg/kg	1.142	1.028 mg/kg	0.000103 %		
5	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				38 mg/kg	1.923	73.077 mg/kg	0.00731 %		
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		70 mg/kg	1.126	78.812 mg/kg	0.00788 %		
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	202 mg/kg	1.56	315.083 mg/kg	0.0202 %		
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.33 mg/kg	1.353	0.447 mg/kg	0.0000447 %		
9	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		29 mg/kg	2.976	86.312 mg/kg	0.00863 %		
10	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		130 mg/kg	1.245	161.813 mg/kg	0.0162 %		
11	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				5 mg/kg	1.884	9.42 mg/kg	0.000942 %		
12	TPH (C6 to C40) petroleum group			TPH		936 mg/kg		936 mg/kg	0.0936 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
13		naphthalene				1.46	mg/kg		1.46	mg/kg	0.000146 %		
		601-052-00-2	202-049-5	91-20-3									
14	●	acenaphthylene				0.21	mg/kg		0.21	mg/kg	0.000021 %		
			205-917-1	208-96-8									
15	●	acenaphthene				2.88	mg/kg		2.88	mg/kg	0.000288 %		
			201-469-6	83-32-9									
16	●	fluorene				3.18	mg/kg		3.18	mg/kg	0.000318 %		
			201-695-5	86-73-7									
17	●	phenanthrene				22.5	mg/kg		22.5	mg/kg	0.00225 %		
			201-581-5	85-01-8									
18	●	anthracene				5.38	mg/kg		5.38	mg/kg	0.000538 %		
			204-371-1	120-12-7									
19	●	fluoranthene				19.7	mg/kg		19.7	mg/kg	0.00197 %		
			205-912-4	206-44-0									
20	●	pyrene				16.7	mg/kg		16.7	mg/kg	0.00167 %		
			204-927-3	129-00-0									
21		benzo[a]anthracene				7.59	mg/kg		7.59	mg/kg	0.000759 %		
		601-033-00-9	200-280-6	56-55-3									
22		chrysene				7.41	mg/kg		7.41	mg/kg	0.000741 %		
		601-048-00-0	205-923-4	218-01-9									
23		benzo[b]fluoranthene				6.78	mg/kg		6.78	mg/kg	0.000678 %		
		601-034-00-4	205-911-9	205-99-2									
24		benzo[k]fluoranthene				2.22	mg/kg		2.22	mg/kg	0.000222 %		
		601-036-00-5	205-916-6	207-08-9									
25		benzo[a]pyrene; benzo[def]chrysene				5.51	mg/kg		5.51	mg/kg	0.000551 %		
		601-032-00-3	200-028-5	50-32-8									
26	●	indeno[123-cd]pyrene				2.95	mg/kg		2.95	mg/kg	0.000295 %		
			205-893-2	193-39-5									
27		dibenz[a,h]anthracene				0.76	mg/kg		0.76	mg/kg	0.000076 %		
		601-041-00-2	200-181-8	53-70-3									
28	●	benzo[ghi]perylene				2.35	mg/kg		2.35	mg/kg	0.000235 %		
			205-883-8	191-24-2									
29	●	pH				8.48	pH		8.48	pH	8.48 pH		
				PH									
30		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.168 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0936%)

Classification of sample: BH19/10

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

Sample details

Sample Name:	LoW Code:
BH19/10	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
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% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		13	mg/kg	1.32	17.164	mg/kg	0.00172 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		3.6	mg/kg	3.22	11.592	mg/kg	0.00116 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.5	mg/kg	1.142	1.713	mg/kg	0.000171 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				38	mg/kg	1.923	73.077	mg/kg	0.00731 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		62	mg/kg	1.126	69.805	mg/kg	0.00698 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	386	mg/kg	1.56	602.089	mg/kg	0.0386 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.93	mg/kg	1.353	1.259	mg/kg	0.000126 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		26	mg/kg	2.976	77.383	mg/kg	0.00774 %		
9	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		175	mg/kg	1.245	217.825	mg/kg	0.0218 %		
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 }	006-007-00-5				4	mg/kg	1.884	7.536	mg/kg	0.000754 %		
11	TPH (C6 to C40) petroleum group			TPH		833	mg/kg		833	mg/kg	0.0833 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		1.21	mg/kg		1.21	mg/kg	0.000121 %		
13	acenaphthylene		205-917-1	208-96-8		0.08	mg/kg		0.08	mg/kg	0.000008 %		
14	acenaphthene		201-469-6	83-32-9		1.97	mg/kg		1.97	mg/kg	0.000197 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15	●	fluorene				1.55	mg/kg		1.55	mg/kg	0.000155 %		
			201-695-5	86-73-7									
16	●	phenanthrene				9.12	mg/kg		9.12	mg/kg	0.000912 %		
			201-581-5	85-01-8									
17	●	anthracene				1.9	mg/kg		1.9	mg/kg	0.00019 %		
			204-371-1	120-12-7									
18	●	fluoranthene				8.7	mg/kg		8.7	mg/kg	0.00087 %		
			205-912-4	206-44-0									
19	●	pyrene				7.39	mg/kg		7.39	mg/kg	0.000739 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				3.6	mg/kg		3.6	mg/kg	0.00036 %		
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				3.48	mg/kg		3.48	mg/kg	0.000348 %		
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				3.72	mg/kg		3.72	mg/kg	0.000372 %		
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				1.38	mg/kg		1.38	mg/kg	0.000138 %		
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				2.45	mg/kg		2.45	mg/kg	0.000245 %		
		601-032-00-3	200-028-5	50-32-8									
25	●	indeno[123-cd]pyrene				1.88	mg/kg		1.88	mg/kg	0.000188 %		
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.4	mg/kg		0.4	mg/kg	0.00004 %		
		601-041-00-2	200-181-8	53-70-3									
27	●	benzo[ghi]perylene				1.57	mg/kg		1.57	mg/kg	0.000157 %		
			205-883-8	191-24-2									
28	●	pH				8.98	pH		8.98	pH	8.98 pH		
				PH									
29		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.175 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0833%)

Classification of sample: BH19/10[2]

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

Sample details

Sample Name:	LoW Code:
BH19/10[2]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
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% No 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 mg/kg	1.32	7.922 mg/kg	0.000792 %		
	033-003-00-0 / 215-481-4 / 1327-53-3							
2	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							
3	cadmium { cadmium oxide }		1.2 mg/kg	1.142	1.371 mg/kg	0.000137 %		
	048-002-00-0 / 215-146-2 / 1306-19-0							
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }		22 mg/kg	1.923	42.308 mg/kg	0.00423 %		
	024-017-00-8							
5	copper { dicopper oxide; copper (I) oxide }		227 mg/kg	1.126	255.577 mg/kg	0.0256 %		
	029-002-00-X / 215-270-7 / 1317-39-1							
6	lead { lead chromate }	1	116 mg/kg	1.56	180.939 mg/kg	0.0116 %		
	082-004-00-2 / 231-846-0 / 7758-97-6							
7	mercury { mercury dichloride }		<0.17 mg/kg	1.353	<0.23 mg/kg	<0.000023 %		<LOD
	080-010-00-X / 231-299-8 / 7487-94-7							
8	nickel { nickel chromate }		20 mg/kg	2.976	59.525 mg/kg	0.00595 %		
	028-035-00-7 / 238-766-5 / 14721-18-7							
9	zinc { zinc oxide }		104 mg/kg	1.245	129.45 mg/kg	0.0129 %		
	030-013-00-7 / 215-222-5 / 1314-13-2							
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 }		<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5							
11	benzene		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-020-00-8 / 200-753-7 / 71-43-2							
12	toluene		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-021-00-3 / 203-625-9 / 108-88-3							
13	ethylbenzene		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	601-023-00-4 / 202-849-4 / 100-41-4							
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							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15	●	TPH (C6 to C40) petroleum group		TPH		206	mg/kg		206	mg/kg	0.0206 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		1.19	mg/kg		1.19	mg/kg	0.000119 %		
17	●	acenaphthylene											
			205-917-1	208-96-8		0.06	mg/kg		0.06	mg/kg	0.000006 %		
18	●	acenaphthene											
			201-469-6	83-32-9		1.3	mg/kg		1.3	mg/kg	0.00013 %		
19	●	fluorene											
			201-695-5	86-73-7		0.95	mg/kg		0.95	mg/kg	0.000095 %		
20	●	phenanthrene											
			201-581-5	85-01-8		4.36	mg/kg		4.36	mg/kg	0.000436 %		
21	●	anthracene											
			204-371-1	120-12-7		1.26	mg/kg		1.26	mg/kg	0.000126 %		
22	●	fluoranthene											
			205-912-4	206-44-0		6.12	mg/kg		6.12	mg/kg	0.000612 %		
23	●	pyrene											
			204-927-3	129-00-0		5.76	mg/kg		5.76	mg/kg	0.000576 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		3.21	mg/kg		3.21	mg/kg	0.000321 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		2.94	mg/kg		2.94	mg/kg	0.000294 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		2.62	mg/kg		2.62	mg/kg	0.000262 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		0.94	mg/kg		0.94	mg/kg	0.000094 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		2.3	mg/kg		2.3	mg/kg	0.00023 %		
29	●	indeno[123-cd]pyrene											
			205-893-2	193-39-5		1.7	mg/kg		1.7	mg/kg	0.00017 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.4	mg/kg		0.4	mg/kg	0.00004 %		
31	●	benzo[ghi]perylene											
			205-883-8	191-24-2		1.69	mg/kg		1.69	mg/kg	0.000169 %		
32	●	pH		PH		10.12	pH		10.12	pH	10.12 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
34	●	1,1-dichloroethane and 1,2-dichloroethane (combined)											
			203-458-1, 200-863-5	107-06-2, 75-34-3		<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
35		carbon tetrachloride; tetrachloromethane											
		602-008-00-5	200-262-8	56-23-5		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
36		trichloroethylene; trichloroethene											
		602-027-00-9	201-167-4	79-01-6		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
37		vinyl chloride; chloroethylene											
		602-023-00-7	200-831-0	75-01-4		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
										Total:	0.0866 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0206%)

Classification of sample: BH19/13

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

Sample details

Sample Name:	LoW Code:	
BH19/13	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:		
4 m	Entry:	17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to hazardous because Elevated TPHs over 1000mg/kg. Free product recorded in occasional samples during post-investgation monitoring. Loss on ignition tests carried out within 33% recorded elevated loss of ignition above the hazardous waste threshold.

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.103%)

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

Hazard Statements hit:

Carc. 1B; 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:

TPH (C6 to C40) petroleum group: (conc.: 0.103%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.103%)

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		56	mg/kg	1.32	73.938	mg/kg	0.00739 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2.8	mg/kg	3.22	9.016	mg/kg	0.000902 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.9	mg/kg	1.142	3.313	mg/kg	0.000331 %		

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				37 mg/kg	1.923	71.154 mg/kg	0.00712 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		172 mg/kg	1.126	193.653 mg/kg	0.0194 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	385 mg/kg	1.56	600.529 mg/kg	0.0385 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.53 mg/kg	1.353	0.717 mg/kg	0.0000717 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		40 mg/kg	2.976	119.051 mg/kg	0.0119 %		
9	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		210 mg/kg	1.245	261.39 mg/kg	0.0261 %		
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 }	006-007-00-5				35 mg/kg	1.884	65.94 mg/kg	0.00659 %		
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
15	TPH (C6 to C40) petroleum group			TPH		1030 mg/kg		1030 mg/kg	0.103 %		
16	naphthalene	601-052-00-2	202-049-5	91-20-3		2.15 mg/kg		2.15 mg/kg	0.000215 %		
17	acenaphthylene		205-917-1	208-96-8		0.4 mg/kg		0.4 mg/kg	0.00004 %		
18	acenaphthene		201-469-6	83-32-9		6.5 mg/kg		6.5 mg/kg	0.00065 %		
19	fluorene		201-695-5	86-73-7		5.02 mg/kg		5.02 mg/kg	0.000502 %		
20	phenanthrene		201-581-5	85-01-8		40.5 mg/kg		40.5 mg/kg	0.00405 %		
21	anthracene		204-371-1	120-12-7		9.66 mg/kg		9.66 mg/kg	0.000966 %		
22	fluoranthene		205-912-4	206-44-0		36.9 mg/kg		36.9 mg/kg	0.00369 %		
23	pyrene		204-927-3	129-00-0		34.6 mg/kg		34.6 mg/kg	0.00346 %		
24	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		16.9 mg/kg		16.9 mg/kg	0.00169 %		
25	chrysene	601-048-00-0	205-923-4	218-01-9		15.9 mg/kg		15.9 mg/kg	0.00159 %		
26	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		14.4 mg/kg		14.4 mg/kg	0.00144 %		
27	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		5 mg/kg		5 mg/kg	0.0005 %		
28	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		12.1 mg/kg		12.1 mg/kg	0.00121 %		
29	indeno[123-cd]pyrene		205-893-2	193-39-5		5.89 mg/kg		5.89 mg/kg	0.000589 %		
30	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		1.44 mg/kg		1.44 mg/kg	0.000144 %		

#		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[ghi]perylene				4.51	mg/kg		4.51	mg/kg	0.000451 %		
			205-883-8	191-24-2									
32		pH				8.1	pH		8.1	pH	8.1 pH		
				PH									
33		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.243 %		

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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: BH19/13[2]

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

Sample details

Sample Name:	LoW Code:	
BH19/13[2]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:		
6 m	Entry:	17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to hazardous because Elevated TPHs over 1000mg/kg. Free product recorded in occasional samples during post-investgation monitoring. Loss on ignition tests carried out within 33% recorded elevated loss of ignition above the hazardous waste threshold.

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.102%)

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

Hazard Statements hit:

Carc. 1B; 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:

TPH (C6 to C40) petroleum group: (conc.: 0.102%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.102%)

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		92 mg/kg	1.32	121.47 mg/kg	0.0121 %		
2	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 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		3.6 mg/kg	1.142	4.112 mg/kg	0.000411 %		

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				38	mg/kg	1.923	73.077	mg/kg	0.00731 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		786	mg/kg	1.126	884.948	mg/kg	0.0885 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	439	mg/kg	1.56	684.759	mg/kg	0.0439 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		1.01	mg/kg	1.353	1.367	mg/kg	0.000137 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		71	mg/kg	2.976	211.315	mg/kg	0.0211 %		
9	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		411	mg/kg	1.245	511.577	mg/kg	0.0512 %		
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 }	006-007-00-5				7	mg/kg	1.884	13.188	mg/kg	0.00132 %		
11	TPH (C6 to C40) petroleum group			TPH		1020	mg/kg		1020	mg/kg	0.102 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		0.49	mg/kg		0.49	mg/kg	0.000049 %		
13	acenaphthylene		205-917-1	208-96-8		0.11	mg/kg		0.11	mg/kg	0.000011 %		
14	acenaphthene		201-469-6	83-32-9		0.64	mg/kg		0.64	mg/kg	0.000064 %		
15	fluorene		201-695-5	86-73-7		0.57	mg/kg		0.57	mg/kg	0.000057 %		
16	phenanthrene		201-581-5	85-01-8		5.15	mg/kg		5.15	mg/kg	0.000515 %		
17	anthracene		204-371-1	120-12-7		1.18	mg/kg		1.18	mg/kg	0.000118 %		
18	fluoranthene		205-912-4	206-44-0		6.36	mg/kg		6.36	mg/kg	0.000636 %		
19	pyrene		204-927-3	129-00-0		6.42	mg/kg		6.42	mg/kg	0.000642 %		
20	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		3.19	mg/kg		3.19	mg/kg	0.000319 %		
21	chrysene	601-048-00-0	205-923-4	218-01-9		3.35	mg/kg		3.35	mg/kg	0.000335 %		
22	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		3.53	mg/kg		3.53	mg/kg	0.000353 %		
23	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		1.04	mg/kg		1.04	mg/kg	0.000104 %		
24	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		2.74	mg/kg		2.74	mg/kg	0.000274 %		
25	indeno[123-cd]pyrene		205-893-2	193-39-5		1.33	mg/kg		1.33	mg/kg	0.000133 %		
26	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		0.39	mg/kg		0.39	mg/kg	0.000039 %		
27	benzo[ghi]perylene		205-883-8	191-24-2		1.13	mg/kg		1.13	mg/kg	0.000113 %		
28	pH			PH		7.64	pH		7.64	pH	7.64 pH		
29	phenol	604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
										Total:	0.332 %		

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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: BH19/14

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

Sample details

Sample Name:	LoW Code:	
BH19/14	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 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to hazardous because Elevated TPHs over 1000mg/kg. Free product recorded in occasional samples during post-investgation monitoring. Loss on ignition tests carried out within 33% recorded elevated loss of ignition above the hazardous waste threshold.

