

Intended for
First Street (Developments) Limited

Project no.
1620002943

Date
29 April 2020

PLOT 9 FIRST STREET MANCHESTER

GROUND CONTAMINATION RISK ASSESSMENT AND REMEDIAL STRATEGY



Revision History

Revision	Date	Purpose / Status	Document Ref.	Comments
- 1	29.04.2020	Issue	1620002943-RS-01	First issue to client

Prepared By



Caroline Clark
Senior Consultant

Reviewed By



Hazel Comyn
Associate

Approved By



Phil Studds
Director

Ramboll

Third Floor
Kings Court
2-4 Exchange Street
Manchester M2 7HA
United Kingdom

Tel: +44 (0)161 827 1890
manchester@ramboll.co.uk

CONTENTS

1. INTRODUCTION.....	4
2. THE SITE	6
3. GROUND CONTAMINATION - GENERIC QUANTITATIVE RISK ASSESSMENT.....	8
4. GROUND GAS RISK ASSESSMENT	13
5. WATER SUPPLY PIPE MATERIAL ASSESSMENT	15
6. GROUND CONTAMINATION – RISK EVALUATION	17
7. DEVELOPMENT PROPOSALS AND REMEDIAL DESIGN STATEMENT.....	21
8. REMEDIAL STRATEGY SPECIFIC REQUIREMENTS	23
9. VERIFICATION PLAN	28

APPENDICES

APPENDIX A – DRAWINGS

APPENDIX B - LEGISLATIVE CONTEXT AND GROUND CONTAMINATION ASSESSMENT
METHODOLOGIES

APPENDIX C - LABORATORY DATA SCREENING SUMMARY

APPENDIX D – GROUND GAS MONITORING DATA

APPENDIX E – WASTE CLASSIFICATION

APPENDIX F – HAZWASTE ONLINE OUTPUT

APPENDIX G – SOIL REUSE CRITERIA

APPENDIX H – MCC COVER SYSTEMS GUIDANCE

1. INTRODUCTION

1.1. Brief

Ramboll UK Ltd was appointed by First Street (Developments) Limited to provide a range of consultancy services, which included contaminated land consultancy, for the proposed development of Plot 9, First Street, Manchester. Plot 9 is part of a larger parcel of land formerly referred to as Plots 6 and 7 which was then renamed as Plots 9 and 10. A site plan showing the proposed site boundary is provided as Figure 1 including the former development areas.

This report is prepared to address Planning Condition 4a of Planning Application 25833/FO/2019 for the site development.

1.2. Previous Reports

There have been several reports already prepared for the site. Previous ground investigation and contaminated land risk assessment work has mostly been prepared for the combined Plots 9 and 10.

This report should be read in conjunction with the following Ramboll reports:

- Ramboll, 2020, Plot 9 First Street Manchester, Waste Assessment Update;
- Ramboll, 2020, Plot 9 First Street Manchester, Contaminated Land Interpretive Report, (Ref:1620002943-GCLIR-03);
- Ramboll, 2019, Plot 9 and Plot 10, First Street Manchester, Waste Classification Letter Report;
- Ramboll, 2019, Plot 9 First Street Manchester, Contaminated Land Desk Study;
- Ramboll, 2018, *Plots 6 & 7 First Street, Manchester – Geotechnical and Contaminated Land Interpretative Report*, Report Ref: 1620002943-GCLIR-02, rev. 2, March 2018;
- Ramboll, March 2017, Contaminated Land Desk Study – Plot 6/7 First Street, Report Ref: 1620002943_CLDS_01;
- Ramboll, February 2017, Ground Investigation Review, Plot 6/7 First Street, Manchester, Report Ref: 1620002943;
- Cundall, 2016, Geoenvironmental Assessment Plot 6/7 First Street, Manchester, (Ref:1011906.RPT.GL.005).

Details from these reports are referenced as appropriate.

1.3. Proposed Development

The development of Plot 9 currently proposed comprises a 10-storey commercial development with limited soft landscaping and with a single storey basement. The proposed depth of basement (i.e. underside of basement slab) level is approximately 26.65 m AOD.

1.4. Objectives

The objectives of this report are:

1. To provide an update to the ground contamination generic quantitative risk assessment and risk evaluation provided for Plot 9 and 10 in Ramboll, Feb 2020 GCLIR, to reflect the data for Plot 9 only; and
2. Based on the updated risk assessment conclusions, provide a remedial strategy to address any potentially significant pollutant linkages identified and any other potential ground contamination based risks associated with the proposed development.

1.5. Scope

The scope of works for this phase of works includes:

- Update of the ground contamination generic quantitative risk assessment provided for Plot 9 and 10 in Ramboll, Feb 2020 GCLIR, to reflect the data for Plot 9 only and incorporate new data from the Ramboll March 2020 soil sampling;
- Provide an updated risk evaluation to identify potentially significant pollutant linkages which require further consideration in the remedial strategy;
- Provide a remedial strategy detailing actions required to mitigate risks from the pollutant linkages identified and to ensure no new pollutant linkages are created as a result of the development; and
- Provide a verification plan for use during construction to aid confirmation that the remedial strategy has been adhered to during the development.

1.6. Constraints and Limitations

This report is intended for First Street (Developments) Limited for the purpose of assisting them in evaluating the site in the context of the potential development. This report should not be used in whole or in part by any third parties without the express permission of Ramboll in writing.

Ramboll has endeavoured to assess all information provided to them. The report includes summaries of information from external sources and cannot offer any guarantees or warranties for the completeness or accuracy of information relied upon. The proposed design options and recommendations summarised in this report relate to the feasibility of developing on the site are based on information gained at the time of writing the report. Any substantial changes to the use of the site may require a reassessment of the implications of the risks identified and a review of the design options.

The conclusions resulting from this study are not necessarily indicative of future conditions or operating practices at or adjacent to the site.

It should be noted that although every effort has been made to ensure the accuracy of the data obtained from the investigation, the possibility exists for variations in ground and groundwater conditions between and around the borehole locations. In addition, groundwater levels will vary seasonally and with changes in weather conditions.

A gas main passes through the western and north western parts of the site, close to the site boundary; refer to Drawing 1620002943-RAM-XX-XX-DR-GE-010. This area was not investigated and is excluded from the scope of this report.

2. THE SITE

2.1. Site Location

The site is situated on a site north of Hulme Street, Manchester, east of Medlock Street and may be located by its National Grid co-ordinates SJ 83729725, and is shown on Figure 1 within Appendix A.

2.2. Site Description

The site is rectangular in shape and is approximately 0.7 Ha in size. The site is situated to the east of Medlock street and is accessed through the northern site boundary via First Street.

At the time of the 2016 and 2017 site investigation, Plot 6 (western half of the site) was used for storage of building material for the Plot 5 development to the north. Plot 7 (eastern half of the site) was occupied by site cabins and car parking. At the time of writing (April 2020) Plot 9 is vacant.

There are four access gates along the northern boundary which are padlocked. There are intermittent areas of hardstanding (concrete/asphalt) across the site.