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.117%)

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

Hazard Statements hit:

Carc. 1B; 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:

TPH (C6 to C40) petroleum group: (conc.: 0.117%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.117%)

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		29	mg/kg	1.32	38.289	mg/kg	0.00383 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		1.8	mg/kg	3.22	5.796	mg/kg	0.00058 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2.4	mg/kg	1.142	2.742	mg/kg	0.000274 %		

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex } 024-017-00-8		31 mg/kg	1.923	59.615 mg/kg	0.00596 %		
5	copper { dicopper oxide; copper (I) oxide } 029-002-00-X / 215-270-7 / 1317-39-1		122 mg/kg	1.126	137.358 mg/kg	0.0137 %		
6	lead { lead chromate } 082-004-00-2 / 231-846-0 / 7758-97-6	1	255 mg/kg	1.56	397.753 mg/kg	0.0255 %		
7	mercury { mercury dichloride } 080-010-00-X / 231-299-8 / 7487-94-7		0.38 mg/kg	1.353	0.514 mg/kg	0.0000514 %		
8	nickel { nickel chromate } 028-035-00-7 / 238-766-5 / 14721-18-7		33 mg/kg	2.976	98.217 mg/kg	0.00982 %		
9	zinc { zinc oxide } 030-013-00-7 / 215-222-5 / 1314-13-2		183 mg/kg	1.245	227.783 mg/kg	0.0228 %		
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 } 006-007-00-5		102 mg/kg	1.884	192.168 mg/kg	0.0192 %		
11	benzene 601-020-00-8 / 200-753-7 / 71-43-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
12	toluene 601-021-00-3 / 203-625-9 / 108-88-3		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
13	ethylbenzene 601-023-00-4 / 202-849-4 / 100-41-4		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane 603-181-00-X / 216-653-1 / 1634-04-4		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
15	TPH (C6 to C40) petroleum group TPH		1170 mg/kg		1170 mg/kg	0.117 %		
16	naphthalene 601-052-00-2 / 202-049-5 / 91-20-3		3.29 mg/kg		3.29 mg/kg	0.000329 %		
17	acenaphthylene 205-917-1 / 208-96-8		0.14 mg/kg		0.14 mg/kg	0.000014 %		
18	acenaphthene 201-469-6 / 83-32-9		4.9 mg/kg		4.9 mg/kg	0.00049 %		
19	fluorene 201-695-5 / 86-73-7		4.63 mg/kg		4.63 mg/kg	0.000463 %		
20	phenanthrene 201-581-5 / 85-01-8		45.3 mg/kg		45.3 mg/kg	0.00453 %		
21	anthracene 204-371-1 / 120-12-7		7.04 mg/kg		7.04 mg/kg	0.000704 %		
22	fluoranthene 205-912-4 / 206-44-0		33.9 mg/kg		33.9 mg/kg	0.00339 %		
23	pyrene 204-927-3 / 129-00-0		36.2 mg/kg		36.2 mg/kg	0.00362 %		
24	benzo[a]anthracene 601-033-00-9 / 200-280-6 / 56-55-3		11.6 mg/kg		11.6 mg/kg	0.00116 %		
25	chrysene 601-048-00-0 / 205-923-4 / 218-01-9		11.5 mg/kg		11.5 mg/kg	0.00115 %		
26	benzo[b]fluoranthene 601-034-00-4 / 205-911-9 / 205-99-2		9.11 mg/kg		9.11 mg/kg	0.000911 %		
27	benzo[k]fluoranthene 601-036-00-5 / 205-916-6 / 207-08-9		3.21 mg/kg		3.21 mg/kg	0.000321 %		
28	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3 / 200-028-5 / 50-32-8		8.38 mg/kg		8.38 mg/kg	0.000838 %		
29	indeno[123-cd]pyrene 205-893-2 / 193-39-5		3.76 mg/kg		3.76 mg/kg	0.000376 %		
30	dibenz[a,h]anthracene 601-041-00-2 / 200-181-8 / 53-70-3		1.17 mg/kg		1.17 mg/kg	0.000117 %		

#		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[ghi]perylene				3.35	mg/kg		3.35	mg/kg	0.000335 %		
			205-883-8	191-24-2									
32		pH				9.25	pH		9.25	pH	9.25 pH		
				PH									
33		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
34		1,1-dichloroethane and 1,2-dichloroethane (combined)				<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
			203-458-1, 200-863-5	107-06-2, 75-34-3									
35		carbon tetrachloride; tetrachloromethane				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		602-008-00-5	200-262-8	56-23-5									
36		trichloroethylene; trichloroethene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		602-027-00-9	201-167-4	79-01-6									
37		vinyl chloride; chloroethylene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		602-023-00-7	200-831-0	75-01-4									
										Total:	0.238 %		

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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: BH19/14[2]

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

Sample details

Sample Name:	LoW Code:
BH19/14[2]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
7 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		84	mg/kg	1.32	110.907	mg/kg	0.0111 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2.4	mg/kg	3.22	7.728	mg/kg	0.000773 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		3.2	mg/kg	1.142	3.655	mg/kg	0.000366 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				29	mg/kg	1.923	55.769	mg/kg	0.00558 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		248	mg/kg	1.126	279.22	mg/kg	0.0279 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	320	mg/kg	1.56	499.141	mg/kg	0.032 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.5	mg/kg	1.353	0.677	mg/kg	0.0000677 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		70	mg/kg	2.976	208.339	mg/kg	0.0208 %		
9	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		319	mg/kg	1.245	397.064	mg/kg	0.0397 %		
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 }	006-007-00-5				1	mg/kg	1.884	1.884	mg/kg	0.000188 %		
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<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									
15	●	TPH (C6 to C40) petroleum group		TPH		141	mg/kg		141	mg/kg	0.0141 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		0.12	mg/kg		0.12	mg/kg	0.000012 %		
17	●	acenaphthylene											
			205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
18	●	acenaphthene											
			201-469-6	83-32-9		0.13	mg/kg		0.13	mg/kg	0.000013 %		
19	●	fluorene											
			201-695-5	86-73-7		0.09	mg/kg		0.09	mg/kg	0.000009 %		
20	●	phenanthrene											
			201-581-5	85-01-8		0.8	mg/kg		0.8	mg/kg	0.00008 %		
21	●	anthracene											
			204-371-1	120-12-7		0.14	mg/kg		0.14	mg/kg	0.000014 %		
22	●	fluoranthene											
			205-912-4	206-44-0		0.78	mg/kg		0.78	mg/kg	0.000078 %		
23	●	pyrene											
			204-927-3	129-00-0		0.8	mg/kg		0.8	mg/kg	0.00008 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		0.39	mg/kg		0.39	mg/kg	0.000039 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		0.45	mg/kg		0.45	mg/kg	0.000045 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		0.28	mg/kg		0.28	mg/kg	0.000028 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		0.09	mg/kg		0.09	mg/kg	0.000009 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		0.22	mg/kg		0.22	mg/kg	0.000022 %		
29	●	indeno[123-cd]pyrene											
			205-893-2	193-39-5		0.12	mg/kg		0.12	mg/kg	0.000012 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.04	mg/kg		0.04	mg/kg	0.000004 %		
31	●	benzo[ghi]perylene											
			205-883-8	191-24-2		0.11	mg/kg		0.11	mg/kg	0.000011 %		
32	●	pH		PH		7.41	pH		7.41	pH	7.41 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
34	●	1,1-dichloroethane and 1,2-dichloroethane (combined)											
			203-458-1, 200-863-5	107-06-2, 75-34-3		<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
35		carbon tetrachloride; tetrachloromethane											
		602-008-00-5	200-262-8	56-23-5		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
36		trichloroethylene; trichloroethene											
		602-027-00-9	201-167-4	79-01-6		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
37		vinyl chloride; chloroethylene											
		602-023-00-7	200-831-0	75-01-4		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
										Total:	0.154 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0141%)

Classification of sample: BH19/19

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

Sample details

Sample Name:
BH19/19
Sample Depth:
5 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		16	mg/kg	1.32	21.125	mg/kg	0.00211 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2.9	mg/kg	3.22	9.338	mg/kg	0.000934 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.1	mg/kg	1.142	1.257	mg/kg	0.000126 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				23	mg/kg	1.923	44.231	mg/kg	0.00442 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		61	mg/kg	1.126	68.679	mg/kg	0.00687 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	111	mg/kg	1.56	173.139	mg/kg	0.0111 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.96	mg/kg	1.353	1.299	mg/kg	0.00013 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		27	mg/kg	2.976	80.359	mg/kg	0.00804 %		
9	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		125	mg/kg	1.245	155.589	mg/kg	0.0156 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		0.01	mg/kg		0.01	mg/kg	0.000001 %		
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
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

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		TPH (C6 to C40) petroleum group		TPH		441	mg/kg		441	mg/kg	0.0441 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		1.38	mg/kg		1.38	mg/kg	0.000138 %		
17		acenaphthylene											
			205-917-1	208-96-8		0.09	mg/kg		0.09	mg/kg	0.000009 %		
18		acenaphthene											
			201-469-6	83-32-9		1.64	mg/kg		1.64	mg/kg	0.000164 %		
19		fluorene											
			201-695-5	86-73-7		1.24	mg/kg		1.24	mg/kg	0.000124 %		
20		phenanthrene											
			201-581-5	85-01-8		6.77	mg/kg		6.77	mg/kg	0.000677 %		
21		anthracene											
			204-371-1	120-12-7		1.62	mg/kg		1.62	mg/kg	0.000162 %		
22		fluoranthene											
			205-912-4	206-44-0		6.23	mg/kg		6.23	mg/kg	0.000623 %		
23		pyrene											
			204-927-3	129-00-0		5.95	mg/kg		5.95	mg/kg	0.000595 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		2.82	mg/kg		2.82	mg/kg	0.000282 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		2.65	mg/kg		2.65	mg/kg	0.000265 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		0.72	mg/kg		0.72	mg/kg	0.000072 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		2.31	mg/kg		2.31	mg/kg	0.000231 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		1.85	mg/kg		1.85	mg/kg	0.000185 %		
29		indeno[123-cd]pyrene											
			205-893-2	193-39-5		1.32	mg/kg		1.32	mg/kg	0.000132 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.22	mg/kg		0.22	mg/kg	0.000022 %		
31		benzo[ghi]perylene											
			205-883-8	191-24-2		1.07	mg/kg		1.07	mg/kg	0.000107 %		
32		pH											
				PH		10.25	pH		10.25	pH	10.25 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
34		1,1-dichloroethane and 1,2-dichloroethane (combined)											
			203-458-1, 200-863-5	107-06-2, 75-34-3		<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
35		carbon tetrachloride; tetrachloromethane											
		602-008-00-5	200-262-8	56-23-5		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
36		trichloroethylene; trichloroethene											
		602-027-00-9	201-167-4	79-01-6		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
37		vinyl chloride; chloroethylene											
		602-023-00-7	200-831-0	75-01-4		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
										Total:	0.0979 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

toluene: (conc.: 1.0e-06%)

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0441%)

Classification of sample: BH19/19[2]

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

Sample details

Sample Name:	LoW Code:
BH19/19[2]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
9 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		79	mg/kg	1.32	104.306	mg/kg	0.0104 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		23.4	mg/kg	3.22	75.345	mg/kg	0.00753 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.1	mg/kg	1.142	1.257	mg/kg	0.000126 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				27	mg/kg	1.923	51.923	mg/kg	0.00519 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		49	mg/kg	1.126	55.169	mg/kg	0.00552 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	35	mg/kg	1.56	54.594	mg/kg	0.0035 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.39	mg/kg	1.353	0.528	mg/kg	0.0000528 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		32	mg/kg	2.976	95.24	mg/kg	0.00952 %		
9	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		60	mg/kg	1.245	74.683	mg/kg	0.00747 %		
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 }	006-007-00-5				2	mg/kg	1.884	3.768	mg/kg	0.000377 %		
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
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**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15	●	TPH (C6 to C40) petroleum group		TPH		301	mg/kg		301	mg/kg	0.0301 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		1.35	mg/kg		1.35	mg/kg	0.000135 %		
17	●	acenaphthylene											
			205-917-1	208-96-8		0.28	mg/kg		0.28	mg/kg	0.000028 %		
18	●	acenaphthene											
			201-469-6	83-32-9		0.53	mg/kg		0.53	mg/kg	0.000053 %		
19	●	fluorene											
			201-695-5	86-73-7		0.83	mg/kg		0.83	mg/kg	0.000083 %		
20	●	phenanthrene											
			201-581-5	85-01-8		7.15	mg/kg		7.15	mg/kg	0.000715 %		
21	●	anthracene											
			204-371-1	120-12-7		1.47	mg/kg		1.47	mg/kg	0.000147 %		
22	●	fluoranthene											
			205-912-4	206-44-0		6.15	mg/kg		6.15	mg/kg	0.000615 %		
23	●	pyrene											
			204-927-3	129-00-0		5.89	mg/kg		5.89	mg/kg	0.000589 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		2.28	mg/kg		2.28	mg/kg	0.000228 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		2.22	mg/kg		2.22	mg/kg	0.000222 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		2.2	mg/kg		2.2	mg/kg	0.00022 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		0.72	mg/kg		0.72	mg/kg	0.000072 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		1.76	mg/kg		1.76	mg/kg	0.000176 %		
29	●	indeno[123-cd]pyrene											
			205-893-2	193-39-5		0.79	mg/kg		0.79	mg/kg	0.000079 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.15	mg/kg		0.15	mg/kg	0.000015 %		
31	●	benzo[ghi]perylene											
			205-883-8	191-24-2		0.78	mg/kg		0.78	mg/kg	0.000078 %		
32	●	pH		PH		10.45	pH		10.45	pH	10.45 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
34	●	1,1-dichloroethane and 1,2-dichloroethane (combined)											
			203-458-1, 200-863-5	107-06-2, 75-34-3		<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
35		carbon tetrachloride; tetrachloromethane											
		602-008-00-5	200-262-8	56-23-5		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
36		trichloroethylene; trichloroethene											
		602-027-00-9	201-167-4	79-01-6		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
37		vinyl chloride; chloroethylene											
		602-023-00-7	200-831-0	75-01-4		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
										Total:	0.0838 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0301%)

Classification of sample: BH19/19[3]

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

Sample details

Sample Name:
BH19/19[3]
Sample Depth:
12 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	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	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		3.6	mg/kg	3.22	11.592	mg/kg	0.00116 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.8	mg/kg	1.142	0.914	mg/kg	0.0000914 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				18	mg/kg	1.923	34.615	mg/kg	0.00346 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		34	mg/kg	1.126	38.28	mg/kg	0.00383 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	68	mg/kg	1.56	106.067	mg/kg	0.0068 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17	mg/kg	1.353	<0.23	mg/kg	<0.000023 %		**<LOD**
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		21	mg/kg	2.976	62.502	mg/kg	0.00625 %		
9	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		67	mg/kg	1.245	83.396	mg/kg	0.00834 %		
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 }	006-007-00-5				2	mg/kg	1.884	3.768	mg/kg	0.000377 %		
11	TPH (C6 to C40) petroleum group			TPH		88	mg/kg		88	mg/kg	0.0088 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		0.34	mg/kg		0.34	mg/kg	0.000034 %		
13	acenaphthylene		205-917-1	208-96-8		0.08	mg/kg		0.08	mg/kg	0.000008 %		
14	acenaphthene		201-469-6	83-32-9		0.13	mg/kg		0.13	mg/kg	0.000013 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		fluorene				0.19	mg/kg		0.19	mg/kg	0.000019 %		
			201-695-5	86-73-7									
16		phenanthrene				1.55	mg/kg		1.55	mg/kg	0.000155 %		
			201-581-5	85-01-8									
17		anthracene				0.33	mg/kg		0.33	mg/kg	0.000033 %		
			204-371-1	120-12-7									
18		fluoranthene				1.55	mg/kg		1.55	mg/kg	0.000155 %		
			205-912-4	206-44-0									
19		pyrene				1.6	mg/kg		1.6	mg/kg	0.00016 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				0.65	mg/kg		0.65	mg/kg	0.000065 %		
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				0.69	mg/kg		0.69	mg/kg	0.000069 %		
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				0.72	mg/kg		0.72	mg/kg	0.000072 %		
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				0.25	mg/kg		0.25	mg/kg	0.000025 %		
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				0.57	mg/kg		0.57	mg/kg	0.000057 %		
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				0.32	mg/kg		0.32	mg/kg	0.000032 %		
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.06	mg/kg		0.06	mg/kg	0.000006 %		
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				0.34	mg/kg		0.34	mg/kg	0.000034 %		
			205-883-8	191-24-2									
28		pH				7.47	pH		7.47	pH	7.47 pH		
				PH									
29		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0415 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0088%)

Classification of sample: BH19/20

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

Sample details

Sample Name:	LoW Code:	
BH19/20	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:		
4 m	Entry:	17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to hazardous because Elevated TPHs over 1000mg/kg. Free product recorded in occasional samples during post-investgation monitoring. Loss on ignition tests carried out within 33% recorded elevated loss of ignition above the hazardous waste threshold.