2.3. Ground Model

The Ramboll Waste Classification letter report (March 2020) identified the following ground conditions onsite:

- Made Ground Granular
- Made Ground Black Ashy Material
- Made Ground Cohesive/Mixed
- Possible Made Ground- Cohesive/Granular reworked natural material (Glaciofluvial Deposits)
- Alluvium
- Glaciofluvial Deposits
- Sandstone (weak/weathered)

Further details are provided in the previous reports.

2.4. Preliminary Conceptual Model

Information presented in previous reports has developed a preliminary conceptual model for the site. Further detail can be found in the Ramboll desk study for Plot 9 (2019) and taken to further detail but for plot 9 and 10 combined in the risk assessment and conceptual model presented in the Ramboll contaminated land interpretative report 2020 (1620002943-GCLIR-03). In brief, the following potential sources of ground contamination have been identified in the desk study:

- Historical site use and development as former Rubber Works and car parking;
- Potential for infilled voids in the underlying sandstone or infilled historical river channels;
- Former terraced housing on site;
- Asbestos clad buildings northwest of the site;
- Made Ground or natural superficial deposits; and
- Off-site sources of contamination such as Gaythorne Gas Works, rubber works, and rubber works storage buildings, timber yard and saw-mills, coal yard, engineering and printing works.

Site investigation works were designed for Plot 9 and 10 combined to provide additional information on the potential risks identified within the desk study.

The conclusions from the combined Plot 9 and Plot 10 Generic Quantitative Risk Assessment (Ramboll, Feb 2020) are shown in Table 2.1 below:

Table 2.1: Potentially Significant Pollutant Linkages Identified for Plot9 and 10 (Ramboll Feb 2020)

Pollutant Linkage	Additional Actions Required
Asbestos in made ground across the site.	Risk management measures required to address potential risks to human health (construction workers and off site receptors) during construction.
Hydrocarbons and SVOCs in soils above water supply pipe threshold for PE pipe.	Barrier pipe recommended.
Ground gases. Elevated methane and carbon dioxide indicate Characteristic Situation 2 is most appropriate classification.	Ground gas protection measures required. Further monitoring data still required to confirm classification.
Potential additional impacts e.g. beneath site cabins and close to the gas main where site investigation access was restricted, or unexpected / unidentified contamination which may be encountered during works.	Risk management measures required in remedial strategy.

The site data provided in the previous reports is reassessed in the next chapter to confirm the generic quantitative risk assessment and conclusions for Plot 9 only.

3. GROUND CONTAMINATION - GENERIC QUANTITATIVE RISK ASSESSMENT

This ground contamination assessment has been undertaken in accordance with the current UK framework and comprises a generic quantitative risk assessment (GQRA) as defined in CLR 11 (EA 2004). Further details of the UK legislative context are provided in Appendix B.

In order to assess the significance of the chemical concentrations reported, generic assessment criteria (GAC) must be selected based on the critical receptors identified at the site. Receptors are considered in relation to Human Health (e.g., people using the site) and the Water Environment (e.g., water resources).

Additional receptors may also require consideration e.g. building materials and flora/fauna, as appropriate to the proposed development. Quantitative assessment of these receptors is not provided at this stage; however, comment is made qualitatively in a later section. These should be considered further as the development proposals progress. A water supply pipe assessment is included in a later section.

3.1. Dataset

The dataset used has been derived from all the ground investigations undertaken across both Plot 9 and 10. Laboratory certificates for the data can be found in the previous reports listed in Section 1.

The data relevant to Plot 9 only has been separated out for this update of the risk assessment provided in the Ramboll, 2020, Plot 9 First Street Manchester, Contaminated Land Interpretive Report, (Ref:1620002943-GCLIR-03).

3.2. Human Health Assessment

3.2.1. Methodology

Details of the UK framework for human health risk assessment and GAC are provided in Appendix B.

Contaminant concentrations below the adopted GAC are considered not to warrant further risk assessment. Where any concentrations are recorded above the GAC consideration of the contaminant distribution is undertaken.

Current UK guidance is provided in the DEFRA/EA CLR framework which sets out standard land uses for which GAC are derived for individual contaminants. A commercial /industrial land use scenario has been assumed as the reasonable worst-case scenario for the development proposed.

3.2.2. Soil Screening Analysis

The soil analysis results are presented in comparison to the GAC in Appendix C.

Alkaline conditions are recorded.

There are no exceedances of the GAC from all sets of ground investigation data. The only contaminant identified of potential concern for a commercial end use is asbestos.

Within Plot 9, 91 samples in total have been analysed for asbestos from between 2016 and 2020. Asbestos quantification data from the Cundall (2016) and Ramboll investigations (2017, 2019, 2020) is summarised in Table 3.1 below.

Table 3.1: Summary of all Asbestos Results

Location	Cundall (2016)	Ramboll (2017)	Ramboll (2019)	Ramboll (2020)	Total	total as %
Number of samples analysed	70	34	0	21	125	-
Number of detects at visual ID stage	40	2	0	3	45	-
Number of detects from quantification (>0.001% w/w)	11	1	0	2	14	11.2
Number above Hazardous Waste threshold of 0.1% w/w	2	0	0	1	3	2.4

NOTE: The Cundall 2016 data is labelled in such a way it is generally not possible to distinguish Plot 9 data only. Therefore, the sample numbers will include some from Plot 10.

The Cundall ground investigation identified 11 samples and the additional Ramboll investigations identified a further three samples with asbestos above the laboratory quantification limit of 0.001% w/w on Plot 9. In total three samples were identified to be above the hazardous waste threshold of 0.1% w/w, the greatest concentration was identified at 2.698% w/w.

The current data for Plot 9 suggests asbestos has been identified (above the laboratory quantification limit) at varying depths within the made ground and distributed across the site. Asbestos is often found in discrete areas e.g. in backfill to former building foundations. A localised area in the centre of Plot 9 has been identified as a potential asbestos hotspot with two samples (from previous investigation by Cundall in 2016 A0P6-7) noted as containing asbestos above 0.1% w/w. Data from the 2017, 2019 and recent 2020 Ramboll investigations identified asbestos in one out of total of 55 samples containing asbestos above hazardous waste threshold of 0.1% w/w. This sample was from TT1, located along the southern boundary of the site (see Appendix C for exceedance locations).

The made ground is deemed to be similar across the site. Therefore, it must be assumed that all made ground on site may be similarly impacted with asbestos at the low levels identified.

3.3. Waters Assessment

3.3.1. Methodology

Generic assessment criteria (GAC) for waters must be selected to assess potential risks to identified human health and environmental receptors.

The site is underlain by made ground overlying Glacial Deposits (Secondary A Aquifer) and Chester Pebble Beds (Principal Aquifer). There is sufficient water resource potential beneath the site that future resource potential for potable water must be considered.

There is an east – west trending surface watercourse located approximately 80m to the north of the site boundary. Potential risks to the surface water environment must also be considered.