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.105%)

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

Hazard Statements hit:

Carc. 1B; 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:

TPH (C6 to C40) petroleum group: (conc.: 0.105%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.105%)

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	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	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		1.6	mg/kg	3.22	5.152	mg/kg	0.000515 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		4	mg/kg	1.142	4.569	mg/kg	0.000457 %		

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				24	mg/kg	1.923	46.154	mg/kg	0.00462 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		46	mg/kg	1.126	51.791	mg/kg	0.00518 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	80	mg/kg	1.56	124.785	mg/kg	0.008 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.99	mg/kg	1.353	1.34	mg/kg	0.000134 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		30	mg/kg	2.976	89.288	mg/kg	0.00893 %		
9	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		320	mg/kg	1.245	398.308	mg/kg	0.0398 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	TPH (C6 to C40) petroleum group			TPH		1050	mg/kg		1050	mg/kg	0.105 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		3.25	mg/kg		3.25	mg/kg	0.000325 %		
13	acenaphthylene		205-917-1	208-96-8		0.2	mg/kg		0.2	mg/kg	0.00002 %		
14	acenaphthene		201-469-6	83-32-9		1.83	mg/kg		1.83	mg/kg	0.000183 %		
15	fluorene		201-695-5	86-73-7		1.52	mg/kg		1.52	mg/kg	0.000152 %		
16	phenanthrene		201-581-5	85-01-8		8.63	mg/kg		8.63	mg/kg	0.000863 %		
17	anthracene		204-371-1	120-12-7		2.16	mg/kg		2.16	mg/kg	0.000216 %		
18	fluoranthene		205-912-4	206-44-0		9.24	mg/kg		9.24	mg/kg	0.000924 %		
19	pyrene		204-927-3	129-00-0		9	mg/kg		9	mg/kg	0.0009 %		
20	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		4.89	mg/kg		4.89	mg/kg	0.000489 %		
21	chrysene	601-048-00-0	205-923-4	218-01-9		4.53	mg/kg		4.53	mg/kg	0.000453 %		
22	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		4.29	mg/kg		4.29	mg/kg	0.000429 %		
23	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		1.29	mg/kg		1.29	mg/kg	0.000129 %		
24	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		3.43	mg/kg		3.43	mg/kg	0.000343 %		
25	indeno[123-cd]pyrene		205-893-2	193-39-5		2.83	mg/kg		2.83	mg/kg	0.000283 %		
26	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		0.49	mg/kg		0.49	mg/kg	0.000049 %		
27	benzo[ghi]perylene		205-883-8	191-24-2		2.34	mg/kg		2.34	mg/kg	0.000234 %		
28	pH			PH		10.35	pH		10.35	pH	10.35 pH		
29	phenol	604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
										Total:	0.18 %		

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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: BH19/20[2]

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

Sample details

Sample Name:
BH19/20[2]
Sample Depth:
6 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7	mg/kg	1.32	9.242	mg/kg	0.000924 %		
2	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 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.9	mg/kg	1.142	1.028	mg/kg	0.000103 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				21	mg/kg	1.923	40.385	mg/kg	0.00404 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		40	mg/kg	1.126	45.036	mg/kg	0.0045 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	124	mg/kg	1.56	193.417	mg/kg	0.0124 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.51	mg/kg	1.353	0.69	mg/kg	0.000069 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		22	mg/kg	2.976	65.478	mg/kg	0.00655 %		
9	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		96	mg/kg	1.245	119.493	mg/kg	0.0119 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
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

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15	●	TPH (C6 to C40) petroleum group		TPH		783	mg/kg		783	mg/kg	0.0783 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		0.84	mg/kg		0.84	mg/kg	0.000084 %		
17	●	acenaphthylene											
			205-917-1	208-96-8		0.11	mg/kg		0.11	mg/kg	0.000011 %		
18	●	acenaphthene											
			201-469-6	83-32-9		1.12	mg/kg		1.12	mg/kg	0.000112 %		
19	●	fluorene											
			201-695-5	86-73-7		0.79	mg/kg		0.79	mg/kg	0.000079 %		
20	●	phenanthrene											
			201-581-5	85-01-8		5.36	mg/kg		5.36	mg/kg	0.000536 %		
21	●	anthracene											
			204-371-1	120-12-7		1.39	mg/kg		1.39	mg/kg	0.000139 %		
22	●	fluoranthene											
			205-912-4	206-44-0		5.65	mg/kg		5.65	mg/kg	0.000565 %		
23	●	pyrene											
			204-927-3	129-00-0		5.65	mg/kg		5.65	mg/kg	0.000565 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		2.79	mg/kg		2.79	mg/kg	0.000279 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		2.64	mg/kg		2.64	mg/kg	0.000264 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		2.23	mg/kg		2.23	mg/kg	0.000223 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		0.68	mg/kg		0.68	mg/kg	0.000068 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		1.88	mg/kg		1.88	mg/kg	0.000188 %		
29	●	indeno[123-cd]pyrene											
			205-893-2	193-39-5		1.7	mg/kg		1.7	mg/kg	0.00017 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.28	mg/kg		0.28	mg/kg	0.000028 %		
31	●	benzo[ghi]perylene											
			205-883-8	191-24-2		1.37	mg/kg		1.37	mg/kg	0.000137 %		
32	●	pH		PH		10.2	pH		10.2	pH	10.2 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
34	●	1,1-dichloroethane and 1,2-dichloroethane (combined)											
			203-458-1, 200-863-5	107-06-2, 75-34-3		<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
35		carbon tetrachloride; tetrachloromethane											
		602-008-00-5	200-262-8	56-23-5		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
36		trichloroethylene; trichloroethene											
		602-027-00-9	201-167-4	79-01-6		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
37		vinyl chloride; chloroethylene											
		602-023-00-7	200-831-0	75-01-4		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
										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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0783%)

Classification of sample: BH19/21

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

Sample details

Sample Name:	LoW Code:	
BH19/21	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:		
4 m	Entry:	17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to hazardous because Elevated TPHs over 1000mg/kg. Free product recorded in occasional samples during post-investgation monitoring. Loss on ignition tests carried out within 33% recorded elevated loss of ignition above the hazardous waste threshold.

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.127%)

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

Hazard Statements hit:

Carc. 1B; 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:

TPH (C6 to C40) petroleum group: (conc.: 0.127%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.127%)

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		15	mg/kg	1.32	19.805	mg/kg	0.00198 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2	mg/kg	3.22	6.44	mg/kg	0.000644 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.7	mg/kg	1.142	0.8	mg/kg	0.00008 %		

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				25	mg/kg	1.923	48.077	mg/kg	0.00481 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		79	mg/kg	1.126	88.945	mg/kg	0.00889 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	201	mg/kg	1.56	313.523	mg/kg	0.0201 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.39	mg/kg	1.353	0.528	mg/kg	0.0000528 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		26	mg/kg	2.976	77.383	mg/kg	0.00774 %		
9	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		125	mg/kg	1.245	155.589	mg/kg	0.0156 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		**<LOD**
11	TPH (C6 to C40) petroleum group			TPH		1270	mg/kg		1270	mg/kg	0.127 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		1.48	mg/kg		1.48	mg/kg	0.000148 %		
13	acenaphthylene		205-917-1	208-96-8		0.11	mg/kg		0.11	mg/kg	0.000011 %		
14	acenaphthene		201-469-6	83-32-9		1.82	mg/kg		1.82	mg/kg	0.000182 %		
15	fluorene		201-695-5	86-73-7		1.47	mg/kg		1.47	mg/kg	0.000147 %		
16	phenanthrene		201-581-5	85-01-8		8.51	mg/kg		8.51	mg/kg	0.000851 %		
17	anthracene		204-371-1	120-12-7		2.11	mg/kg		2.11	mg/kg	0.000211 %		
18	fluoranthene		205-912-4	206-44-0		10.5	mg/kg		10.5	mg/kg	0.00105 %		
19	pyrene		204-927-3	129-00-0		9.66	mg/kg		9.66	mg/kg	0.000966 %		
20	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		4.77	mg/kg		4.77	mg/kg	0.000477 %		
21	chrysene	601-048-00-0	205-923-4	218-01-9		4.73	mg/kg		4.73	mg/kg	0.000473 %		
22	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		5.13	mg/kg		5.13	mg/kg	0.000513 %		
23	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		1.77	mg/kg		1.77	mg/kg	0.000177 %		
24	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		4.14	mg/kg		4.14	mg/kg	0.000414 %		
25	indeno[123-cd]pyrene		205-893-2	193-39-5		2.43	mg/kg		2.43	mg/kg	0.000243 %		
26	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		0.53	mg/kg		0.53	mg/kg	0.000053 %		
27	benzo[ghi]perylene		205-883-8	191-24-2		2.27	mg/kg		2.27	mg/kg	0.000227 %		
28	pH			PH		9.74	pH		9.74	pH	9.74 pH		
29	phenol	604-001-00-2	203-632-7	108-95-2		0.3	mg/kg		0.3	mg/kg	0.00003 %		
										Total:	0.193 %		

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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: BH19/21[2]

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

Sample details

Sample Name:	LoW Code:
BH19/21[2]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
7 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		4 mg/kg	1.32	5.281 mg/kg	0.000528 %		
2	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 %		<LOD
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.6 mg/kg	1.142	0.685 mg/kg	0.0000685 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				10 mg/kg	1.923	19.231 mg/kg	0.00192 %		
5	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 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	43 mg/kg	1.56	67.072 mg/kg	0.0043 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.21 mg/kg	1.353	0.284 mg/kg	0.0000284 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		12 mg/kg	2.976	35.715 mg/kg	0.00357 %		
9	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		49 mg/kg	1.245	60.991 mg/kg	0.0061 %		
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 }	006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		0.01 mg/kg		0.01 mg/kg	0.000001 %		
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
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

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15	●	TPH (C6 to C40) petroleum group		TPH		173	mg/kg		173	mg/kg	0.0173 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		0.73	mg/kg		0.73	mg/kg	0.000073 %		
17	●	acenaphthylene											
			205-917-1	208-96-8		0.04	mg/kg		0.04	mg/kg	0.000004 %		
18	●	acenaphthene											
			201-469-6	83-32-9		0.85	mg/kg		0.85	mg/kg	0.000085 %		
19	●	fluorene											
			201-695-5	86-73-7		0.62	mg/kg		0.62	mg/kg	0.000062 %		
20	●	phenanthrene											
			201-581-5	85-01-8		3.53	mg/kg		3.53	mg/kg	0.000353 %		
21	●	anthracene											
			204-371-1	120-12-7		0.81	mg/kg		0.81	mg/kg	0.000081 %		
22	●	fluoranthene											
			205-912-4	206-44-0		3.22	mg/kg		3.22	mg/kg	0.000322 %		
23	●	pyrene											
			204-927-3	129-00-0		3.11	mg/kg		3.11	mg/kg	0.000311 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		1.38	mg/kg		1.38	mg/kg	0.000138 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		1.43	mg/kg		1.43	mg/kg	0.000143 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		0.37	mg/kg		0.37	mg/kg	0.000037 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		1.25	mg/kg		1.25	mg/kg	0.000125 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		0.97	mg/kg		0.97	mg/kg	0.000097 %		
29	●	indeno[123-cd]pyrene											
			205-893-2	193-39-5		0.76	mg/kg		0.76	mg/kg	0.000076 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.13	mg/kg		0.13	mg/kg	0.000013 %		
31	●	benzo[ghi]perylene											
			205-883-8	191-24-2		0.64	mg/kg		0.64	mg/kg	0.000064 %		
32	●	pH		PH		9.4	pH		9.4	pH	9.4 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
34	●	1,1-dichloroethane and 1,2-dichloroethane (combined)											
			203-458-1, 200-863-5	107-06-2, 75-34-3		<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
35		carbon tetrachloride; tetrachloromethane											
		602-008-00-5	200-262-8	56-23-5		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
36		trichloroethylene; trichloroethene											
		602-027-00-9	201-167-4	79-01-6		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
37		vinyl chloride; chloroethylene											
		602-023-00-7	200-831-0	75-01-4		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
										Total:	0.0408 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

toluene: (conc.: 1.0e-06%)

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0173%)

Classification of sample: BH19/23

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

Sample details

Sample Name:
BH19/23
Sample Depth:
3 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	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	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2.4	mg/kg	3.22	7.728	mg/kg	0.000773 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.2	mg/kg	1.142	1.371	mg/kg	0.000137 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				23	mg/kg	1.923	44.231	mg/kg	0.00442 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		78	mg/kg	1.126	87.819	mg/kg	0.00878 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	114	mg/kg	1.56	177.819	mg/kg	0.0114 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.66	mg/kg	1.353	0.893	mg/kg	0.0000893 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		21	mg/kg	2.976	62.502	mg/kg	0.00625 %		
9	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		137	mg/kg	1.245	170.526	mg/kg	0.0171 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<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									
15		TPH (C6 to C40) petroleum group		TPH		246	mg/kg		246	mg/kg	0.0246 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		0.83	mg/kg		0.83	mg/kg	0.000083 %		
17		acenaphthylene											
			205-917-1	208-96-8		0.07	mg/kg		0.07	mg/kg	0.000007 %		
18		acenaphthene											
			201-469-6	83-32-9		0.96	mg/kg		0.96	mg/kg	0.000096 %		
19		fluorene											
			201-695-5	86-73-7		0.77	mg/kg		0.77	mg/kg	0.000077 %		
20		phenanthrene											
			201-581-5	85-01-8		4.74	mg/kg		4.74	mg/kg	0.000474 %		
21		anthracene											
			204-371-1	120-12-7		1.4	mg/kg		1.4	mg/kg	0.00014 %		
22		fluoranthene											
			205-912-4	206-44-0		6.05	mg/kg		6.05	mg/kg	0.000605 %		
23		pyrene											
			204-927-3	129-00-0		5.6	mg/kg		5.6	mg/kg	0.00056 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		2.46	mg/kg		2.46	mg/kg	0.000246 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		2.52	mg/kg		2.52	mg/kg	0.000252 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		2.48	mg/kg		2.48	mg/kg	0.000248 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		1.01	mg/kg		1.01	mg/kg	0.000101 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		2.07	mg/kg		2.07	mg/kg	0.000207 %		
29		indeno[123-cd]pyrene											
			205-893-2	193-39-5		1.23	mg/kg		1.23	mg/kg	0.000123 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.29	mg/kg		0.29	mg/kg	0.000029 %		
31		benzo[ghi]perylene											
			205-883-8	191-24-2		1.09	mg/kg		1.09	mg/kg	0.000109 %		
32		pH		PH		10.22	pH		10.22	pH	10.22 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
34		1,1-dichloroethane and 1,2-dichloroethane (combined)											
			203-458-1, 200-863-5	107-06-2, 75-34-3		<2	mg/kg		<2	mg/kg	<0.0002 %		**<LOD**
35		carbon tetrachloride; tetrachloromethane											
		602-008-00-5	200-262-8	56-23-5		<1	mg/kg		<1	mg/kg	<0.0001 %		**<LOD**
36		trichloroethylene; trichloroethene											
		602-027-00-9	201-167-4	79-01-6		<1	mg/kg		<1	mg/kg	<0.0001 %		**<LOD**
37		vinyl chloride; chloroethylene											
		602-023-00-7	200-831-0	75-01-4		<1	mg/kg		<1	mg/kg	<0.0001 %		**<LOD**
										Total:	0.079 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0246%)

Classification of sample: BH19/23[2]

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

Sample details

Sample Name:	LoW Code:
BH19/23[2]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
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% No 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 mg/kg	1.32	11.883 mg/kg	0.00119 %		
	033-003-00-0 / 215-481-4 / 1327-53-3							
2	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							
3	cadmium { cadmium oxide }		0.7 mg/kg	1.142	0.8 mg/kg	0.00008 %		
	048-002-00-0 / 215-146-2 / 1306-19-0							
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }		23 mg/kg	1.923	44.231 mg/kg	0.00442 %		
	024-017-00-8							
5	copper { dicopper oxide; copper (I) oxide }		55 mg/kg	1.126	61.924 mg/kg	0.00619 %		
	029-002-00-X / 215-270-7 / 1317-39-1							
6	lead { lead chromate }	1	112 mg/kg	1.56	174.699 mg/kg	0.0112 %		
	082-004-00-2 / 231-846-0 / 7758-97-6							
7	mercury { mercury dichloride }		0.57 mg/kg	1.353	0.771 mg/kg	0.0000771 %		
	080-010-00-X / 231-299-8 / 7487-94-7							
8	nickel { nickel chromate }		21 mg/kg	2.976	62.502 mg/kg	0.00625 %		
	028-035-00-7 / 238-766-5 / 14721-18-7							
9	zinc { zinc oxide }		114 mg/kg	1.245	141.897 mg/kg	0.0142 %		
	030-013-00-7 / 215-222-5 / 1314-13-2							
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 }		<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		**<LOD**
	006-007-00-5							
11	benzene		0.03 mg/kg		0.03 mg/kg	0.000003 %		
	601-020-00-8 / 200-753-7 / 71-43-2							
12	toluene		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		**<LOD**
	601-021-00-3 / 203-625-9 / 108-88-3							
13	ethylbenzene		0.01 mg/kg		0.01 mg/kg	0.000001 %		
	601-023-00-4 / 202-849-4 / 100-41-4							
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							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15	●	TPH (C6 to C40) petroleum group		TPH		508	mg/kg		508	mg/kg	0.0508 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		4.82	mg/kg		4.82	mg/kg	0.000482 %		
17	●	acenaphthylene											
			205-917-1	208-96-8		0.09	mg/kg		0.09	mg/kg	0.000009 %		
18	●	acenaphthene											
			201-469-6	83-32-9		2.41	mg/kg		2.41	mg/kg	0.000241 %		
19	●	fluorene											
			201-695-5	86-73-7		2.55	mg/kg		2.55	mg/kg	0.000255 %		
20	●	phenanthrene											
			201-581-5	85-01-8		9.7	mg/kg		9.7	mg/kg	0.00097 %		
21	●	anthracene											
			204-371-1	120-12-7		2.27	mg/kg		2.27	mg/kg	0.000227 %		
22	●	fluoranthene											
			205-912-4	206-44-0		7.33	mg/kg		7.33	mg/kg	0.000733 %		
23	●	pyrene											
			204-927-3	129-00-0		6.78	mg/kg		6.78	mg/kg	0.000678 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		2.91	mg/kg		2.91	mg/kg	0.000291 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		2.97	mg/kg		2.97	mg/kg	0.000297 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		2.55	mg/kg		2.55	mg/kg	0.000255 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		0.95	mg/kg		0.95	mg/kg	0.000095 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		2.11	mg/kg		2.11	mg/kg	0.000211 %		
29	●	indeno[123-cd]pyrene											
			205-893-2	193-39-5		1.05	mg/kg		1.05	mg/kg	0.000105 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.26	mg/kg		0.26	mg/kg	0.000026 %		
31	●	benzo[ghi]perylene											
			205-883-8	191-24-2		0.96	mg/kg		0.96	mg/kg	0.000096 %		
32	●	pH		PH		9.44	pH		9.44	pH	9.44 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
34	●	1,1-dichloroethane and 1,2-dichloroethane (combined)											
			203-458-1, 200-863-5	107-06-2, 75-34-3		<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
35		carbon tetrachloride; tetrachloromethane											
		602-008-00-5	200-262-8	56-23-5		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
36		trichloroethylene; trichloroethene											
		602-027-00-9	201-167-4	79-01-6		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
37		vinyl chloride; chloroethylene											
		602-023-00-7	200-831-0	75-01-4		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
										Total:	0.1 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinands:

benzene: (conc.: 3.0e-06%)
ethylbenzene: (conc.: 1.0e-06%)

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0508%)

Classification of sample: BH19/23[3]

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

Sample details

Sample Name:
BH19/23[3]
Sample Depth:
7 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7	mg/kg	1.32	9.242	mg/kg	0.000924 %		
2	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 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.5	mg/kg	1.142	0.571	mg/kg	0.0000571 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				26	mg/kg	1.923	50	mg/kg	0.005 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		51	mg/kg	1.126	57.42	mg/kg	0.00574 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	73	mg/kg	1.56	113.867	mg/kg	0.0073 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.36	mg/kg	1.353	0.487	mg/kg	0.0000487 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		40	mg/kg	2.976	119.051	mg/kg	0.0119 %		
9	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		81	mg/kg	1.245	100.822	mg/kg	0.0101 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<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									
15		TPH (C6 to C40) petroleum group		TPH		936	mg/kg		936	mg/kg	0.0936 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		8.22	mg/kg		8.22	mg/kg	0.000822 %		
17		acenaphthylene											
			205-917-1	208-96-8		0.3	mg/kg		0.3	mg/kg	0.00003 %		
18		acenaphthene											
			201-469-6	83-32-9		4.99	mg/kg		4.99	mg/kg	0.000499 %		
19		fluorene											
			201-695-5	86-73-7		4.05	mg/kg		4.05	mg/kg	0.000405 %		
20		phenanthrene											
			201-581-5	85-01-8		15.6	mg/kg		15.6	mg/kg	0.00156 %		
21		anthracene											
			204-371-1	120-12-7		4.25	mg/kg		4.25	mg/kg	0.000425 %		
22		fluoranthene											
			205-912-4	206-44-0		10.4	mg/kg		10.4	mg/kg	0.00104 %		
23		pyrene											
			204-927-3	129-00-0		8.81	mg/kg		8.81	mg/kg	0.000881 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		3.68	mg/kg		3.68	mg/kg	0.000368 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		3.66	mg/kg		3.66	mg/kg	0.000366 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		3.06	mg/kg		3.06	mg/kg	0.000306 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		1.04	mg/kg		1.04	mg/kg	0.000104 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		2.4	mg/kg		2.4	mg/kg	0.00024 %		
29		indeno[123-cd]pyrene											
			205-893-2	193-39-5		1.24	mg/kg		1.24	mg/kg	0.000124 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.3	mg/kg		0.3	mg/kg	0.00003 %		
31		benzo[ghi]perylene											
			205-883-8	191-24-2		1.09	mg/kg		1.09	mg/kg	0.000109 %		
32		pH											
				PH		9.53	pH		9.53	pH	9.53 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
										Total:	0.143 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0936%)

Classification of sample: BH19/26

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

Sample details

Sample Name:	LoW Code:
BH19/26	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
3 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	asbestos	650-013-00-6	- - - - - - -	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5		<0.001 mg/kg		<0.001 mg/kg	<0.0000001 %		**<LOD**
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		12 mg/kg	1.32	15.844 mg/kg	0.00158 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2.6 mg/kg	3.22	8.372 mg/kg	0.000837 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.9 mg/kg	1.142	1.028 mg/kg	0.000103 %		
5	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				24 mg/kg	1.923	46.154 mg/kg	0.00462 %		
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		61 mg/kg	1.126	68.679 mg/kg	0.00687 %		
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	116 mg/kg	1.56	180.939 mg/kg	0.0116 %		
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17 mg/kg	1.353	<0.23 mg/kg	<0.000023 %		**<LOD**
9	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		24 mg/kg	2.976	71.43 mg/kg	0.00714 %		
10	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		119 mg/kg	1.245	148.121 mg/kg	0.0148 %		
11	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				13 mg/kg	1.884	24.492 mg/kg	0.00245 %		
12	benzene	601-020-00-8	200-753-7	71-43-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		**<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									
13		toluene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
14		ethylbenzene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
15		tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		603-181-00-X	216-653-1	1634-04-4									
16		TPH (C6 to C40) petroleum group				329	mg/kg		329	mg/kg	0.0329 %		
				TPH									
17		naphthalene				1.31	mg/kg		1.31	mg/kg	0.000131 %		
		601-052-00-2	202-049-5	91-20-3									
18		acenaphthylene				0.09	mg/kg		0.09	mg/kg	0.000009 %		
			205-917-1	208-96-8									
19		acenaphthene				1.59	mg/kg		1.59	mg/kg	0.000159 %		
			201-469-6	83-32-9									
20		fluorene				1.24	mg/kg		1.24	mg/kg	0.000124 %		
			201-695-5	86-73-7									
21		phenanthrene				8.11	mg/kg		8.11	mg/kg	0.000811 %		
			201-581-5	85-01-8									
22		anthracene				1.89	mg/kg		1.89	mg/kg	0.000189 %		
			204-371-1	120-12-7									
23		fluoranthene				8.93	mg/kg		8.93	mg/kg	0.000893 %		
			205-912-4	206-44-0									
24		pyrene				8.36	mg/kg		8.36	mg/kg	0.000836 %		
			204-927-3	129-00-0									
25		benzo[a]anthracene				3.97	mg/kg		3.97	mg/kg	0.000397 %		
		601-033-00-9	200-280-6	56-55-3									
26		chrysene				4.14	mg/kg		4.14	mg/kg	0.000414 %		
		601-048-00-0	205-923-4	218-01-9									
27		benzo[b]fluoranthene				1.2	mg/kg		1.2	mg/kg	0.00012 %		
		601-034-00-4	205-911-9	205-99-2									
28		benzo[k]fluoranthene				3.67	mg/kg		3.67	mg/kg	0.000367 %		
		601-036-00-5	205-916-6	207-08-9									
29		benzo[a]pyrene; benzo[def]chrysene				3.15	mg/kg		3.15	mg/kg	0.000315 %		
		601-032-00-3	200-028-5	50-32-8									
30		indeno[123-cd]pyrene				1.89	mg/kg		1.89	mg/kg	0.000189 %		
			205-893-2	193-39-5									
31		dibenz[a,h]anthracene				0.49	mg/kg		0.49	mg/kg	0.000049 %		
		601-041-00-2	200-181-8	53-70-3									
32		benzo[ghi]perylene				1.53	mg/kg		1.53	mg/kg	0.000153 %		
			205-883-8	191-24-2									
33		pH				9.57	pH		9.57	pH	9.57 pH		
				PH									
34		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0881 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0329%)

Classification of sample: BH19/26[2]

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

Sample details

Sample Name:
BH19/26[2]
Sample Depth:
5 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		5	mg/kg	1.32	6.602	mg/kg	0.00066 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2.5	mg/kg	3.22	8.05	mg/kg	0.000805 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.5	mg/kg	1.142	<0.571	mg/kg	<0.0000571 %		<LOD
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				16	mg/kg	1.923	30.769	mg/kg	0.00308 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		55	mg/kg	1.126	61.924	mg/kg	0.00619 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	25	mg/kg	1.56	38.995	mg/kg	0.0025 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17	mg/kg	1.353	<0.23	mg/kg	<0.000023 %		<LOD
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		41	mg/kg	2.976	122.027	mg/kg	0.0122 %		
9	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		39	mg/kg	1.245	48.544	mg/kg	0.00485 %		
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 }	006-007-00-5				1	mg/kg	1.884	1.884	mg/kg	0.000188 %		
11	TPH (C6 to C40) petroleum group			TPH		437	mg/kg		437	mg/kg	0.0437 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		0.94	mg/kg		0.94	mg/kg	0.000094 %		
13	acenaphthylene		205-917-1	208-96-8		0.02	mg/kg		0.02	mg/kg	0.000002 %		
14	acenaphthene		201-469-6	83-32-9		0.05	mg/kg		0.05	mg/kg	0.000005 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		fluorene				0.06	mg/kg		0.06	mg/kg	0.000006 %		
			201-695-5	86-73-7									
16		phenanthrene				0.36	mg/kg		0.36	mg/kg	0.000036 %		
			201-581-5	85-01-8									
17		anthracene				0.05	mg/kg		0.05	mg/kg	0.000005 %		
			204-371-1	120-12-7									
18		fluoranthene				0.17	mg/kg		0.17	mg/kg	0.000017 %		
			205-912-4	206-44-0									
19		pyrene				0.18	mg/kg		0.18	mg/kg	0.000018 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				0.11	mg/kg		0.11	mg/kg	0.000011 %		
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				0.13	mg/kg		0.13	mg/kg	0.000013 %		
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		**<LOD**
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				0.11	mg/kg		0.11	mg/kg	0.000011 %		
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				0.08	mg/kg		0.08	mg/kg	0.000008 %		
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				0.05	mg/kg		0.05	mg/kg	0.000005 %		
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		**<LOD**
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				0.05	mg/kg		0.05	mg/kg	0.000005 %		
			205-883-8	191-24-2									
28		pH				7.86	pH		7.86	pH	7.86 pH		
				PH									
29		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0745 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0437%)

Classification of sample: BH19/26[3]

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

Sample details

Sample Name:
BH19/26[3]
Sample Depth:
6 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		7	mg/kg	1.32	9.242	mg/kg	0.000924 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2	mg/kg	3.22	6.44	mg/kg	0.000644 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.8	mg/kg	1.142	0.914	mg/kg	0.0000914 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				14	mg/kg	1.923	26.923	mg/kg	0.00269 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		43	mg/kg	1.126	48.413	mg/kg	0.00484 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	34	mg/kg	1.56	53.034	mg/kg	0.0034 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17	mg/kg	1.353	<0.23	mg/kg	<0.000023 %		<LOD
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		33	mg/kg	2.976	98.217	mg/kg	0.00982 %		
9	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		65	mg/kg	1.245	80.906	mg/kg	0.00809 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<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									
15		TPH (C6 to C40) petroleum group		TPH		200	mg/kg		200	mg/kg	0.02 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		0.9	mg/kg		0.9	mg/kg	0.00009 %		
17		acenaphthylene											
			205-917-1	208-96-8		0.05	mg/kg		0.05	mg/kg	0.000005 %		
18		acenaphthene											
			201-469-6	83-32-9		0.36	mg/kg		0.36	mg/kg	0.000036 %		
19		fluorene											
			201-695-5	86-73-7		0.28	mg/kg		0.28	mg/kg	0.000028 %		
20		phenanthrene											
			201-581-5	85-01-8		2.14	mg/kg		2.14	mg/kg	0.000214 %		
21		anthracene											
			204-371-1	120-12-7		0.49	mg/kg		0.49	mg/kg	0.000049 %		
22		fluoranthene											
			205-912-4	206-44-0		2.32	mg/kg		2.32	mg/kg	0.000232 %		
23		pyrene											
			204-927-3	129-00-0		2.12	mg/kg		2.12	mg/kg	0.000212 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		1.01	mg/kg		1.01	mg/kg	0.000101 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		1.06	mg/kg		1.06	mg/kg	0.000106 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		0.89	mg/kg		0.89	mg/kg	0.000089 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		0.3	mg/kg		0.3	mg/kg	0.00003 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		0.71	mg/kg		0.71	mg/kg	0.000071 %		
29		indeno[123-cd]pyrene											
			205-893-2	193-39-5		0.42	mg/kg		0.42	mg/kg	0.000042 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.13	mg/kg		0.13	mg/kg	0.000013 %		
31		benzo[ghi]perylene											
			205-883-8	191-24-2		0.33	mg/kg		0.33	mg/kg	0.000033 %		
32		pH		PH		7.4	pH		7.4	pH	7.4 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
34		1,1-dichloroethane and 1,2-dichloroethane (combined)											
			203-458-1, 200-863-5	107-06-2, 75-34-3		<2	mg/kg		<2	mg/kg	<0.0002 %		**<LOD**
35		carbon tetrachloride; tetrachloromethane											
		602-008-00-5	200-262-8	56-23-5		<1	mg/kg		<1	mg/kg	<0.0001 %		**<LOD**
36		trichloroethylene; trichloroethene											
		602-027-00-9	201-167-4	79-01-6		3	mg/kg		3	mg/kg	0.0003 %		
37		vinyl chloride; chloroethylene											
		602-023-00-7	200-831-0	75-01-4		<1	mg/kg		<1	mg/kg	<0.0001 %		**<LOD**
										Total:	0.0528 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.02%)

Classification of sample: TP19/04

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

Sample details

Sample Name:	LoW Code:
TP19/04	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
4 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	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	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 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1	mg/kg	1.142	1.142	mg/kg	0.000114 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				20	mg/kg	1.923	38.462	mg/kg	0.00385 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		61	mg/kg	1.126	68.679	mg/kg	0.00687 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	138	mg/kg	1.56	215.254	mg/kg	0.0138 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.32	mg/kg	1.353	0.433	mg/kg	0.0000433 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		26	mg/kg	2.976	77.383	mg/kg	0.00774 %		
9	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		137	mg/kg	1.245	170.526	mg/kg	0.0171 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		**<LOD**
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
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**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15	●	TPH (C6 to C40) petroleum group		TPH		784	mg/kg		784	mg/kg	0.0784 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		2.29	mg/kg		2.29	mg/kg	0.000229 %		
17	●	acenaphthylene											
			205-917-1	208-96-8		0.14	mg/kg		0.14	mg/kg	0.000014 %		
18	●	acenaphthene											
			201-469-6	83-32-9		2.23	mg/kg		2.23	mg/kg	0.000223 %		
19	●	fluorene											
			201-695-5	86-73-7		1.29	mg/kg		1.29	mg/kg	0.000129 %		
20	●	phenanthrene											
			201-581-5	85-01-8		8.4	mg/kg		8.4	mg/kg	0.00084 %		
21	●	anthracene											
			204-371-1	120-12-7		1.97	mg/kg		1.97	mg/kg	0.000197 %		
22	●	fluoranthene											
			205-912-4	206-44-0		9.82	mg/kg		9.82	mg/kg	0.000982 %		
23	●	pyrene											
			204-927-3	129-00-0		9.16	mg/kg		9.16	mg/kg	0.000916 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		4.36	mg/kg		4.36	mg/kg	0.000436 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		4.07	mg/kg		4.07	mg/kg	0.000407 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		3.97	mg/kg		3.97	mg/kg	0.000397 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		1.51	mg/kg		1.51	mg/kg	0.000151 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		3.46	mg/kg		3.46	mg/kg	0.000346 %		
29	●	indeno[123-cd]pyrene											
			205-893-2	193-39-5		2.17	mg/kg		2.17	mg/kg	0.000217 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.49	mg/kg		0.49	mg/kg	0.000049 %		
31	●	benzo[ghi]perylene											
			205-883-8	191-24-2		1.91	mg/kg		1.91	mg/kg	0.000191 %		
32	●	pH		PH		9.36	pH		9.36	pH	9.36 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
										Total:	0.136 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0784%)

Classification of sample: TP19/06

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

Sample details

Sample Name:
TP19/06
Sample Depth:
4 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		6	mg/kg	1.32	7.922	mg/kg	0.000792 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		1.4	mg/kg	3.22	4.508	mg/kg	0.000451 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.7	mg/kg	1.142	0.8	mg/kg	0.00008 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				18	mg/kg	1.923	34.615	mg/kg	0.00346 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		29	mg/kg	1.126	32.651	mg/kg	0.00327 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	35	mg/kg	1.56	54.594	mg/kg	0.0035 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17	mg/kg	1.353	<0.23	mg/kg	<0.000023 %		<LOD
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		28	mg/kg	2.976	83.335	mg/kg	0.00833 %		
9	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		46	mg/kg	1.245	57.257	mg/kg	0.00573 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	TPH (C6 to C40) petroleum group			TPH		246	mg/kg		246	mg/kg	0.0246 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		0.09	mg/kg		0.09	mg/kg	0.000009 %		
13	acenaphthylene		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
14	acenaphthene		201-469-6	83-32-9		0.06	mg/kg		0.06	mg/kg	0.000006 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		fluorene				0.04	mg/kg		0.04	mg/kg	0.000004 %		
			201-695-5	86-73-7									
16		phenanthrene				0.36	mg/kg		0.36	mg/kg	0.000036 %		
			201-581-5	85-01-8									
17		anthracene				0.08	mg/kg		0.08	mg/kg	0.000008 %		
			204-371-1	120-12-7									
18		fluoranthene				0.38	mg/kg		0.38	mg/kg	0.000038 %		
			205-912-4	206-44-0									
19		pyrene				0.39	mg/kg		0.39	mg/kg	0.000039 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				0.22	mg/kg		0.22	mg/kg	0.000022 %		
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				0.24	mg/kg		0.24	mg/kg	0.000024 %		
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				0.24	mg/kg		0.24	mg/kg	0.000024 %		
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				0.08	mg/kg		0.08	mg/kg	0.000008 %		
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				0.17	mg/kg		0.17	mg/kg	0.000017 %		
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				0.1	mg/kg		0.1	mg/kg	0.00001 %		
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		**<LOD**
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				0.09	mg/kg		0.09	mg/kg	0.000009 %		
			205-883-8	191-24-2									
28		pH				7.42	pH		7.42	pH	7.42 pH		
				PH									
29		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0507 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0246%)

Classification of sample: TP19/08

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

Sample details

Sample Name:	LoW Code:	
TP19/08	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:		
3.8 m	Entry:	17 05 03 * (Soil and stones containing hazardous substances)

Hazard properties

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to hazardous because Elevated TPHs over 1000mg/kg. Free product recorded in occasional samples during post-investgation monitoring. Loss on ignition tests carried out within 33% recorded elevated loss of ignition above the hazardous waste threshold.