The GAC used to assess the leaching and groundwater data are:

- Minimum reporting values for hazardous substances to identify any input of hazardous substances to groundwater.
- Resource Protection Values (RPV) to ensure protection of the potential water supply resource in both superficial and bedrock aquifers: Drinking Water Standards (DWS) for all substances; and
- Freshwater Environmental Quality Standards (EQS) - used to assess potential risks to the surface water environment.

3.3.2. Groundwater and Leachate Screening Analysis

For Plot 9 TerraConsult Ltd obtained groundwater samples from two wells (RP17 and RP20) and six soil samples were analysed for leachate.

The Cundall investigation in 2016 provided analysis of one leachate sample for Plot 9, however no ground water samples were analysed. The Ramboll 2017 investigation provided analysis of three leachate samples for Plot 9 with one groundwater sample analysed.

The chemical analysis screening summary tables are included in Appendix C using both Ramboll and Cundall data. Measured concentrations in leachate above the recommended GAC for the surface water environment are summarised in Table 3.2 and measured concentrations in leachate above the recommended GAC for drinking water and aquifer resource protection are summarised in Table 3.3 below. Measured concentrations in groundwater above GAC for surface water environment or aquifer resource protection are summarised in Table 3.4 below.

Table 3.2: Summary of Elevated Chemical Concentrations above EQS in Leachate

Determinant	GAC	Units	No. of Exceedances (out of 4 samples tested)	Maximum	Comments
Anthracene	0.1	µg/l	2	0.52	Impacts predominantly from targeted Ramboll investigation. Distributed across site made ground.
Fluoranthene	0.0063	µg/l	3	3	
Benzo(a)pyrene	0.0017	µg/l	3	2.5	
Benzo(b)fluoranthene	0.0017	µg/l	3	2.1	
Benzo(ghi)perylene	0.0017	µg/l	3	2.3	
Benzo(k)fluoranthene	0.0017	µg/l	3	1.6	
Indeno(123-cd)Pyrene	0.0017	µg/l	3	1.7	
Copper	1	µg/l	3	9.9	Minor exceedances. Conservative assessment assuming 100% bioavailability. Unlikely to be significant given concentrations and setting.
Zinc	10.9	µg/l	1	15	
Lead	1.2	µg/l	2	14	Impacts noted only in targeted Ramboll investigation. Minor impacts.
TPH(C10-C35)	0.01	µg/l	3	0.96	

Table 3.3: Summary of Elevated Chemical Concentrations above DWS in Leachate

Determinant	GAC	Units	No. of Exceedances (out of 20 samples tested)	Maximum	Comment
Benzo(a)pyrene	0.005	µg/l	2	2.5	Impacts predominantly from targeted Ramboll investigation. Distributed across site made ground.
Benzo(b)fluoranthene	0.075	µg/l	2	2.1	
Benzo(ghi)perylene	0.05	µg/l	2	2.3	
Benzo(k)fluoranthene	0.05	µg/l	2	1.6	
Indeno(123-cd)Pyrene	0.05	µg/l	2	1.7	
Lead	5	µg/l	1	14	Minor impacts in made ground
TPH (C10-C35)	0.09	µg/l	1	0.96	Minor impact in made ground

Table 3.4: Summary of Elevated Chemical Concentrations above EQS or DWS in Groundwater

Determinand	GAC	Units	No. of Exceedances	Maximum	Comment
EQS					
Fluoranthene	0.0063	µg/l	1	0.01	Measured at detection limit. Minor impact.
Nickel	4	µg/l	1	6	Worst case, assumption 100% bioavailable. Unlikely to be significant given concentrations and setting.
TPH (C10-C35)	0.01	mg/l	1	0.27	Minor impact to groundwater.
DWS					
Sulphate	250	mg/l	1	290	Trivial exceedance, no significant impact to groundwater.
TPH(C10-C35)	0.09	mg/l	1	0.27	Minor impact to groundwater.

Discussion

The pH across the site is alkaline. This is due to the made ground which includes significant concrete fragments which would raise the pH.

Risks to Surface Water Receptors

There are exceedances of the PAHs and TPH and certain metals above the EQS. Impacts are typically low concentrations, distributed throughout the made ground. Metals and PAHs were identified at very low concentrations in the groundwater samples analysed suggesting a minor impact.

The underlying aquifer has been impacted historically around the site from the Gaythorn Gas Works to the north and other industrial activities in the area. The River Medlock is culverted approximately 230m north of the site and unlikely to be in hydraulic connectivity

with the site. The impacts noted are not considered to pose a significant risk to the nearby surface water receptors.

Risks to Aquifer Resource and Drinking Water Receptors

There are exceedances of the PAHs and TPH and certain metals above the DWS. Impacts are typically low concentrations, distributed throughout the made ground. Metals and PAHs were not identified in the groundwater samples analysed. TPH was identified at low concentrations. This suggests there may be a minor ongoing impact to the underlying groundwater from leaching of contaminants from the made ground.

3.4. Summary

Localised impacts have been identified in soils and groundwater which required further consideration of the potential risks in the context of the site and proposed development. This is completed in the following chapters.

4. GROUND GAS RISK ASSESSMENT

4.1. Methodology

The gas regime at the site has been characterised using current UK guidance including BS 8485: 2015, CIRIA Report C665 (2007), and RSK/NHBC (2006).

Further details of the assessment methodology are provided in Appendix B.

4.2. Ground Gas Data

The ground investigation identified deep made ground and localised peat deposits which have the potential for gas generation.

Across Plots 9 and 10 (i.e. the area covered by the TerraConsult Factual Report) a total of eight wells were monitored, of which five are located within the Plot 9 boundary.

Six rounds of monitoring were completed by TerraConsult Limited which provide an appropriate number of rounds of monitoring for the proposed development (based on CIRIA C665 for a commercial end use with a low to moderate gas source potential). However, due to site conditions, RP20 was destroyed after two rounds of monitoring, WS103 was flooded for the final three rounds of monitoring and WS105 was inaccessible with a skip for the final four rounds. However, the remaining five wells were monitored on all six occasions.

Due to the proximity of Plots 9 and 10 and the similar ground conditions the monitoring data from both plots shall be considered together in order to provide a more comprehensive data set for the following risk assessment. This is also considered to provide a more robust dataset with the loss of certain wells during the monitoring period.

Across the six monitoring events, three rounds were undertaken with atmospheric pressures below 1000mb, with the three remaining rounds undertaken between 1002 and 1038mb. Of the six events, the TerraConsult Factual Report states three were undertaken during falling atmospheric pressure conditions.

Carbon dioxide (CO₂) and methane (CH₄) concentrations were below the 5% and 1% respective thresholds for CS1, with the exception of RP20 which recorded carbon dioxide at 9.3% and methane at 1.5% during the first monitoring visit.

4.3. Classification of Ground Gas Regime

Monitoring data summary for assessment is provided in Appendix D. The assessment presented in Table 4.1 below comprises a worst-case assessment using maximum methane and carbon dioxide concentrations and maximum flow rates.