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.114%)

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

Hazard Statements hit:

Carc. 1B; 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:

TPH (C6 to C40) petroleum group: (conc.: 0.114%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.114%)

Determinands

Moisture content: 0% No 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		asbestos 650-013-00-6	- - - - - - -	12001-28-4 132207-32-0 12172-73-5 77536-66-4 77536-68-6 77536-67-5 12001-29-5		0.001 mg/kg		0.001 mg/kg	0.0000001 %		

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
2	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		22	mg/kg	1.32	29.047	mg/kg	0.0029 %		
3	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		3.6	mg/kg	3.22	11.592	mg/kg	0.00116 %		
4	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.2	mg/kg	1.142	1.371	mg/kg	0.000137 %		
5	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				30	mg/kg	1.923	57.692	mg/kg	0.00577 %		
6	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		75	mg/kg	1.126	84.442	mg/kg	0.00844 %		
7	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	149	mg/kg	1.56	232.412	mg/kg	0.0149 %		
8	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.41	mg/kg	1.353	0.555	mg/kg	0.0000555 %		
9	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		28	mg/kg	2.976	83.335	mg/kg	0.00833 %		
10	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		169	mg/kg	1.245	210.357	mg/kg	0.021 %		
11	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				56	mg/kg	1.884	105.504	mg/kg	0.0106 %		
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	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
16	TPH (C6 to C40) petroleum group			TPH		1140	mg/kg		1140	mg/kg	0.114 %		
17	naphthalene	601-052-00-2	202-049-5	91-20-3		1.3	mg/kg		1.3	mg/kg	0.00013 %		
18	acenaphthylene		205-917-1	208-96-8		0.13	mg/kg		0.13	mg/kg	0.000013 %		
19	acenaphthene		201-469-6	83-32-9		1.66	mg/kg		1.66	mg/kg	0.000166 %		
20	fluorene		201-695-5	86-73-7		1.24	mg/kg		1.24	mg/kg	0.000124 %		
21	phenanthrene		201-581-5	85-01-8		7.74	mg/kg		7.74	mg/kg	0.000774 %		
22	anthracene		204-371-1	120-12-7		1.98	mg/kg		1.98	mg/kg	0.000198 %		
23	fluoranthene		205-912-4	206-44-0		9.19	mg/kg		9.19	mg/kg	0.000919 %		
24	pyrene		204-927-3	129-00-0		8.59	mg/kg		8.59	mg/kg	0.000859 %		
25	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		4.33	mg/kg		4.33	mg/kg	0.000433 %		
26	chrysene	601-048-00-0	205-923-4	218-01-9		4.19	mg/kg		4.19	mg/kg	0.000419 %		
27	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		4.09	mg/kg		4.09	mg/kg	0.000409 %		
28	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		1.49	mg/kg		1.49	mg/kg	0.000149 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
29		benzo[a]pyrene; benzo[def]chrysene				3.44	mg/kg		3.44	mg/kg	0.000344 %		
		601-032-00-3	200-028-5	50-32-8									
30	●	indeno[123-cd]pyrene				2.02	mg/kg		2.02	mg/kg	0.000202 %		
			205-893-2	193-39-5									
31		dibenz[a,h]anthracene				0.46	mg/kg		0.46	mg/kg	0.000046 %		
		601-041-00-2	200-181-8	53-70-3									
32	●	benzo[ghi]perylene				1.83	mg/kg		1.83	mg/kg	0.000183 %		
			205-883-8	191-24-2									
33	●	pH				10.72	pH		10.72	pH	10.72 pH		
				PH									
34		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.193 %		

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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP19/10

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

Sample details

Sample Name:	LoW Code:
TP19/10	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
3.5 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		14	mg/kg	1.32	18.485	mg/kg	0.00185 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		4.1	mg/kg	3.22	13.201	mg/kg	0.00132 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.4	mg/kg	1.142	1.599	mg/kg	0.00016 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				37	mg/kg	1.923	71.154	mg/kg	0.00712 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		84	mg/kg	1.126	94.575	mg/kg	0.00946 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	126	mg/kg	1.56	196.537	mg/kg	0.0126 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.71	mg/kg	1.353	0.961	mg/kg	0.0000961 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		33	mg/kg	2.976	98.217	mg/kg	0.00982 %		
9	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		205	mg/kg	1.245	255.166	mg/kg	0.0255 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		**<LOD**
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
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**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15	●	TPH (C6 to C40) petroleum group		TPH		520	mg/kg		520	mg/kg	0.052 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		0.57	mg/kg		0.57	mg/kg	0.000057 %		
17	●	acenaphthylene											
			205-917-1	208-96-8		0.07	mg/kg		0.07	mg/kg	0.000007 %		
18	●	acenaphthene											
			201-469-6	83-32-9		0.71	mg/kg		0.71	mg/kg	0.000071 %		
19	●	fluorene											
			201-695-5	86-73-7		0.56	mg/kg		0.56	mg/kg	0.000056 %		
20	●	phenanthrene											
			201-581-5	85-01-8		3.65	mg/kg		3.65	mg/kg	0.000365 %		
21	●	anthracene											
			204-371-1	120-12-7		0.91	mg/kg		0.91	mg/kg	0.000091 %		
22	●	fluoranthene											
			205-912-4	206-44-0		5.37	mg/kg		5.37	mg/kg	0.000537 %		
23	●	pyrene											
			204-927-3	129-00-0		4.88	mg/kg		4.88	mg/kg	0.000488 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		2.61	mg/kg		2.61	mg/kg	0.000261 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		2.67	mg/kg		2.67	mg/kg	0.000267 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		2.59	mg/kg		2.59	mg/kg	0.000259 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		0.94	mg/kg		0.94	mg/kg	0.000094 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		2.18	mg/kg		2.18	mg/kg	0.000218 %		
29	●	indeno[123-cd]pyrene											
			205-893-2	193-39-5		1.35	mg/kg		1.35	mg/kg	0.000135 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.3	mg/kg		0.3	mg/kg	0.00003 %		
31	●	benzo[ghi]perylene											
			205-883-8	191-24-2		1.2	mg/kg		1.2	mg/kg	0.00012 %		
32	●	pH		PH		9.7	pH		9.7	pH	9.7 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
34	●	1,1-dichloroethane and 1,2-dichloroethane (combined)											
			203-458-1, 200-863-5	107-06-2, 75-34-3		<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
35		carbon tetrachloride; tetrachloromethane											
		602-008-00-5	200-262-8	56-23-5		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
36		trichloroethylene; trichloroethene											
		602-027-00-9	201-167-4	79-01-6		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
37		vinyl chloride; chloroethylene											
		602-023-00-7	200-831-0	75-01-4		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
										Total:	0.124 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.052%)

Classification of sample: TP19/11

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

Sample details

Sample Name:	LoW Code:	
TP19/11	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 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to hazardous because Elevated TPHs over 1000mg/kg. Free product recorded in occasional samples during post-investgation monitoring. Loss on ignition tests carried out within 33% recorded elevated loss of ignition above the hazardous waste threshold.

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.322%)

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

Hazard Statements hit:

Carc. 1B; 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:

TPH (C6 to C40) petroleum group: (conc.: 0.322%)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.322%)

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		16	mg/kg	1.32	21.125	mg/kg	0.00211 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		1.6	mg/kg	3.22	5.152	mg/kg	0.000515 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.1	mg/kg	1.142	1.257	mg/kg	0.000126 %		

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number / EC Number / CAS Number							
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex } 024-017-00-8		25 mg/kg	1.923	48.077 mg/kg	0.00481 %		
5	copper { dicopper oxide; copper (I) oxide } 029-002-00-X / 215-270-7 / 1317-39-1		113 mg/kg	1.126	127.225 mg/kg	0.0127 %		
6	lead { lead chromate } 082-004-00-2 / 231-846-0 / 7758-97-6	1	172 mg/kg	1.56	268.288 mg/kg	0.0172 %		
7	mercury { mercury dichloride } 080-010-00-X / 231-299-8 / 7487-94-7		0.6 mg/kg	1.353	0.812 mg/kg	0.0000812 %		
8	nickel { nickel chromate } 028-035-00-7 / 238-766-5 / 14721-18-7		26 mg/kg	2.976	77.383 mg/kg	0.00774 %		
9	zinc { zinc oxide } 030-013-00-7 / 215-222-5 / 1314-13-2		141 mg/kg	1.245	175.505 mg/kg	0.0176 %		
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 } 006-007-00-5		<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
11	benzene 601-020-00-8 / 200-753-7 / 71-43-2		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
12	toluene 601-021-00-3 / 203-625-9 / 108-88-3		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
13	ethylbenzene 601-023-00-4 / 202-849-4 / 100-41-4		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
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	TPH (C6 to C40) petroleum group TPH		3220 mg/kg		3220 mg/kg	0.322 %		
16	naphthalene 601-052-00-2 / 202-049-5 / 91-20-3		0.64 mg/kg		0.64 mg/kg	0.000064 %		
17	acenaphthylene 205-917-1 / 208-96-8		0.02 mg/kg		0.02 mg/kg	0.000002 %		
18	acenaphthene 201-469-6 / 83-32-9		0.54 mg/kg		0.54 mg/kg	0.000054 %		
19	fluorene 201-695-5 / 86-73-7		0.5 mg/kg		0.5 mg/kg	0.00005 %		
20	phenanthrene 201-581-5 / 85-01-8		2.2 mg/kg		2.2 mg/kg	0.00022 %		
21	anthracene 204-371-1 / 120-12-7		0.48 mg/kg		0.48 mg/kg	0.000048 %		
22	fluoranthene 205-912-4 / 206-44-0		2.06 mg/kg		2.06 mg/kg	0.000206 %		
23	pyrene 204-927-3 / 129-00-0		1.9 mg/kg		1.9 mg/kg	0.00019 %		
24	benzo[a]anthracene 601-033-00-9 / 200-280-6 / 56-55-3		0.73 mg/kg		0.73 mg/kg	0.000073 %		
25	chrysene 601-048-00-0 / 205-923-4 / 218-01-9		0.77 mg/kg		0.77 mg/kg	0.000077 %		
26	benzo[b]fluoranthene 601-034-00-4 / 205-911-9 / 205-99-2		0.59 mg/kg		0.59 mg/kg	0.000059 %		
27	benzo[k]fluoranthene 601-036-00-5 / 205-916-6 / 207-08-9		0.21 mg/kg		0.21 mg/kg	0.000021 %		
28	benzo[a]pyrene; benzo[def]chrysene 601-032-00-3 / 200-028-5 / 50-32-8		0.48 mg/kg		0.48 mg/kg	0.000048 %		
29	indeno[123-cd]pyrene 205-893-2 / 193-39-5		0.27 mg/kg		0.27 mg/kg	0.000027 %		
30	dibenz[a,h]anthracene 601-041-00-2 / 200-181-8 / 53-70-3		0.06 mg/kg		0.06 mg/kg	0.000006 %		

#		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[ghi]perylene				0.25	mg/kg		0.25	mg/kg	0.000025 %		
			205-883-8	191-24-2									
32		pH				9.14	pH		9.14	pH	9.14 pH		
				PH									
33		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
34		1,1-dichloroethane and 1,2-dichloroethane (combined)				<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
			203-458-1, 200-863-5	107-06-2, 75-34-3									
35		carbon tetrachloride; tetrachloromethane				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		602-008-00-5	200-262-8	56-23-5									
36		trichloroethylene; trichloroethene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		602-027-00-9	201-167-4	79-01-6									
37		vinyl chloride; chloroethylene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		602-023-00-7	200-831-0	75-01-4									
										Total:	0.387 %		

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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP19/14

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

Sample details

Sample Name:
TP19/14
Sample Depth:
3 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		23	mg/kg	1.32	30.367	mg/kg	0.00304 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2.1	mg/kg	3.22	6.762	mg/kg	0.000676 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		2	mg/kg	1.142	2.285	mg/kg	0.000228 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				49	mg/kg	1.923	94.231	mg/kg	0.00942 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		114	mg/kg	1.126	128.351	mg/kg	0.0128 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	203	mg/kg	1.56	316.642	mg/kg	0.0203 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.58	mg/kg	1.353	0.785	mg/kg	0.0000785 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		37	mg/kg	2.976	110.122	mg/kg	0.011 %		
9	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		175	mg/kg	1.245	217.825	mg/kg	0.0218 %		
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 }	006-007-00-5				36	mg/kg	1.884	67.824	mg/kg	0.00678 %		
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<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									
15	●	TPH (C6 to C40) petroleum group		TPH		896	mg/kg		896	mg/kg	0.0896 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		2.14	mg/kg		2.14	mg/kg	0.000214 %		
17	●	acenaphthylene											
			205-917-1	208-96-8		0.22	mg/kg		0.22	mg/kg	0.000022 %		
18	●	acenaphthene											
			201-469-6	83-32-9		2.93	mg/kg		2.93	mg/kg	0.000293 %		
19	●	fluorene											
			201-695-5	86-73-7		2.45	mg/kg		2.45	mg/kg	0.000245 %		
20	●	phenanthrene											
			201-581-5	85-01-8		17.4	mg/kg		17.4	mg/kg	0.00174 %		
21	●	anthracene											
			204-371-1	120-12-7		3.85	mg/kg		3.85	mg/kg	0.000385 %		
22	●	fluoranthene											
			205-912-4	206-44-0		18.5	mg/kg		18.5	mg/kg	0.00185 %		
23	●	pyrene											
			204-927-3	129-00-0		18.9	mg/kg		18.9	mg/kg	0.00189 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		9.76	mg/kg		9.76	mg/kg	0.000976 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		9.48	mg/kg		9.48	mg/kg	0.000948 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		8.7	mg/kg		8.7	mg/kg	0.00087 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		3.11	mg/kg		3.11	mg/kg	0.000311 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		7.72	mg/kg		7.72	mg/kg	0.000772 %		
29	●	indeno[123-cd]pyrene											
			205-893-2	193-39-5		4.24	mg/kg		4.24	mg/kg	0.000424 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		1.12	mg/kg		1.12	mg/kg	0.000112 %		
31	●	benzo[ghi]perylene											
			205-883-8	191-24-2		4.01	mg/kg		4.01	mg/kg	0.000401 %		
32	●	pH		PH		9.54	pH		9.54	pH	9.54 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
										Total:	0.187 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0896%)

Appendix A: Classifier defined and non CLP determinands

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

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

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

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

pH (CAS Number: PH)

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

1,1-dichloroethane and 1,2-dichloroethane (combined) (EC Number: 203-458-1, 200-863-5, CAS Number: 107-06-2, 75-34-3)

Description/Comments: Combines the hazard statements and risk phrases for 1,1-dichloroethane and 1,2-dichloroethane
Data source: N/a
Data source date: 14 Oct 2016
Hazard Statements: Aquatic Chronic 3 H412 , Carc. 1B H350 , STOT SE 3 H335 , Eye Irrit. 2 H319 , Skin Irrit. 2 H315 , Acute Tox. 4 H302 , Flam. Liq. 2 H225

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)

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 {chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex}

Worst case scenario

copper {dicopper oxide; copper (I) oxide}

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

lead {lead chromate}

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

mercury {mercury dichloride}

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

nickel {nickel chromate}

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

zinc {zinc oxide}

Most likely form of zinc present on site based on site history

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)

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018
HazWasteOnline Classification Engine Version: 2019.316.4053.8153 (12 Nov 2019)
HazWasteOnline Database: 2019.316.4053.8153 (12 Nov 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

Waste Classification Report

XYX3Y-SEQ85-7C2VW

Job name

0042841 >2.0m EAST

Description/Comments

East side of site, formerly residential use.

Project

Project Bradford

Site

Manchester

Related Documents

#	Name	Description
None		

Waste Stream Template

2019 Geoff

Classified by

Name:
Francesca Gould
Date:
26 Nov 2019 14:42 GMT
Telephone:
020 7927 9700

Company:
Buro Happold
17 Newman Street
London
W1T 1PD

Report

Created by: Francesca Gould
Created date: 26 Nov 2019 14:42 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	BH19/05	3	Non Hazardous		3
2	BH19/05[2]	7	Non Hazardous		6
3	BH19/05[3]	10	Non Hazardous		8
4	BH19/06	5	Non Hazardous		11
5	BH19/12	3	Non Hazardous		14
6	BH19/15	4	Non Hazardous		17
7	BH19/15[2]	7	Non Hazardous		19
8	BH19/16	5	Non Hazardous		21
9	BH19/22	4	Non Hazardous		23
10	BH19/22[2]	7	Non Hazardous		25
11	BH19/24	6	Non Hazardous		27
12	BH19/25	5	Non Hazardous		30

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
13	TP19/03	3	Hazardous	HP 3(i), HP 7, HP 8, HP 11	32
14	TP19/07	3.6	Non Hazardous		35
15	TP19/09	2.8	Non Hazardous		38
16	TP19/09[2]	4	Non Hazardous		41
17	TP19/12	2.1	Non Hazardous		44

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Appendix B: Rationale for selection of metal species	47
Appendix C: Version	48

Classification of sample: BH19/05

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

Sample details

Sample Name:	LoW Code:
BH19/05	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
3 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		31	mg/kg	1.32	40.93	mg/kg	0.00409 %		
2	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 %		**<LOD**
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.9	mg/kg	1.142	2.17	mg/kg	0.000217 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				74	mg/kg	1.923	142.308	mg/kg	0.0142 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		318	mg/kg	1.126	358.032	mg/kg	0.0358 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	509	mg/kg	1.56	793.946	mg/kg	0.0509 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.51	mg/kg	1.353	0.69	mg/kg	0.000069 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		34	mg/kg	2.976	101.193	mg/kg	0.0101 %		
9	zinc { zinc chromate }	024-007-00-3				192	mg/kg	2.774	532.636	mg/kg	0.0533 %		
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 }	006-007-00-5				2	mg/kg	1.884	3.768	mg/kg	0.000377 %		
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
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**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15	●	TPH (C6 to C40) petroleum group		TPH		245	mg/kg		245	mg/kg	0.0245 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		0.19	mg/kg		0.19	mg/kg	0.000019 %		
17	●	acenaphthylene											
			205-917-1	208-96-8		0.04	mg/kg		0.04	mg/kg	0.000004 %		
18	●	acenaphthene											
			201-469-6	83-32-9		0.24	mg/kg		0.24	mg/kg	0.000024 %		
19	●	fluorene											
			201-695-5	86-73-7		0.19	mg/kg		0.19	mg/kg	0.000019 %		
20	●	phenanthrene											
			201-581-5	85-01-8		2	mg/kg		2	mg/kg	0.0002 %		
21	●	anthracene											
			204-371-1	120-12-7		0.41	mg/kg		0.41	mg/kg	0.000041 %		
22	●	fluoranthene											
			205-912-4	206-44-0		2.45	mg/kg		2.45	mg/kg	0.000245 %		
23	●	pyrene											
			204-927-3	129-00-0		2.46	mg/kg		2.46	mg/kg	0.000246 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		1.51	mg/kg		1.51	mg/kg	0.000151 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		1.65	mg/kg		1.65	mg/kg	0.000165 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		2.07	mg/kg		2.07	mg/kg	0.000207 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		0.69	mg/kg		0.69	mg/kg	0.000069 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		1.5	mg/kg		1.5	mg/kg	0.00015 %		
29	●	indeno[123-cd]pyrene											
			205-893-2	193-39-5		0.86	mg/kg		0.86	mg/kg	0.000086 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.25	mg/kg		0.25	mg/kg	0.000025 %		
31	●	benzo[ghi]perylene											
			205-883-8	191-24-2		0.67	mg/kg		0.67	mg/kg	0.000067 %		
32	●	pH		PH		8.04	pH		8.04	pH	8.04 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		0.5	mg/kg		0.5	mg/kg	0.00005 %		
										Total:	0.196 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0245%)

Classification of sample: BH19/05[2]

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

Sample details

Sample Name:
BH19/05[2]
Sample Depth:
7 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		48	mg/kg	1.32	63.376	mg/kg	0.00634 %		
2	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 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.1	mg/kg	1.142	1.257	mg/kg	0.000126 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				32	mg/kg	1.923	61.538	mg/kg	0.00615 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		76	mg/kg	1.126	85.568	mg/kg	0.00856 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	87	mg/kg	1.56	135.704	mg/kg	0.0087 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17	mg/kg	1.353	<0.23	mg/kg	<0.000023 %		**<LOD**
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		23	mg/kg	2.976	68.454	mg/kg	0.00685 %		
9	zinc { zinc chromate }	024-007-00-3				63	mg/kg	2.774	174.771	mg/kg	0.0175 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		**<LOD**
11	TPH (C6 to C40) petroleum group			TPH		142	mg/kg		142	mg/kg	0.0142 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		0.2	mg/kg		0.2	mg/kg	0.00002 %		
13	acenaphthylene		205-917-1	208-96-8		0.01	mg/kg		0.01	mg/kg	0.000001 %		
14	acenaphthene		201-469-6	83-32-9		0.09	mg/kg		0.09	mg/kg	0.000009 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		fluorene				0.06	mg/kg		0.06	mg/kg	0.000006 %		
			201-695-5	86-73-7									
16		phenanthrene				0.76	mg/kg		0.76	mg/kg	0.000076 %		
			201-581-5	85-01-8									
17		anthracene				0.12	mg/kg		0.12	mg/kg	0.000012 %		
			204-371-1	120-12-7									
18		fluoranthene				0.81	mg/kg		0.81	mg/kg	0.000081 %		
			205-912-4	206-44-0									
19		pyrene				0.72	mg/kg		0.72	mg/kg	0.000072 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				0.52	mg/kg		0.52	mg/kg	0.000052 %		
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				0.53	mg/kg		0.53	mg/kg	0.000053 %		
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				0.63	mg/kg		0.63	mg/kg	0.000063 %		
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				0.22	mg/kg		0.22	mg/kg	0.000022 %		
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				0.38	mg/kg		0.38	mg/kg	0.000038 %		
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				0.22	mg/kg		0.22	mg/kg	0.000022 %		
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.06	mg/kg		0.06	mg/kg	0.000006 %		
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				0.15	mg/kg		0.15	mg/kg	0.000015 %		
			205-883-8	191-24-2									
28		pH				5.75	pH		5.75	pH	5.75 pH		
				PH									
29		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0696 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0142%)

Classification of sample: BH19/05[3]

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

Sample details

Sample Name:
BH19/05[3]
Sample Depth:
10 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		6	mg/kg	1.32	7.922	mg/kg	0.000792 %		
2	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 %		<LOD
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1	mg/kg	1.142	1.142	mg/kg	0.000114 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				28	mg/kg	1.923	53.846	mg/kg	0.00538 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		38	mg/kg	1.126	42.784	mg/kg	0.00428 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	40	mg/kg	1.56	62.393	mg/kg	0.004 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17	mg/kg	1.353	<0.23	mg/kg	<0.000023 %		<LOD
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		33	mg/kg	2.976	98.217	mg/kg	0.00982 %		
9	zinc { zinc chromate }	024-007-00-3				82	mg/kg	2.774	227.48	mg/kg	0.0227 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<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									
15		TPH (C6 to C40) petroleum group		TPH		240	mg/kg		240	mg/kg	0.024 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		0.55	mg/kg		0.55	mg/kg	0.000055 %		
17		acenaphthylene											
			205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
18		acenaphthene											
			201-469-6	83-32-9		0.03	mg/kg		0.03	mg/kg	0.000003 %		
19		fluorene											
			201-695-5	86-73-7		0.03	mg/kg		0.03	mg/kg	0.000003 %		
20		phenanthrene											
			201-581-5	85-01-8		0.26	mg/kg		0.26	mg/kg	0.000026 %		
21		anthracene											
			204-371-1	120-12-7		0.03	mg/kg		0.03	mg/kg	0.000003 %		
22		fluoranthene											
			205-912-4	206-44-0		0.14	mg/kg		0.14	mg/kg	0.000014 %		
23		pyrene											
			204-927-3	129-00-0		0.14	mg/kg		0.14	mg/kg	0.000014 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		0.1	mg/kg		0.1	mg/kg	0.00001 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		0.12	mg/kg		0.12	mg/kg	0.000012 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		0.13	mg/kg		0.13	mg/kg	0.000013 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		**<LOD**
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		0.08	mg/kg		0.08	mg/kg	0.000008 %		
29		indeno[123-cd]pyrene											
			205-893-2	193-39-5		0.04	mg/kg		0.04	mg/kg	0.000004 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		**<LOD**
31		benzo[ghi]perylene											
			205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
32		pH											
				PH		4.72	pH		4.72	pH	4.72 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
										Total:	0.0719 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.024%)

Classification of sample: BH19/06

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

Sample details

Sample Name:	LoW Code:
BH19/06	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
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% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		55	mg/kg	1.32	72.618	mg/kg	0.00726 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		2.9	mg/kg	3.22	9.338	mg/kg	0.000934 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		1.7	mg/kg	1.142	1.942	mg/kg	0.000194 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				87	mg/kg	1.923	167.308	mg/kg	0.0167 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		136	mg/kg	1.126	153.121	mg/kg	0.0153 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	362	mg/kg	1.56	564.653	mg/kg	0.0362 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.52	mg/kg	1.353	0.704	mg/kg	0.0000704 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		34	mg/kg	2.976	101.193	mg/kg	0.0101 %		
9	zinc { zinc chromate }	024-007-00-3				194	mg/kg	2.774	538.184	mg/kg	0.0538 %		
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 }	006-007-00-5				7	mg/kg	1.884	13.188	mg/kg	0.00132 %		
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<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									
15	●	TPH (C6 to C40) petroleum group		TPH		588	mg/kg		588	mg/kg	0.0588 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		0.22	mg/kg		0.22	mg/kg	0.000022 %		
17	●	acenaphthylene											
			205-917-1	208-96-8		0.03	mg/kg		0.03	mg/kg	0.000003 %		
18	●	acenaphthene											
			201-469-6	83-32-9		0.2	mg/kg		0.2	mg/kg	0.00002 %		
19	●	fluorene											
			201-695-5	86-73-7		0.18	mg/kg		0.18	mg/kg	0.000018 %		
20	●	phenanthrene											
			201-581-5	85-01-8		1.54	mg/kg		1.54	mg/kg	0.000154 %		
21	●	anthracene											
			204-371-1	120-12-7		0.32	mg/kg		0.32	mg/kg	0.000032 %		
22	●	fluoranthene											
			205-912-4	206-44-0		1.78	mg/kg		1.78	mg/kg	0.000178 %		
23	●	pyrene											
			204-927-3	129-00-0		1.72	mg/kg		1.72	mg/kg	0.000172 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		1	mg/kg		1	mg/kg	0.0001 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		1.67	mg/kg		1.67	mg/kg	0.000167 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		0.36	mg/kg		0.36	mg/kg	0.000036 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		1.14	mg/kg		1.14	mg/kg	0.000114 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		0.84	mg/kg		0.84	mg/kg	0.000084 %		
29	●	indeno[123-cd]pyrene											
			205-893-2	193-39-5		0.64	mg/kg		0.64	mg/kg	0.000064 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.32	mg/kg		0.32	mg/kg	0.000032 %		
31	●	benzo[ghi]perylene											
			205-883-8	191-24-2		0.57	mg/kg		0.57	mg/kg	0.000057 %		
32	●	pH		PH		7.59	pH		7.59	pH	7.59 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
34	●	1,1-dichloroethane and 1,2-dichloroethane (combined)											
			203-458-1, 200-863-5	107-06-2, 75-34-3		<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
35		carbon tetrachloride; tetrachloromethane											
		602-008-00-5	200-262-8	56-23-5		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
36		trichloroethylene; trichloroethene											
		602-027-00-9	201-167-4	79-01-6		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
37		vinyl chloride; chloroethylene											
		602-023-00-7	200-831-0	75-01-4		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
										Total:	0.203 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0588%)

Classification of sample: BH19/12

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

Sample details

Sample Name:
BH19/12
Sample Depth:
3 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No 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 }		73 mg/kg	1.32	96.384 mg/kg	0.00964 %		
	033-003-00-0 / 215-481-4 / 1327-53-3							
2	boron { diboron trioxide; boric oxide }		2.4 mg/kg	3.22	7.728 mg/kg	0.000773 %		
	005-008-00-8 / 215-125-8 / 1303-86-2							
3	cadmium { cadmium oxide }		2 mg/kg	1.142	2.285 mg/kg	0.000228 %		
	048-002-00-0 / 215-146-2 / 1306-19-0							
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }		28 mg/kg	1.923	53.846 mg/kg	0.00538 %		
	024-017-00-8							
5	copper { dicopper oxide; copper (I) oxide }		220 mg/kg	1.126	247.695 mg/kg	0.0248 %		
	029-002-00-X / 215-270-7 / 1317-39-1							
6	lead { lead chromate }	1	163 mg/kg	1.56	254.25 mg/kg	0.0163 %		
	082-004-00-2 / 231-846-0 / 7758-97-6							
7	mercury { mercury dichloride }		0.41 mg/kg	1.353	0.555 mg/kg	0.0000555 %		
	080-010-00-X / 231-299-8 / 7487-94-7							
8	nickel { nickel chromate }		75 mg/kg	2.976	223.22 mg/kg	0.0223 %		
	028-035-00-7 / 238-766-5 / 14721-18-7							
9	zinc { zinc chromate }		153 mg/kg	2.774	424.444 mg/kg	0.0424 %		
	024-007-00-3							
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 }		<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5							
11	benzene		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-020-00-8 / 200-753-7 / 71-43-2							
12	toluene		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-021-00-3 / 203-625-9 / 108-88-3							
13	ethylbenzene		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-023-00-4 / 202-849-4 / 100-41-4							
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	603-181-00-X / 216-653-1 / 1634-04-4							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		TPH (C6 to C40) petroleum group		TPH		195	mg/kg		195	mg/kg	0.0195 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		0.48	mg/kg		0.48	mg/kg	0.000048 %		
17		acenaphthylene											
			205-917-1	208-96-8		0.08	mg/kg		0.08	mg/kg	0.000008 %		
18		acenaphthene											
			201-469-6	83-32-9		0.55	mg/kg		0.55	mg/kg	0.000055 %		
19		fluorene											
			201-695-5	86-73-7		0.49	mg/kg		0.49	mg/kg	0.000049 %		
20		phenanthrene											
			201-581-5	85-01-8		4.73	mg/kg		4.73	mg/kg	0.000473 %		
21		anthracene											
			204-371-1	120-12-7		1.05	mg/kg		1.05	mg/kg	0.000105 %		
22		fluoranthene											
			205-912-4	206-44-0		5.85	mg/kg		5.85	mg/kg	0.000585 %		
23		pyrene											
			204-927-3	129-00-0		5.95	mg/kg		5.95	mg/kg	0.000595 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		3	mg/kg		3	mg/kg	0.0003 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		3.05	mg/kg		3.05	mg/kg	0.000305 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		2.98	mg/kg		2.98	mg/kg	0.000298 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		1.01	mg/kg		1.01	mg/kg	0.000101 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		2.34	mg/kg		2.34	mg/kg	0.000234 %		
29		indeno[123-cd]pyrene											
			205-893-2	193-39-5		1.03	mg/kg		1.03	mg/kg	0.000103 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.27	mg/kg		0.27	mg/kg	0.000027 %		
31		benzo[ghi]perylene											
			205-883-8	191-24-2		0.97	mg/kg		0.97	mg/kg	0.000097 %		
32		pH											
				PH		7.88	pH		7.88	pH	7.88 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
										Total:	0.145 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0195%)

Classification of sample: BH19/15

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

Sample details

Sample Name:	LoW Code:
BH19/15	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
4 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		17	mg/kg	1.32	22.446	mg/kg	0.00224 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		3.4	mg/kg	3.22	10.948	mg/kg	0.00109 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.5	mg/kg	1.142	<0.571	mg/kg	<0.0000571 %		<LOD
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				13	mg/kg	1.923	25	mg/kg	0.0025 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		44	mg/kg	1.126	49.539	mg/kg	0.00495 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	42	mg/kg	1.56	65.512	mg/kg	0.0042 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17	mg/kg	1.353	<0.23	mg/kg	<0.000023 %		<LOD
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		31	mg/kg	2.976	92.264	mg/kg	0.00923 %		
9	zinc { zinc chromate }	024-007-00-3				48	mg/kg	2.774	133.159	mg/kg	0.0133 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	TPH (C6 to C40) petroleum group			TPH		83	mg/kg		83	mg/kg	0.0083 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		0.16	mg/kg		0.16	mg/kg	0.000016 %		
13	acenaphthylene		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
14	acenaphthene		201-469-6	83-32-9		0.15	mg/kg		0.15	mg/kg	0.000015 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		fluorene				0.11	mg/kg		0.11	mg/kg	0.000011 %		
			201-695-5	86-73-7									
16		phenanthrene				1.26	mg/kg		1.26	mg/kg	0.000126 %		
			201-581-5	85-01-8									
17		anthracene				0.25	mg/kg		0.25	mg/kg	0.000025 %		
			204-371-1	120-12-7									
18		fluoranthene				1	mg/kg		1	mg/kg	0.0001 %		
			205-912-4	206-44-0									
19		pyrene				0.92	mg/kg		0.92	mg/kg	0.000092 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				0.37	mg/kg		0.37	mg/kg	0.000037 %		
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				0.4	mg/kg		0.4	mg/kg	0.00004 %		
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				0.33	mg/kg		0.33	mg/kg	0.000033 %		
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				0.12	mg/kg		0.12	mg/kg	0.000012 %		
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				0.25	mg/kg		0.25	mg/kg	0.000025 %		
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				0.18	mg/kg		0.18	mg/kg	0.000018 %		
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				0.05	mg/kg		0.05	mg/kg	0.000005 %		
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				0.19	mg/kg		0.19	mg/kg	0.000019 %		
			205-883-8	191-24-2									
28		pH				8.05	pH		8.05	pH	8.05 pH		
				PH									
29		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0467 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0083%)

Classification of sample: BH19/15[2]