Table 4.1: Worst Case Ground Gas Monitoring Record

Borehole Ref	Flow rate (l/hr)	CH ₄ Peak Gas Concentration (% v/v)	CO ₂ Peak Gas Concentration (% v/v)	GSV Worst case	Characteristic Situation (CIRIA C665)
Worst Case [RP20]	0.1	1.5	9.3	0.0093	CS1 Consideration to be given to elevate classification due to CH ₄ and CO ₂ concentrations.

Notes

- Peak flow and concentrations used for GSV calculation.

- Negative and zero flow rates are assumed to be at the detection limit of 0.1 l/hr for calculation of GSV, as per guidance in CIRIA C665.
- GSV threshold required to elevate the classification from CS1 to CS2 is 0.07 l/h.

4.4. Design of Gas Protection Measures

Plot 9 ground gas monitoring data has identified the site to be generally Characteristic Situation CS1 but with slightly elevated carbon dioxide and methane in one location which requires consideration of an increase to CS2. At this site, the basement design already covers the requirements of CS2 as discussed in more detail below thus no further additional gas protection is required above that already included in the basement design.

Gas protection requirements are provided in BS8485:2015. The proposed building is considered to be a Type C building (in accordance with the BS8485:2015). A Type C building would require 2.5 gas protection points to comply with requirements.

The basement design is understood to be in two parts:

- Car parking (~40% of the area). This area will be constructed with basement floor and walls conforming to BS 8102:2009, Grade 2 waterproofing which scores 2 points. This area will also be ventilated to deal with car exhaust fumes, designed to Buildings Regulations 2000, Approved Document F which scores 4 points. Total 6 points for design solutions.
- The remaining basement area (~60%) will be used for commercial office space, showers and bicycle parking. These areas will be constructed with basement floor and walls conforming to BS 8102:2009, Grade 3 waterproofing which scores 2.5 points.

The existing design is therefore considered suitable to protect for the worst case CS2 classification of the site. No further monitoring, assessment or mitigation design measures are required.

5. WATER SUPPLY PIPE MATERIAL ASSESSMENT

The assessment has been completed in accordance with the current UK Guidance for the Specification of Water Supply Pipes to be used in Brownfield Sites (UK Water Industry Research Ltd. UKWIR, 2014).

This guidance provides threshold concentrations for different pipe material for various chemical groups.

The pipeline materials considered by the guidance are PE, PVC, wrapped steel, wrapped ductile iron or copper pipe and barrier pipe. PE and PVC are assessed using threshold concentrations for various chemical groups including volatile organic compounds (VOC) with tentatively identified compounds (TICs), semi-volatile organic compounds (SVOC) with TICs, and mineral oils. Wrapped steel, wrapped ductile iron and copper pipe are assessed using corrosive properties.

Table 5.1 summarises the relevant analytical results compared to pipeline threshold concentrations.

Table 5.1: Soil data compared to pipeline threshold concentrations

Test Group	Testing Required?	PE Threshold mg/kg	Maximum measured concentration	Metal Pipes/ Barrier Pipe
Total VOCs	Where Preliminary Risk Assessment (PRA) has identified land potentially affected by contamination	0.5	-	Pass
Total BTEX & MTBE		0.1	<0.01	Pass
Total SVOCs (excluding PAHs and those substances marked with an *)		2	-	Pass
EC5-EC10 aliphatic and aromatic hydrocarbons		2	<0.1	Pass
EC10-EC16 aliphatic and aromatic hydrocarbons		10	96	Fail
EC16-EC40 aliphatic and aromatic hydrocarbons		500	5300	Fail
Phenols* (from SVOC analysis) ^[2]		2	1.2	Pass
Cresols and chlorinated phenols* (from SVOC analysis) ^[3]		2	-	Pass
Ethers*	Only where identified	0.5	-	Pass
Nitrobenzene*		0.5	-	Pass
Ketones*		0.5	-	Pass
Aldehydes*		0.5	-	Pass
Amines		Fail	-	Pass
Corrosive	Conductivity, Redox and pH	Pass	pH 5.8-10	See Note ^[1]

Notes:

'Total' concentrations calculated as the sum of all concentrations above laboratory detection limit.

^[1] Threshold: For wrapped steel, corrosive if pH<7 and conductivity > 400!S/cm. For wrapped ductile iron corrosive if pH<5, Eh not neutral and conductivity > 400uS/cm. For copper, corrosive if pH<5 or >8 and Eh positive.

^[2] Phenols: Group 2e as specified in UK WIR, 2010: sum of butyl phenol, dichlorophenols, dimethyl phenol, ethyl phenol, pentachlorophenol, phenols, trichlorophenols

^[3] Cresols: 2-, 3-, and 4- methylphenols

Highlighted where concentrations exceed the threshold for PE.

Elevated hydrocarbons C10-C16 were identified in nine different locations. Made ground is similar across the site thus it is likely these results reflect typical made ground.

In light of these results, it is likely that barrier pipe will be required for any water supply pipes at this site; however, due to the extensive basement excavations as part of the development, there is potential for the source material to be removed.

If it is considered preferable to try and reduce the specification of the water pipes to PE instead of barrier pipe, a further review could be completed once the final position of the water supply pipes is determined and after made ground removal, with additional sampling, analysis, assessment and consultation with the regulatory authority.

6. GROUND CONTAMINATION – RISK EVALUATION

6.1. Conceptual Site Model

The information presented in the previous sections of this report have been collated and evaluated to refine the initial conceptual site model for the site.

6.1.1. Sources

The potential contamination sources are summarised in Table 6.1 based on the site investigation results.

Table 6.1: Potential Sources

Source	Comments
Soil impact	Potential risks to human health - Asbestos identified above the laboratory quantification limit of <0.001% in 14 locations across site. Potential for further impacts in made ground. Elevated concentrations of hydrocarbons may pose a risk to buried water pipes.
Ground gas impacts	There is a potential for ground gas generation and subsequent vapour migration and risks to future site users in particular within buildings. The results from the ground gas monitoring identified slightly elevated carbon dioxide and methane indicative of Characteristic Situation 2 for new buildings.
Groundwater impacts	Hydrocarbons and metals have been identified at slightly elevated concentrations which may pose a risk to surface water receptors and drinking water/water resources.

Alkaline pH was noted but is not considered further in this section. This has been considered within the geotechnical assessment.

6.1.2. Receptors

The site-specific receptors that could potentially be affected by the contamination hazards are summarised in Table 6.2.

Table 6.2: Potential Receptors

Feature	Details
ON SITE	
Future site users	Proposed use: Ground plus 10 storey commercial tower block with basement
Construction workers	Any workers coming in contact with the ground or confined space in which gases may build up.
Underlying aquifer	Bedrock Sandstone aquifer classified as Principal Aquifer.
Construction materials	Buildings materials used below ground, e.g. foundations and services.
Flora/fauna	Soft landscaping will be very limited, based on current development proposals. Any planting assumed to be within e.g. tree boxes with imported topsoils.
OFF SITE	
Neighbouring properties	Neighbouring properties are commercial and residential.
Adjacent Water Courses	River Medway culverted approximately 230m north of the site.

6.1.3. Pathways

In order for the contaminants identified to reach potential receptors, there has to be a viable pathway for the contaminant. Potential pathways were identified within the preliminary conceptual model and are discussed further in Table 6.3 below in relation to the identified source impacts and receptors identified.

Table 6.3: Potential Pathways

Receptor	Pathway	Comments
Human health, fauna	Direct contact with contaminated soils	This will be very limited following development as hard cover is proposed across the majority of the site. Direct contact is more significant issue for construction workers.
Human health and fauna	Inhalation of dusts and vapours	Inhalation of dusts will be very limited following development as hard cover is proposed across the majority of the site. Organic material and hydrocarbon impacts identified in soils and groundwater have the potential to give off ground gases which have the potential to migrate and build up in particular in buildings and confined spaces. There is also the risk to offsite users from asbestos fibres generated during construction which may migrate offsite.
Flora	Direct contact with impacted soils and root uptake	This will be very limited following development as hard cover is proposed across the majority of the site.
Water environment	Leaching and vertical migration of soil impacts to groundwater	Potential for leaching will be limited after development due to the high percentage of the site to be covered with hardstanding. No significant amounts of water were identified within the wells installed within the made ground.
Water environment	Migration of contaminants via groundwater to surface water courses and underlying aquifer	No shallow groundwater was identified during the site investigation, thus there is unlikely to be a pathway via which contaminants may enter the culverted River Medway. Groundwater depths within the made ground were typically around 27.45 – 28.350 m AOD (approx. 3.3-4.8 m bgl). Groundwater within the deeper boreholes in the sandstone recorded levels of 26.7-31.1 m AOD (approx. 4.4-9.1 m bgl). Any infiltration of rainwater and subsequent leachate generated will ultimately reach the sandstone aquifer at depth. The predominantly low permeability of the made ground will slow any such movement.
Buildings and structures	Damage to building materials or services through direct contact with contaminants or through contaminant migration	Hydrocarbons have been identified in the soil and groundwater which may affect subsurface construction materials and in particular water supply pipes. The high pH should be considered in relation to subsurface materials.

6.2. Qualitative Risk Assessment

Potential pollutant linkages are identified using the source-pathway-receptor framework detailed above. An assessment of the potential significance of each linkage is then made by consideration of the likely magnitude and mobility of the source, the sensitivity of the receptor and nature of the migration/exposure pathways.

This qualitative hazard assessment has been undertaken in accordance with NHBC and Environment Agency, 2008. Further details of which are provided in Appendix B including definition of risk categories.

Table 6.4 summarises the pollutant linkages and risk ratings associated with the proposed development.

Table 6.4: Risk Assessment

Hazard / Pollutant	Pathway	Receptor	Potential Severity	Probability of Risk	Level of Risk	Remedial Actions Required
Hydrocarbons in soils	Direct contact	Water supply pipes	Medium	Likely	MODERATE. Impacts are above the water supply pipe thresholds for PE pipes.	Barrier pipe is recommended.
Asbestos in shallow soils	Inhalation	Future Site users	Severe	Unlikely	LOW/MODERATE. Site is to be predominantly hard standing, soft landscaped areas to have cover system in place. Very limited potential for direct contact with impacted soils.	Risk management measures required to address potential risks to human health (construction workers and off site receptors) during construction.
		Neighbouring residents	Severe	Unlikely	LOW/MODERATE. During construction there is a potential risk of offsite migration of windblown fibres. Precautions to be taken during site works	Development to include predominantly hardstanding which will break any pathway between future site users and impacted soils.
		Construction workers	Severe	Low	MODERATE*. Appropriate on-site health and safety measures to be taken.	Material management strategy required to ensure appropriate use/reuse of soils.
Ground gas	Inhalation	Future Site users	Medium	Likely	MODERATE. Ground gas protection measures required to Characteristic Situation 2.	Development design currently incorporates sufficient measures to mitigate risks. Measures to be detailed in the remedial strategy.
Leachable impacts of PAHs and metals	Leaching and migration	River Medlock	Medium	Unlikely	LOW. Residual impacts identified in groundwater and leachate indicating potential for further leachable contaminant source. However, groundwater was only identified within the sandstone bedrock and rose to within the depth of made ground when monitored. The made ground appears to be underlain by low permeability clay which provides some protection to the underlying sandstone aquifer. The development will comprise impermeable hard standing over the majority of the site thus significantly reducing leaching potential further from the unsaturated soils.	Due to the basement excavations the majority of the made ground will be excavated and taken offsite reducing the source. Therefore, limits any potential leaching and migration. No remedial measures required.
		Principal Aquifer	Medium	Unlikely	LOW. As above. There may however, be a potential risk of piling affecting risks to the aquifer. Further consideration of this should be undertaken e.g. in a piling risk assessment.	Piling risk assessment to be completed by the piling contractor once details of foundations are known.

Notes

Should the development proposals alter significantly a review of this risk assessment may be required. In particular if wider or new areas of landscaping / open areas are planned.

* Given the use of appropriate PPE and on-site health and safety precautions, risk to site development workers would be reduced to low.

6.3. Ground Contamination Risk Assessment Conclusions

The potential pollutant linkages and further actions listed in Table 6.4 form the basis of the remedial strategy requirements.

The proposed development may also introduce new pollutant linkages which must be assessed and addressed within the remedial strategy.

The following sections detail the proposed development plans, the remedial strategy to mitigate ground contamination risks and verification plan to ensure a safe development.

7. DEVELOPMENT PROPOSALS AND REMEDIAL DESIGN STATEMENT

7.1. Proposed Development

The development of Plot 9 currently proposed comprises a ground plus 10-storey commercial development with limited soft landscaping and with a single storey basement. The proposed depth of basement (i.e. underside of basement slab) level is approximately 26.65 m AOD.

7.2. Ground Contamination Risks From Proposed Development

There are a number of design elements that will affect the current ground conditions and thus may have a potentially significant effect on ground contamination risks at the site. These are summarised in Table 7.1.

Table 7.1: Design Details

Design Feature	Development Details	Implication for Ground Contamination Risks
Earthworks Cut and fill	Full details not known at the time of writing. However, a basement is it to be excavated which covers the majority of Plot 9.	Strategy for material management required to address reuse of materials under the CL:AIRE Code of Practice and ensure appropriate waste management procedures adopted for materials surplus to requirements.
Drainage	All surface water drainage will discharge to public sewerage network. There are understood to be no soakaways intended as part of the development scheme.	No additional associated risks to the water environment. Soil arisings from any new excavation to be managed under a material management strategy.
Potable water supply pipes	The finalised new potable water supply pipe route is not known at the time of writing.	Due to the presence of organic compounds in Made Ground soils, it is recommended that barrier pipe be used for potable water supply pipes. Additional soil sampling and analysis may be required along the route of any proposed potable water supply with subsequent assessment in accordance with current guidance. Consultation with the Water Authority as to the type of water pipe to be used and verification plan required. Soil arisings from any new excavation to be managed under a material management strategy.
Foundations	Current foundation solution includes CFA piles to the bedrock which is likely to be between 4 and 6m bgl	Given the geology identified and the type of piling selected, the piles are considered unlikely to pose an additional risk to controlled waters. Hard standing across the site will also aid mitigation of any such potential risks. Pile arisings to be managed under a material management strategy. A piling risk assessment will be required from the contractor to demonstrate no additional risks to the water environment.
Landscaping	No significant areas of planned soft landscaping. Potential for minor areas of tree pits and scrub planting.	Any imported topsoil will need to conform to BS3882:2015 for Topsoil and also the suitability for use criteria for Human Health for the proposed end use.