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

Sample details

Sample Name:
BH19/15[2]
Sample Depth:
7 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		8	mg/kg	1.32	10.563	mg/kg	0.00106 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		6.9	mg/kg	3.22	22.217	mg/kg	0.00222 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.6	mg/kg	1.142	0.685	mg/kg	0.0000685 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				22	mg/kg	1.923	42.308	mg/kg	0.00423 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		25	mg/kg	1.126	28.147	mg/kg	0.00281 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	30	mg/kg	1.56	46.794	mg/kg	0.003 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17	mg/kg	1.353	<0.23	mg/kg	<0.000023 %		<LOD
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		28	mg/kg	2.976	83.335	mg/kg	0.00833 %		
9	zinc { zinc chromate }	024-007-00-3				60	mg/kg	2.774	166.449	mg/kg	0.0166 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	TPH (C6 to C40) petroleum group			TPH		109	mg/kg		109	mg/kg	0.0109 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		0.08	mg/kg		0.08	mg/kg	0.000008 %		
13	acenaphthylene		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
14	acenaphthene		201-469-6	83-32-9		0.04	mg/kg		0.04	mg/kg	0.000004 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		fluorene				0.04	mg/kg		0.04	mg/kg	0.000004 %		
			201-695-5	86-73-7									
16		phenanthrene				0.24	mg/kg		0.24	mg/kg	0.000024 %		
			201-581-5	85-01-8									
17		anthracene				0.04	mg/kg		0.04	mg/kg	0.000004 %		
			204-371-1	120-12-7									
18		fluoranthene				0.14	mg/kg		0.14	mg/kg	0.000014 %		
			205-912-4	206-44-0									
19		pyrene				0.11	mg/kg		0.11	mg/kg	0.000011 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		**<LOD**
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		**<LOD**
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		**<LOD**
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		**<LOD**
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		**<LOD**
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
			205-883-8	191-24-2									
28		pH				8.19	pH		8.19	pH	8.19 pH		
				PH									
29		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0496 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0109%)

Classification of sample: BH19/16

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

Sample details

Sample Name:
BH19/16
Sample Depth:
5 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		4	mg/kg	1.32	5.281	mg/kg	0.000528 %		
2	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 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.6	mg/kg	1.142	0.685	mg/kg	0.0000685 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				23	mg/kg	1.923	44.231	mg/kg	0.00442 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		27	mg/kg	1.126	30.399	mg/kg	0.00304 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	25	mg/kg	1.56	38.995	mg/kg	0.0025 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17	mg/kg	1.353	<0.23	mg/kg	<0.000023 %		<LOD
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		33	mg/kg	2.976	98.217	mg/kg	0.00982 %		
9	zinc { zinc chromate }	024-007-00-3				49	mg/kg	2.774	135.933	mg/kg	0.0136 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	TPH (C6 to C40) petroleum group			TPH		185	mg/kg		185	mg/kg	0.0185 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		0.21	mg/kg		0.21	mg/kg	0.000021 %		
13	acenaphthylene		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
14	acenaphthene		201-469-6	83-32-9		<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									
15		fluorene											
			201-695-5	86-73-7		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<LOD
16		phenanthrene											
			201-581-5	85-01-8		0.12	mg/kg		0.12	mg/kg	0.000012 %		
17		anthracene											
			204-371-1	120-12-7		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
18		fluoranthene											
			205-912-4	206-44-0		<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
19		pyrene											
			204-927-3	129-00-0		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<LOD
20		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
21		chrysene											
		601-048-00-0	205-923-4	218-01-9		<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
22		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
23		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<LOD
24		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
25		indeno[123-cd]pyrene											
			205-893-2	193-39-5		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
26		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
27		benzo[ghi]perylene											
			205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
28		pH											
				PH		8.24	pH		8.24	pH	8.24 pH		
29		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
										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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0185%)

Classification of sample: BH19/22

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

Sample details

Sample Name:	LoW Code:
BH19/22	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
4 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		27	mg/kg	1.32	35.649	mg/kg	0.00356 %		
2	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 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.9	mg/kg	1.142	1.028	mg/kg	0.000103 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				17	mg/kg	1.923	32.692	mg/kg	0.00327 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		46	mg/kg	1.126	51.791	mg/kg	0.00518 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	48	mg/kg	1.56	74.871	mg/kg	0.0048 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17	mg/kg	1.353	<0.23	mg/kg	<0.000023 %		**<LOD**
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		29	mg/kg	2.976	86.312	mg/kg	0.00863 %		
9	zinc { zinc chromate }	024-007-00-3				96	mg/kg	2.774	266.318	mg/kg	0.0266 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		**<LOD**
11	TPH (C6 to C40) petroleum group			TPH		290	mg/kg		290	mg/kg	0.029 %		
12	naphthalene	601-052-00-2	202-049-5	91-20-3		0.27	mg/kg		0.27	mg/kg	0.000027 %		
13	acenaphthylene		205-917-1	208-96-8		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		**<LOD**
14	acenaphthene		201-469-6	83-32-9		0.02	mg/kg		0.02	mg/kg	0.000002 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		fluorene				0.01	mg/kg		0.01	mg/kg	0.000001 %		
			201-695-5	86-73-7									
16		phenanthrene				0.27	mg/kg		0.27	mg/kg	0.000027 %		
			201-581-5	85-01-8									
17		anthracene				0.02	mg/kg		0.02	mg/kg	0.000002 %		
			204-371-1	120-12-7									
18		fluoranthene				0.12	mg/kg		0.12	mg/kg	0.000012 %		
			205-912-4	206-44-0									
19		pyrene				0.13	mg/kg		0.13	mg/kg	0.000013 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				0.07	mg/kg		0.07	mg/kg	0.000007 %		
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				0.09	mg/kg		0.09	mg/kg	0.000009 %		
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				0.08	mg/kg		0.08	mg/kg	0.000008 %		
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		**<LOD**
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		**<LOD**
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		**<LOD**
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
			205-883-8	191-24-2									
28		pH				4.93	pH		4.93	pH	4.93 pH		
				PH									
29		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.029%)

Classification of sample: BH19/22[2]

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

Sample details

Sample Name:	LoW Code:
BH19/22[2]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
7 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No 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 mg/kg	1.32	5.281 mg/kg	0.000528 %		
	033-003-00-0 / 215-481-4 / 1327-53-3							
2	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							
3	cadmium { cadmium oxide }		1.1 mg/kg	1.142	1.257 mg/kg	0.000126 %		
	048-002-00-0 / 215-146-2 / 1306-19-0							
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }		27 mg/kg	1.923	51.923 mg/kg	0.00519 %		
	024-017-00-8							
5	copper { dicopper oxide; copper (I) oxide }		33 mg/kg	1.126	37.154 mg/kg	0.00372 %		
	029-002-00-X / 215-270-7 / 1317-39-1							
6	lead { lead chromate }	1	30 mg/kg	1.56	46.794 mg/kg	0.003 %		
	082-004-00-2 / 231-846-0 / 7758-97-6							
7	mercury { mercury dichloride }		<0.17 mg/kg	1.353	<0.23 mg/kg	<0.000023 %		**<LOD**
	080-010-00-X / 231-299-8 / 7487-94-7							
8	nickel { nickel chromate }		48 mg/kg	2.976	142.861 mg/kg	0.0143 %		
	028-035-00-7 / 238-766-5 / 14721-18-7							
9	zinc { zinc chromate }		75 mg/kg	2.774	208.061 mg/kg	0.0208 %		
	024-007-00-3							
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 }		<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		**<LOD**
	006-007-00-5							
11	TPH (C6 to C40) petroleum group		360 mg/kg		360 mg/kg	0.036 %		
	TPH							
12	naphthalene		0.75 mg/kg		0.75 mg/kg	0.000075 %		
	601-052-00-2 / 202-049-5 / 91-20-3							
13	acenaphthylene		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		**<LOD**
	205-917-1 / 208-96-8							
14	acenaphthene		0.05 mg/kg		0.05 mg/kg	0.000005 %		
	201-469-6 / 83-32-9							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		fluorene				0.05	mg/kg		0.05	mg/kg	0.000005 %		
			201-695-5	86-73-7									
16		phenanthrene				0.38	mg/kg		0.38	mg/kg	0.000038 %		
			201-581-5	85-01-8									
17		anthracene				0.05	mg/kg		0.05	mg/kg	0.000005 %		
			204-371-1	120-12-7									
18		fluoranthene				0.21	mg/kg		0.21	mg/kg	0.000021 %		
			205-912-4	206-44-0									
19		pyrene				0.22	mg/kg		0.22	mg/kg	0.000022 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				0.12	mg/kg		0.12	mg/kg	0.000012 %		
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				0.12	mg/kg		0.12	mg/kg	0.000012 %		
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				0.12	mg/kg		0.12	mg/kg	0.000012 %		
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		**<LOD**
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				0.08	mg/kg		0.08	mg/kg	0.000008 %		
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				0.04	mg/kg		0.04	mg/kg	0.000004 %		
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		**<LOD**
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
			205-883-8	191-24-2									
28		pH				6.16	pH		6.16	pH	6.16 pH		
				PH									
29		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0846 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.036%)

Classification of sample: BH19/24

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

Sample details

Sample Name:	LoW Code:
BH19/24	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
6 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		5 mg/kg	1.32	6.602 mg/kg	0.00066 %		
2	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		1.6 mg/kg	3.22	5.152 mg/kg	0.000515 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.6 mg/kg	1.142	0.685 mg/kg	0.0000685 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				21 mg/kg	1.923	40.385 mg/kg	0.00404 %		
5	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 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	34 mg/kg	1.56	53.034 mg/kg	0.0034 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17 mg/kg	1.353	<0.23 mg/kg	<0.000023 %		<LOD
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		41 mg/kg	2.976	122.027 mg/kg	0.0122 %		
9	zinc { zinc chromate }	024-007-00-3				41 mg/kg	2.774	113.74 mg/kg	0.0114 %		
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 }	006-007-00-5				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		0.22 mg/kg		0.22 mg/kg	0.000022 %		
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<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									
15	●	TPH (C6 to C40) petroleum group		TPH		656	mg/kg		656	mg/kg	0.0656 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		0.77	mg/kg		0.77	mg/kg	0.000077 %		
17	●	acenaphthylene											
			205-917-1	208-96-8		0.02	mg/kg		0.02	mg/kg	0.000002 %		
18	●	acenaphthene											
			201-469-6	83-32-9		0.03	mg/kg		0.03	mg/kg	0.000003 %		
19	●	fluorene											
			201-695-5	86-73-7		0.04	mg/kg		0.04	mg/kg	0.000004 %		
20	●	phenanthrene											
			201-581-5	85-01-8		0.26	mg/kg		0.26	mg/kg	0.000026 %		
21	●	anthracene											
			204-371-1	120-12-7		0.03	mg/kg		0.03	mg/kg	0.000003 %		
22	●	fluoranthene											
			205-912-4	206-44-0		0.09	mg/kg		0.09	mg/kg	0.000009 %		
23	●	pyrene											
			204-927-3	129-00-0		0.11	mg/kg		0.11	mg/kg	0.000011 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		0.07	mg/kg		0.07	mg/kg	0.000007 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		0.09	mg/kg		0.09	mg/kg	0.000009 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<LOD
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		0.07	mg/kg		0.07	mg/kg	0.000007 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		0.05	mg/kg		0.05	mg/kg	0.000005 %		
29	●	indeno[123-cd]pyrene											
			205-893-2	193-39-5		0.04	mg/kg		0.04	mg/kg	0.000004 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
31	●	benzo[ghi]perylene											
			205-883-8	191-24-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
32	●	pH		PH		7.57	pH		7.57	pH	7.57 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
34	●	1,1-dichloroethane and 1,2-dichloroethane (combined)											
			203-458-1, 200-863-5	107-06-2, 75-34-3		<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
35		carbon tetrachloride; tetrachloromethane											
		602-008-00-5	200-262-8	56-23-5		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
36		trichloroethylene; trichloroethene											
		602-027-00-9	201-167-4	79-01-6		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
37		vinyl chloride; chloroethylene											
		602-023-00-7	200-831-0	75-01-4		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
										Total:	0.103 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

Flam. Liq. 2; H225 "Highly flammable liquid and vapour."

Because of determinand:

toluene: (conc.: 0.00002%)

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0656%)

Classification of sample: BH19/25

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

Sample details

Sample Name:
BH19/25
Sample Depth:
5 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No 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 mg/kg	1.32	11.883 mg/kg	0.00119 %		
	033-003-00-0 / 215-481-4 / 1327-53-3							
2	boron { diboron trioxide; boric oxide }		2.8 mg/kg	3.22	9.016 mg/kg	0.000902 %		
	005-008-00-8 / 215-125-8 / 1303-86-2							
3	cadmium { cadmium oxide }		<0.5 mg/kg	1.142	<0.571 mg/kg	<0.0000571 %		<LOD
	048-002-00-0 / 215-146-2 / 1306-19-0							
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }		18 mg/kg	1.923	34.615 mg/kg	0.00346 %		
	024-017-00-8							
5	copper { dicopper oxide; copper (I) oxide }		40 mg/kg	1.126	45.036 mg/kg	0.0045 %		
	029-002-00-X / 215-270-7 / 1317-39-1							
6	lead { lead chromate }	1	24 mg/kg	1.56	37.436 mg/kg	0.0024 %		
	082-004-00-2 / 231-846-0 / 7758-97-6							
7	mercury { mercury dichloride }		<0.17 mg/kg	1.353	<0.23 mg/kg	<0.000023 %		<LOD
	080-010-00-X / 231-299-8 / 7487-94-7							
8	nickel { nickel chromate }		31 mg/kg	2.976	92.264 mg/kg	0.00923 %		
	028-035-00-7 / 238-766-5 / 14721-18-7							
9	zinc { zinc chromate }		55 mg/kg	2.774	152.578 mg/kg	0.0153 %		
	024-007-00-3							
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 }		<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5							
11	TPH (C6 to C40) petroleum group		17 mg/kg		17 mg/kg	0.0017 %		
	TPH							
12	naphthalene		0.18 mg/kg		0.18 mg/kg	0.000018 %		
	601-052-00-2 / 202-049-5 / 91-20-3							
13	acenaphthylene		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
	205-917-1 / 208-96-8							
14	acenaphthene		0.02 mg/kg		0.02 mg/kg	0.000002 %		
	201-469-6 / 83-32-9							

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		fluorene				0.03	mg/kg		0.03	mg/kg	0.000003 %		
			201-695-5	86-73-7									
16		phenanthrene				0.14	mg/kg		0.14	mg/kg	0.000014 %		
			201-581-5	85-01-8									
17		anthracene				0.03	mg/kg		0.03	mg/kg	0.000003 %		
			204-371-1	120-12-7									
18		fluoranthene				0.11	mg/kg		0.11	mg/kg	0.000011 %		
			205-912-4	206-44-0									
19		pyrene				0.1	mg/kg		0.1	mg/kg	0.00001 %		
			204-927-3	129-00-0									
20		benzo[a]anthracene				0.06	mg/kg		0.06	mg/kg	0.000006 %		
		601-033-00-9	200-280-6	56-55-3									
21		chrysene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		**<LOD**
		601-048-00-0	205-923-4	218-01-9									
22		benzo[b]fluoranthene				0.06	mg/kg		0.06	mg/kg	0.000006 %		
		601-034-00-4	205-911-9	205-99-2									
23		benzo[k]fluoranthene				<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		**<LOD**
		601-036-00-5	205-916-6	207-08-9									
24		benzo[a]pyrene; benzo[def]chrysene				0.05	mg/kg		0.05	mg/kg	0.000005 %		
		601-032-00-3	200-028-5	50-32-8									
25		indeno[123-cd]pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		**<LOD**
			205-893-2	193-39-5									
26		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		**<LOD**
		601-041-00-2	200-181-8	53-70-3									
27		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		**<LOD**
			205-883-8	191-24-2									
28		pH				8.49	pH		8.49	pH	8.49 pH		
				PH									
29		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.039 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0017%)

Classification of sample: TP19/03

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

Sample details

Sample Name:	LoW Code:	
TP19/03	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 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to hazardous because Elevated TPHs over 1000mg/kg. Free product recorded in occasional samples during post-investgation monitoring. Loss on ignition tests carried out within 67% recorded elevated loss of ignition above the hazardous waste threshold.

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.126%)

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

Hazard Statements hit:

Carc. 1B; 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:

TPH (C6 to C40) petroleum group: (conc.: 0.126%)

HP 8: Corrosive "waste which on application can cause skin corrosion"

pH; pH "Assumed to be irritant/corrosive because of pH value"

Because of determinand:

pH: (conc.: 12.69 pH)

HP 11: Mutagenic "waste which may cause a mutation, that is a permanent change in the amount or structure of the genetic material in a cell"

Hazard Statements hit:

Muta. 1B; H340 "May cause genetic defects [state route of exposure if it is conclusively proven that no other routes of exposure cause the hazard]."