7.3. Remedial Design Statement

Remedial mitigation measures have been identified based on the potentially significant pollutant linkages identified in the Ramboll CLIR (summarised in Table 6.4 above) and additional specific implications of the proposed development (summarised in Table 7.1).

The following are to be incorporated into the development design and construction to allow for the safe development of the site.

- Requirement for barrier pipe for any potable water supply pipes;

- Protection of future site users from contact with asbestos fibres in areas of soft landscaping;
- Mitigation of risks to construction workers and general public from asbestos during construction works;
- Ground gas protection measures to comply with Characteristic Situation 2;
- Re-use of site won material under the CL:AIRE Waste Code of Practice Protocol;
- Procedures for dealing with previously unidentified contamination; and
- Validation Works: Verification during works and a final validation report will be required on completion of ground works to confirm that all actions required in this report have been completed appropriately for safe development.

Specific elements of the remedial strategy are presented in the following chapters to include the above considerations.

A verification plan is also presented which will inform the principal contractor as to the data requirements for preparation of a Verification report on completion of ground works.

8. REMEDIAL STRATEGY SPECIFIC REQUIREMENTS

8.1. Cut and Fill Earthworks

All material management should be carried out under the CL:AIRE Waste Code of Practice (WCoP) to ensure appropriate material management procedures are adopted for materials reused on site. A separate CL:AIRE CoP Material Management Plan (MMP) will be required with the associated 'declaration' made by a Qualified Person as defined by CL:AIRE WCoP.

This development will result in a significant surplus of material but will also include some reuse of materials following excavation.

Excavated soils should be stockpiled according to material types to avoid mixing of different waste streams. Stockpiled soils are to be sampled for chemical testing and assessment for suitability for re-use and/or waste classification (further details in the sections below).

Should excavations reveal soils which are identified as potentially contaminated through visual indicators such as black staining or olfactory indicators such as strong hydrocarbon odours, the materials should be stockpiled separately from other excavated materials free of visual or olfactory contamination. Similarly, visual evidence of asbestos containing materials should be considered separately (see section on management of asbestos below).

The Contractor should take all practicable measures to ensure water does not enter excavations. In the event of water entering excavations the Contractor should take suitable measures to ensure it does not become contaminated. Any water entering excavations must be disposed of in a suitable manner.

8.1.1. Management of Asbestos Containing Soils

Some asbestos containing materials were identified within the made ground soils. There is also a potential for further discrete impacts of asbestos which may be encountered during the significant volume of excavation to be completed at this site.

Under the Control of Asbestos Regulations 2012, the production of a 'Plan of Work' or an Asbestos Management Plan (AMP) is required for all works dealing with asbestos.

An AMP can be a standalone document or could be included within the material management plan and should detail the specific asbestos control measures used to facilitate safe systems of work to ensure the safety of construction workers, local residents and the surrounding environment.

An AMP should be produced in conjunction with the Principal Contractor who is required to produce specific construction related risk assessments and protocol statements in relation to work with asbestos impacted soils.

Details of the AMP would further link to the MMP relating to the reuse or offsite disposal of site won soils.

The AMP should contain *inter alia*:

- Details of types, quantities and state of degradation of asbestos contained onsite;
- Assessment of intended site activities and if they consist of licenced or non-licensed asbestos works;
- Details of all stakeholders, role and responsibilities and a communication protocol;
- Details of the working methodologies and asbestos working controls; and
- Details of asbestos waste management.

During the construction phase, onsite verification of the implementation of the control measures is required the details of which should be reported within a site Environmental Verification report.

8.1.2. Reuse of site won materials

It is intended that soil is re-used on site using the procedures outlined in the CL:AIRE Waste Code of Practice.

There is to be a net surplus of material, thus there is likely to be only minimal reuse of material.

Site won made ground is considered chemically suitable for use beneath hardstanding, engineered site surfacings or below 450mm where there is no direct contact pathway via which future site users may be affected by asbestos impacts.

Made ground soils intended for re-use beneath areas of hardstanding will require no additional testing where visual or olfactory evidence of contamination is absent.

Any materials with significant visual/olfactory evidence of contamination should be managed in accordance with the procedures for unexpected contamination detailed below.

8.1.3. Waste Management

A waste classification summary from previous reports is provided in Appendix E with hazwasteonline classification output also included as Appendix F. A summary of waste classifications is provided in Table 8.1 below.

Table 8.1: Waste classification summary

Strata	Waste classification	Notes
Made Ground Granular (hardstanding materials)	Non-hazardous.	Allowance for localised asbestos impacts which would be classified as hazardous
Made Ground Black Ashy Material	Non-hazardous.	Allowance for localised asbestos impacts which would be classified as hazardous.
Made Ground Cohesive Mixed	Non-hazardous.	Potential for localised pockets of asbestos containing materials (ACMs) in deeper made ground in foundation backfill. Hand picking of asbestos should allow the quantities of materials classified as hazardous to be minimised. Likely to be suitable for disposal as inert, confirmation would be required from landfill operator. Further notes in Appendix F.
Possible Made Ground / reworked glacial clays	Non-hazardous.	Likely to be suitable for disposal as inert, confirmation would be required from landfill operator. Further notes in Appendix F.
Glaciofluvial	Non-hazardous.	
Alluvium	Non-hazardous.	Organic content makes it unlikely this will pass inert WAC.
Sandstone	Non-hazardous.	Inert

The proposed development layout includes a net surplus of material due to the excavation of the basement.

For any material which is to be taken off site, the Contractor shall comply with all applicable Waste Management and Duty of Care Regulations when removing material off site.

All stockpiles should be sampled and analysed for waste classification. Materials which are potentially hazardous will require WAC analysis to determine the class of landfill and any potential requirements for pre-treatment prior to disposal.

The following documentation must be completed and held on site for the removal of waste:

- Waste Transfer Notes (Controlled Waste) including EWC classification,
- Consignment Notes (Hazardous Waste).

The Transfer Note must include a description and the quantity of the waste and details of the waste collection contractor who must be licensed. Copies of the waste carrier registration shall be held on site. Sufficient information shall be provided to ensure that the waste disposal operator is aware of the potential hazards of the substance.

The Contractor must ensure that the waste is taken to an appropriately licensed facility.

8.2. Clean Capping and Imported Materials

In soft landscaped areas, a minimum 450mm thickness of clean imported material is required to provide a planting medium and reduce potential for exposure to asbestos impacted subsoil. This cover layer should be separated from the underlying Made Ground using a marker layer.

For materials intended to be imported onto site and used as part of the development, consideration should be given to the following:

- Any material imported to the site shall be analysed geotechnically and chemically to ensure it is suitable for use. Chemical suitability for use shall be considered for soils intended for use at shallow depth. This should be undertaken prior to bringing any such material onto the site. All records must be kept and included within the verification report.
- All materials imported for use in soft landscaped open space shall be free from man-made ameliorants and also conform to the specific requirements of the Landscape Architect.
- In all areas topsoil is imported, certificates shall be provided to demonstrate the material is suitable for use with reference to the British Standard for Topsoil (BS3882:2015).
- It will be necessary to ensure imported materials do not exceed the relevant assessment criteria provided in Appendix G.
- If the imported material is to be from a brownfield source, the material shall be tested at a minimum frequency of 1 per 150m³ or at least three samples for each source whichever is the greatest as per the Manchester City Council Guidance included within Appendix H.
- Onsite testing is required to validate the suitability for use and to verify the thickness of clean cap emplaced in soft landscaped areas. The frequency of testing will be 1 sample per 150m³ or at least three samples for each source whichever is the greatest as per the Manchester City Council Guidance included within Appendix H.
- Virgin quarried material will need to be tested at a frequency of two samples per source when intended for use at shallow depth.
- Care must be taken to confirm the source of all aggregates being imported onto the site. Inert material or soils may be classed as waste, depending on their source. The producer of aggregate must show the material has been fully recovered and is no longer a waste. To do this the producer must follow the quality protocol for the production of aggregate from inert waste, as outlined by WRAP. All documentation will need to be included within the verification report.
- All chemical testing shall be undertaken at an appropriately accredited laboratory (UKAS and MCERTs).
- The use of chemical testing results provided solely by the supplier to determine suitability would not be considered acceptable.

- If chemical test results exceed the assessment criteria then the frequency of testing shall be increased as required to determine the reasons for the exceedances and confirm that the materials are suitable for use or an alternative source used.
- Documentation on the source, quantity and testing results shall be retained onsite for inspection and subsequent inclusion in the verification report.

The Contractor shall retain records on the location, depth of excavations and how/where any imported material is placed. The Contractor shall supply compliance reports for validation reporting.

8.3. Areas of Unexpected Contamination

Any material encountered during enabling works that shows visual and/or olfactory evidence of potentially significant contamination should be assessed by the project Environmental Consultant (Ramboll) to determine potential for re-use.

Segregated stockpiles of suspected contaminated arisings should be tested at a frequency of 1 sample per 100m³ with a minimum of three samples per stockpile. Each sample should comprise of four sub samples collected at random from the stockpile and bulked. Samples should be kept in accordance with the requirements for MCERTS accreditation and testing should be undertaken by a UKAS accredited facility.

Soil samples should be analysed for the suspected contaminants of concern in consultation with the project Environmental Consultant. Additional samples should be taken from the walls and base of any additional excavation deemed necessary to remove significant contamination in order to demonstrate that the material remaining in-situ is chemically suitable for use. A sufficient number of samples should be taken under the guidance of the project Environmental Consultant to ensure a representative spread of data is available for the material types present remaining within the excavation.

In order to reuse the soil on site it will need to be demonstrated that the soil adheres to the chemical reuse criteria presented in Appendix G. Should material fail the chemical specification, then the project Environmental Consultant (Ramboll) should be consulted immediately to assess the material further and recommend appropriate risk management measures.

It will be necessary to retain all records relating to testing, quantity, depth and location of the material identified. Where such material is re-used, it will be necessary to retain records on where this material was placed and depth it was placed.

If this material is removed off-site, then in addition to records on the source area outlined above, it will also be necessary to retain records relating to waste transfer notes, quantities and the receiving site (see waste management section).

The Contractor shall be required to provide a method statement describing how any areas of unexpected contamination encountered will be addressed during the earthworks. This is likely to include:

- The Contractor stopping work in that area and immediately informing the project Environmental Consultant to discuss the proposed action;
- Sample the unexpected contamination to assess the nature of the material;
- No works to commence in the area of unexpected contamination until the contamination has been identified and proposed method of excavating, placing elsewhere onsite during the works, or possible export offsite is understood;
- It may be necessary to place the impacted material in a bunded area of the site whilst the information on the material is gathered; and
- Inform the Local Authority and agree proposals for dealing with the impacted material as appropriate.

8.4. Piling Risk Assessment

Once the final piling solution is confirmed, a piling risk assessment will be required to ensure there is no significant risk to the underlying aquifer resource or human health receptors. This will need to be agreed with the regulator prior to piling works commencing.

8.5. Ground Gas Mitigation

Gas protection to Characteristic Situation 2 are required at this site. Requirements are provided in BS8485:2015.

The proposed building is considered to be a Type C building (in accordance with the BS8485:2015). A Type C building would require 2.5 gas protection points to comply with requirements.

The basement design is understood to be in two parts:

- Car parking (~40% of the area). This area will be constructed with basement floor and walls conforming to BS 8102:2009, Grade 2 waterproofing which scores 2 points. This area will also be ventilated to deal with car exhaust fumes, designed to Buildings Regulations 2000, Approved Document F which scores 4 points. Total 6 points for design solutions.
- The remaining basement area (~60%) will be used for commercial office space, showers and bicycle parking. These areas will be constructed with basement floor and walls conforming to BS 8102:2009, Grade 3 waterproofing which scores 2.5 points.

The existing design is considered suitable to protect for the worst case CS2 classification of the site. No further monitoring, assessment or mitigation design measures are considered necessary.

All ground gas protection measures incorporated into the design of the building will need to be documented onsite by the Contractor. Photographic evidence of the general installation, taping and sealing of the membrane will be required to provide sufficient information for Ramboll to complete the Verification Report upon completion of the construction works. The installation and integrity testing report for the membrane will be required from the Contractor to form part of the validation report.

8.6. Buried Plastic Water Pipes

Protection measures are considered necessary for buried plastic drinking water pipes due to the elevated concentrations of hydrocarbons in shallow Made Ground.

The measures typically comprise the introduction of a suitable backfill material into service trenches and/or upgrading water pipes to a proprietary material such as "Protectaline".

Given the history of this site and surroundings, barrier pipe is recommended at this site. Correspondence should be undertaken with the local water authority to determine the extent of additional sampling required, if any.

9. VERIFICATION PLAN

The remedial works required to ensure a safe development must be documented and a verification report prepared following the completion of all ground works to demonstrate compliance with this remedial strategy.