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.126%)

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		6	mg/kg	1.32	7.922	mg/kg	0.000792 %		
2	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 %		<LOD
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.5	mg/kg	1.142	<0.571	mg/kg	<0.0000571 %		<LOD
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				13	mg/kg	1.923	25	mg/kg	0.0025 %		
5	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 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	11	mg/kg	1.56	17.158	mg/kg	0.0011 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.85	mg/kg	1.353	1.15	mg/kg	0.000115 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		13	mg/kg	2.976	38.691	mg/kg	0.00387 %		
9	zinc { zinc chromate }	024-007-00-3				28	mg/kg	2.774	77.676	mg/kg	0.00777 %		
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 }	006-007-00-5				15	mg/kg	1.884	28.26	mg/kg	0.00283 %		
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
15	TPH (C6 to C40) petroleum group			TPH		1260	mg/kg		1260	mg/kg	0.126 %		
16	naphthalene	601-052-00-2	202-049-5	91-20-3		3.08	mg/kg		3.08	mg/kg	0.000308 %		
17	acenaphthylene		205-917-1	208-96-8		0.19	mg/kg		0.19	mg/kg	0.000019 %		
18	acenaphthene		201-469-6	83-32-9		2.61	mg/kg		2.61	mg/kg	0.000261 %		
19	fluorene		201-695-5	86-73-7		2.21	mg/kg		2.21	mg/kg	0.000221 %		
20	phenanthrene		201-581-5	85-01-8		13.4	mg/kg		13.4	mg/kg	0.00134 %		
21	anthracene		204-371-1	120-12-7		3.23	mg/kg		3.23	mg/kg	0.000323 %		
22	fluoranthene		205-912-4	206-44-0		14.4	mg/kg		14.4	mg/kg	0.00144 %		
23	pyrene		204-927-3	129-00-0		14.3	mg/kg		14.3	mg/kg	0.00143 %		
24	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		7.06	mg/kg		7.06	mg/kg	0.000706 %		
25	chrysene	601-048-00-0	205-923-4	218-01-9		6.85	mg/kg		6.85	mg/kg	0.000685 %		
26	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		5.25	mg/kg		5.25	mg/kg	0.000525 %		
27	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		1.68	mg/kg		1.68	mg/kg	0.000168 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
28		benzo[a]pyrene; benzo[def]chrysene				4.45	mg/kg		4.45	mg/kg	0.000445 %		
		601-032-00-3	200-028-5	50-32-8									
29	●	indeno[123-cd]pyrene				2.93	mg/kg		2.93	mg/kg	0.000293 %		
			205-893-2	193-39-5									
30		dibenz[a,h]anthracene				0.62	mg/kg		0.62	mg/kg	0.000062 %		
		601-041-00-2	200-181-8	53-70-3									
31	●	benzo[ghi]perylene				2.54	mg/kg		2.54	mg/kg	0.000254 %		
			205-883-8	191-24-2									
32	●	pH				12.69	pH		12.69	pH	12.69 pH		
				PH									
33		phenol				0.3	mg/kg		0.3	mg/kg	0.00003 %		
		604-001-00-2	203-632-7	108-95-2									
34	●	1,1-dichloroethane and 1,2-dichloroethane (combined)				<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
			203-458-1, 200-863-5	107-06-2, 75-34-3									
35		carbon tetrachloride; tetrachloromethane				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		602-008-00-5	200-262-8	56-23-5									
36		trichloroethylene; trichloroethene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		602-027-00-9	201-167-4	79-01-6									
37		vinyl chloride; chloroethylene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		602-023-00-7	200-831-0	75-01-4									
										Total:	0.156 %		

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 Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
<LOD	Below limit of detection
CLP: Note 1	Only the metal concentration has been used for classification

Classification of sample: TP19/07

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

Sample details

Sample Name:
TP19/07
Sample Depth:
3.6 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	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	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 %		<LOD
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.7	mg/kg	1.142	0.8	mg/kg	0.00008 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				22	mg/kg	1.923	42.308	mg/kg	0.00423 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		52	mg/kg	1.126	58.546	mg/kg	0.00585 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	73	mg/kg	1.56	113.867	mg/kg	0.0073 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17	mg/kg	1.353	<0.23	mg/kg	<0.000023 %		<LOD
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		25	mg/kg	2.976	74.407	mg/kg	0.00744 %		
9	zinc { zinc chromate }	024-007-00-3				23	mg/kg	2.774	63.805	mg/kg	0.00638 %		
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 }	006-007-00-5				2	mg/kg	1.884	3.768	mg/kg	0.000377 %		
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<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									
15	●	TPH (C6 to C40) petroleum group		TPH		65	mg/kg		65	mg/kg	0.0065 %		
16		naphthalene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
17	●	acenaphthylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			205-917-1	208-96-8									
18	●	acenaphthene				0.01	mg/kg		0.01	mg/kg	0.000001 %		
			201-469-6	83-32-9									
19	●	fluorene				0.01	mg/kg		0.01	mg/kg	0.000001 %		
			201-695-5	86-73-7									
20	●	phenanthrene				0.26	mg/kg		0.26	mg/kg	0.000026 %		
			201-581-5	85-01-8									
21	●	anthracene				0.03	mg/kg		0.03	mg/kg	0.000003 %		
			204-371-1	120-12-7									
22	●	fluoranthene				0.34	mg/kg		0.34	mg/kg	0.000034 %		
			205-912-4	206-44-0									
23	●	pyrene				0.36	mg/kg		0.36	mg/kg	0.000036 %		
			204-927-3	129-00-0									
24		benzo[a]anthracene				0.19	mg/kg		0.19	mg/kg	0.000019 %		
		601-033-00-9	200-280-6	56-55-3									
25		chrysene				0.24	mg/kg		0.24	mg/kg	0.000024 %		
		601-048-00-0	205-923-4	218-01-9									
26		benzo[b]fluoranthene				0.22	mg/kg		0.22	mg/kg	0.000022 %		
		601-034-00-4	205-911-9	205-99-2									
27		benzo[k]fluoranthene				<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
28		benzo[a]pyrene; benzo[def]chrysene				0.15	mg/kg		0.15	mg/kg	0.000015 %		
		601-032-00-3	200-028-5	50-32-8									
29	●	indeno[123-cd]pyrene				0.09	mg/kg		0.09	mg/kg	0.000009 %		
			205-893-2	193-39-5									
30		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
31	●	benzo[ghi]perylene				0.08	mg/kg		0.08	mg/kg	0.000008 %		
			205-883-8	191-24-2									
32	●	pH		PH		4.76	pH		4.76	pH	4.76 pH		
33		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
34	●	1,1-dichloroethane and 1,2-dichloroethane (combined)				<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
			203-458-1, 200-863-5	107-06-2, 75-34-3									
35		carbon tetrachloride; tetrachloromethane				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		602-008-00-5	200-262-8	56-23-5									
36		trichloroethylene; trichloroethene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		602-027-00-9	201-167-4	79-01-6									
37		vinyl chloride; chloroethylene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		602-023-00-7	200-831-0	75-01-4									
										Total:	0.0408 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0065%)

Classification of sample: TP19/09

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

Sample details

Sample Name:
TP19/09
Sample Depth:
2.8 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	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	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 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.9	mg/kg	1.142	1.028	mg/kg	0.000103 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				28	mg/kg	1.923	53.846	mg/kg	0.00538 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		52	mg/kg	1.126	58.546	mg/kg	0.00585 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	128	mg/kg	1.56	199.656	mg/kg	0.0128 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		0.34	mg/kg	1.353	0.46	mg/kg	0.000046 %		
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		32	mg/kg	2.976	95.24	mg/kg	0.00952 %		
9	zinc { zinc chromate }	024-007-00-3				94	mg/kg	2.774	260.77	mg/kg	0.0261 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<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									
15		TPH (C6 to C40) petroleum group		TPH		180	mg/kg		180	mg/kg	0.018 %		
16		naphthalene				0.72	mg/kg		0.72	mg/kg	0.000072 %		
		601-052-00-2	202-049-5	91-20-3									
17		acenaphthylene				0.04	mg/kg		0.04	mg/kg	0.000004 %		
			205-917-1	208-96-8									
18		acenaphthene				0.53	mg/kg		0.53	mg/kg	0.000053 %		
			201-469-6	83-32-9									
19		fluorene				0.58	mg/kg		0.58	mg/kg	0.000058 %		
			201-695-5	86-73-7									
20		phenanthrene				3.97	mg/kg		3.97	mg/kg	0.000397 %		
			201-581-5	85-01-8									
21		anthracene				0.87	mg/kg		0.87	mg/kg	0.000087 %		
			204-371-1	120-12-7									
22		fluoranthene				4.02	mg/kg		4.02	mg/kg	0.000402 %		
			205-912-4	206-44-0									
23		pyrene				3.78	mg/kg		3.78	mg/kg	0.000378 %		
			204-927-3	129-00-0									
24		benzo[a]anthracene				1.93	mg/kg		1.93	mg/kg	0.000193 %		
		601-033-00-9	200-280-6	56-55-3									
25		chrysene				1.93	mg/kg		1.93	mg/kg	0.000193 %		
		601-048-00-0	205-923-4	218-01-9									
26		benzo[b]fluoranthene				1.78	mg/kg		1.78	mg/kg	0.000178 %		
		601-034-00-4	205-911-9	205-99-2									
27		benzo[k]fluoranthene				0.62	mg/kg		0.62	mg/kg	0.000062 %		
		601-036-00-5	205-916-6	207-08-9									
28		benzo[a]pyrene; benzo[def]chrysene				1.44	mg/kg		1.44	mg/kg	0.000144 %		
		601-032-00-3	200-028-5	50-32-8									
29		indeno[123-cd]pyrene				0.78	mg/kg		0.78	mg/kg	0.000078 %		
			205-893-2	193-39-5									
30		dibenz[a,h]anthracene				0.2	mg/kg		0.2	mg/kg	0.00002 %		
		601-041-00-2	200-181-8	53-70-3									
31		benzo[ghi]perylene				0.68	mg/kg		0.68	mg/kg	0.000068 %		
			205-883-8	191-24-2									
32		pH		PH		8.57	pH		8.57	pH	8.57 pH		
33		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		**<LOD**
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0825 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.018%)

Classification of sample: TP19/09[2]

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

Sample details

Sample Name:	LoW Code:
TP19/09[2]	Chapter: 17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	
4 m	Entry: 17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		9	mg/kg	1.32	11.883	mg/kg	0.00119 %		
2	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 %		
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.7	mg/kg	1.142	0.8	mg/kg	0.00008 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				27	mg/kg	1.923	51.923	mg/kg	0.00519 %		
5	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		40	mg/kg	1.126	45.036	mg/kg	0.0045 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	66	mg/kg	1.56	102.948	mg/kg	0.0066 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17	mg/kg	1.353	<0.23	mg/kg	<0.000023 %		<LOD
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		32	mg/kg	2.976	95.24	mg/kg	0.00952 %		
9	zinc { zinc chromate }	024-007-00-3				67	mg/kg	2.774	185.868	mg/kg	0.0186 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
14	tert-butyl methyl ether; MTBE; 2-methoxy-2-methylpropane	603-181-00-X	216-653-1	1634-04-4		<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<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									
15	●	TPH (C6 to C40) petroleum group		TPH		200	mg/kg		200	mg/kg	0.02 %		
16		naphthalene											
		601-052-00-2	202-049-5	91-20-3		0.85	mg/kg		0.85	mg/kg	0.000085 %		
17	●	acenaphthylene											
			205-917-1	208-96-8		0.13	mg/kg		0.13	mg/kg	0.000013 %		
18	●	acenaphthene											
			201-469-6	83-32-9		0.44	mg/kg		0.44	mg/kg	0.000044 %		
19	●	fluorene											
			201-695-5	86-73-7		0.59	mg/kg		0.59	mg/kg	0.000059 %		
20	●	phenanthrene											
			201-581-5	85-01-8		3.76	mg/kg		3.76	mg/kg	0.000376 %		
21	●	anthracene											
			204-371-1	120-12-7		0.86	mg/kg		0.86	mg/kg	0.000086 %		
22	●	fluoranthene											
			205-912-4	206-44-0		4.35	mg/kg		4.35	mg/kg	0.000435 %		
23	●	pyrene											
			204-927-3	129-00-0		4.09	mg/kg		4.09	mg/kg	0.000409 %		
24		benzo[a]anthracene											
		601-033-00-9	200-280-6	56-55-3		1.92	mg/kg		1.92	mg/kg	0.000192 %		
25		chrysene											
		601-048-00-0	205-923-4	218-01-9		1.87	mg/kg		1.87	mg/kg	0.000187 %		
26		benzo[b]fluoranthene											
		601-034-00-4	205-911-9	205-99-2		1.74	mg/kg		1.74	mg/kg	0.000174 %		
27		benzo[k]fluoranthene											
		601-036-00-5	205-916-6	207-08-9		0.6	mg/kg		0.6	mg/kg	0.00006 %		
28		benzo[a]pyrene; benzo[def]chrysene											
		601-032-00-3	200-028-5	50-32-8		1.42	mg/kg		1.42	mg/kg	0.000142 %		
29	●	indeno[123-cd]pyrene											
			205-893-2	193-39-5		0.82	mg/kg		0.82	mg/kg	0.000082 %		
30		dibenz[a,h]anthracene											
		601-041-00-2	200-181-8	53-70-3		0.21	mg/kg		0.21	mg/kg	0.000021 %		
31	●	benzo[ghi]perylene											
			205-883-8	191-24-2		0.77	mg/kg		0.77	mg/kg	0.000077 %		
32	●	pH		PH		8.2	pH		8.2	pH	8.2 pH		
33		phenol											
		604-001-00-2	203-632-7	108-95-2		<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
34	●	1,1-dichloroethane and 1,2-dichloroethane (combined)											
			203-458-1, 200-863-5	107-06-2, 75-34-3		<2	mg/kg		<2	mg/kg	<0.0002 %		<LOD
35		carbon tetrachloride; tetrachloromethane											
		602-008-00-5	200-262-8	56-23-5		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
36		trichloroethylene; trichloroethene											
		602-027-00-9	201-167-4	79-01-6		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
37		vinyl chloride; chloroethylene											
		602-023-00-7	200-831-0	75-01-4		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
										Total:	0.0694 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i): Flammable "flammable liquid waste: liquid waste having a flash point below 60°C or waste gas oil, diesel and light heating oils having a flash point > 55°C and <= 75°C"

Force this Hazardous property to non hazardous because Soil sample with sufficiently elevated moisture content which will likely prevent flammability of samples with less than 1000mg/kg of TPHs

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.02%)

Classification of sample: TP19/12

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

Sample details

Sample Name:
TP19/12
Sample Depth:
2.1 m

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

Hazard properties

None identified

Determinands

Moisture content: 0% No Moisture Correction applied (MC)

#	Determinand	CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		2	mg/kg	1.32	2.641	mg/kg	0.000264 %		
2	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 %		<LOD
3	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.9	mg/kg	1.142	1.028	mg/kg	0.000103 %		
4	chromium { chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex }	024-017-00-8				24	mg/kg	1.923	46.154	mg/kg	0.00462 %		
5	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 %		
6	lead { lead chromate }	082-004-00-2	231-846-0	7758-97-6	1	11	mg/kg	1.56	17.158	mg/kg	0.0011 %		
7	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.17	mg/kg	1.353	<0.23	mg/kg	<0.000023 %		<LOD
8	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		31	mg/kg	2.976	92.264	mg/kg	0.00923 %		
9	zinc { zinc chromate }	024-007-00-3				48	mg/kg	2.774	133.159	mg/kg	0.0133 %		
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 }	006-007-00-5				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
11	benzene	601-020-00-8	200-753-7	71-43-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
12	toluene	601-021-00-3	203-625-9	108-88-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
13	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
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

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
15		TPH (C6 to C40) petroleum group		TPH		<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
16		naphthalene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
17		acenaphthylene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			205-917-1	208-96-8									
18		acenaphthene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			201-469-6	83-32-9									
19		fluorene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
			201-695-5	86-73-7									
20		phenanthrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			201-581-5	85-01-8									
21		anthracene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
			204-371-1	120-12-7									
22		fluoranthene				<0.08	mg/kg		<0.08	mg/kg	<0.000008 %		<LOD
			205-912-4	206-44-0									
23		pyrene				<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<LOD
			204-927-3	129-00-0									
24		benzo[a]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-033-00-9	200-280-6	56-55-3									
25		chrysene				<0.06	mg/kg		<0.06	mg/kg	<0.000006 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
26		benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-034-00-4	205-911-9	205-99-2									
27		benzo[k]fluoranthene				<0.07	mg/kg		<0.07	mg/kg	<0.000007 %		<LOD
		601-036-00-5	205-916-6	207-08-9									
28		benzo[a]pyrene; benzo[def]chrysene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-032-00-3	200-028-5	50-32-8									
29		indeno[123-cd]pyrene				<0.03	mg/kg		<0.03	mg/kg	<0.000003 %		<LOD
			205-893-2	193-39-5									
30		dibenz[a,h]anthracene				<0.04	mg/kg		<0.04	mg/kg	<0.000004 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
31		benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
			205-883-8	191-24-2									
32		pH		PH		7.69	pH		7.69	pH	7.69 pH		
33		phenol				<0.2	mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
										Total:	0.0316 %		

Key

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

Appendix A: Classifier defined and non CLP determinands

- **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

- **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

- **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

- **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

pH (CAS Number: PH)

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

1,1-dichloroethane and 1,2-dichloroethane (combined) (EC Number: 203-458-1, 200-863-5, CAS Number: 107-06-2, 75-34-3)

Description/Comments: Combines the hazard statements and risk phrases for 1,1-dichloroethane and 1,2-dichloroethane
Data source: N/a
Data source date: 14 Oct 2016
Hazard Statements: Aquatic Chronic 3 H412 , Carc. 1B H350 , STOT SE 3 H335 , Eye Irrit. 2 H319 , Skin Irrit. 2 H315 , Acute Tox. 4 H302 , Flam. Liq. 2 H225

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)

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 {chromium (VI) compounds, with the exception of barium chromate and of compounds specified elsewhere in this Annex}

Worst case scenario

copper {dicopper oxide; copper (I) oxide}

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

lead {lead chromate}

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

mercury {mercury dichloride}

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

nickel {nickel chromate}

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

zinc {zinc chromate}

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

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)

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.1, May 2018
HazWasteOnline Classification Engine Version: 2019.316.4053.8153 (12 Nov 2019)
HazWasteOnline Database: 2019.316.4053.8153 (12 Nov 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

Appendix J Structural Soils Factual Report

TO BE INCLUDED WHEN RECEIVED: March 2020

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