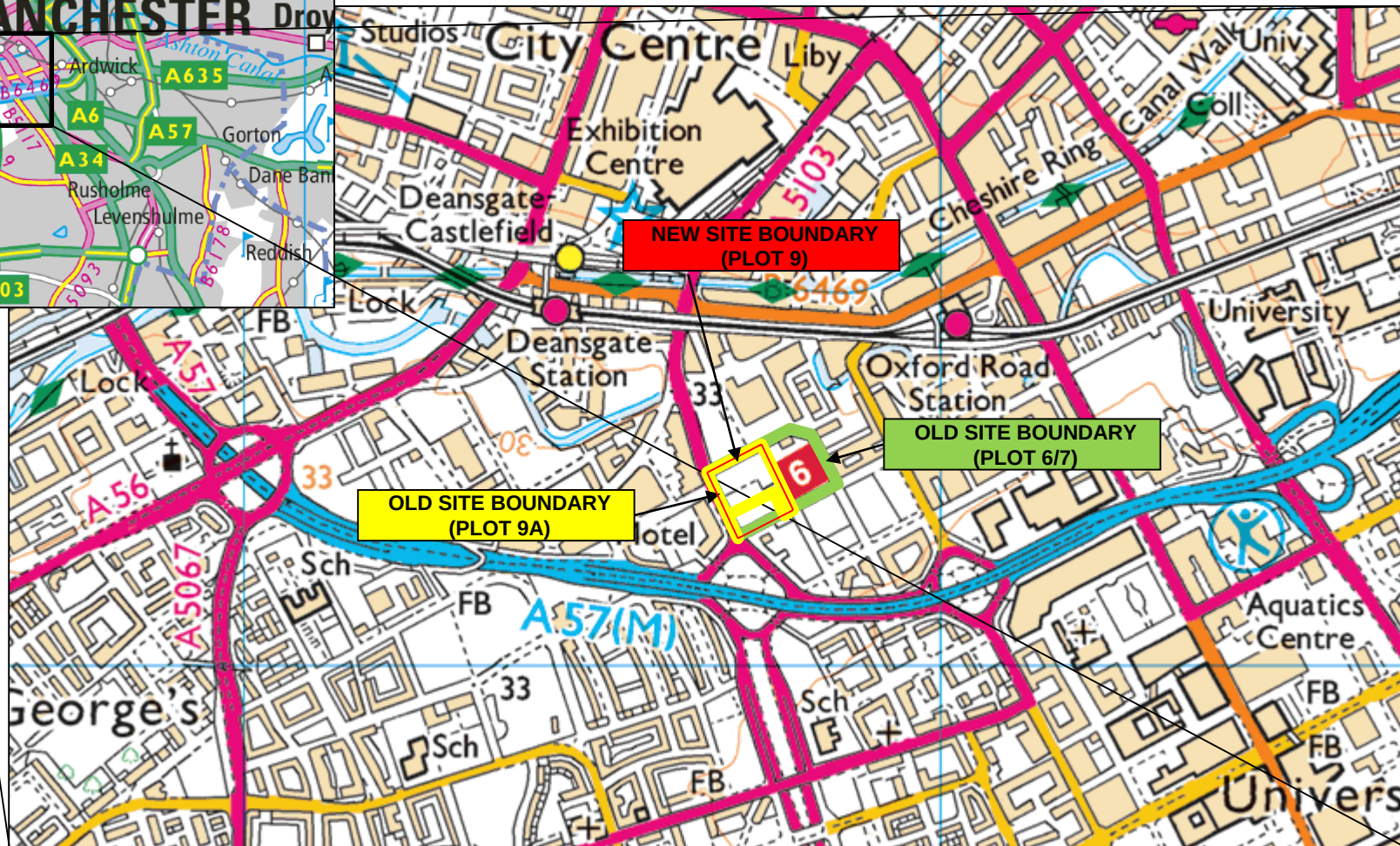
Table 9.1 provides a detailed verification plan to be followed during works.

The Contractor will be responsible for keeping and providing the appropriate records. A part time watching brief by the project Environmental Consultant comprising site visits during key aspects of the remedial works should be completed. An independent verification report would then be prepared following completion of the ground works to provide details of works as witnessed and verification of required documentation provided by the Contractor.

Table 9.1 Verification Plan

Item	Potential Risk	Risk Mitigation	Method of Validation
V1	Asbestos fibres in made ground – risk to construction workers and neighbouring residents during construction	Minimise risk of any asbestos fibres being released during construction and ensure H&S precautions are in place.	Contractor to provide copy of AMP. Details of induction presentation which shows asbestos risks, the PPE used and face fit certificates for respirators if required. Plans of where asbestos was found. Chemical testing certificates for any asbestos found. Details of any site specific measures taken e.g. dampening down methods such as spraying and wheel washing of vehicles on exit from site. Details of any hand picking of asbestos or other measures to segregate asbestos impacted waste streams.
V2	Asbestos in soils – risks to future site users	Remove direct contact pathway through provision of a clean soil cover to soft landscaped areas.	Confirmation that site won soils are all below specified depths in landscaped areas or below hardstanding, including photograph evidence of cover layers.
V3	Ingress of gas to proposed development buildings	Gas protection measures, as specified in Section 8.	Records of the credentials of the approved installer for the gas remediation measures. Records of the gas protection measures installation process, including photographs. Independent inspection / validation of the installed gas protection measures.
V4	Tainting of potable water supply	Barrier pipe.	Email confirmation from United Utilities that they are satisfied with pipe assessment and specification. Photographic evidence of the installation and material used. Chemical analysis for the trench backfill. Plan of where the potable water pipes are located including depths.
V5	Introduction of contamination from soils imported to the site	Checks made to ensure soils brought to site are suitable for use based on the acceptance criteria in Appendix G. Imported soils must be accompanied by chemical testing data. Imported soils should not contravene waste legislation.	Where materials imported to the site could be considered a 'waste', details to demonstrate that the material is not a 'waste' or that waste legislation has been complied with. Details of source of imported material and, where necessary, chemical testing certificates to demonstrate suitability for use against criteria in Appendix G. Volumes of imported material. Plans of where it was temporarily stored, and where it was finally placed, including thickness. For imported topsoil, certificates required to demonstrate it complied with BS3882:2015 and does not exceed the re-use criteria in Appendix G.

Item	Potential Risk	Risk Mitigation	Method of Validation
V6	Reuse of soils	Strategy for reuse of soils on site.	Details of where the material was excavated from onsite, including volumes. Where material was placed, thickness of material placed, temporarily and permanently. Details of capping of the material in soft landscaping areas. Adherence to the MCC capping guidance for minimum 450mm clean topsoil in landscaped areas. Details of site working methods, including how stockpiles have been managed.
V7	Contamination being identified which was not anticipated	Dealing with unexpected contamination appropriately and under liaison with the project Environmental Consultant. Dealt with in accordance with the Environmental Specification and Remediation Strategy.	Records relating to any unexpected contamination identified and actions taken to address this, together with regulator liaison where necessary.
V8	Piling activities introducing preferential pathways for contaminant migration	Piling Risk assessment to be provided by contractor and agreed with regulator.	Details of piling risk assessment and regulatory agreement to be provided. Any change in methodologies during site works to be reviewed and documented appropriately to demonstrate risk minimisation.



1 Broad Gate, Leeds, LS1 8EQ
leeds@ramboll.co.uk
T: 0113 204 2880

Project: **Plot 9, First Street, Manchester**

Title: **Site Location Plan**

Status:

Description:

Date **19.11.2019**

Scale: NTS

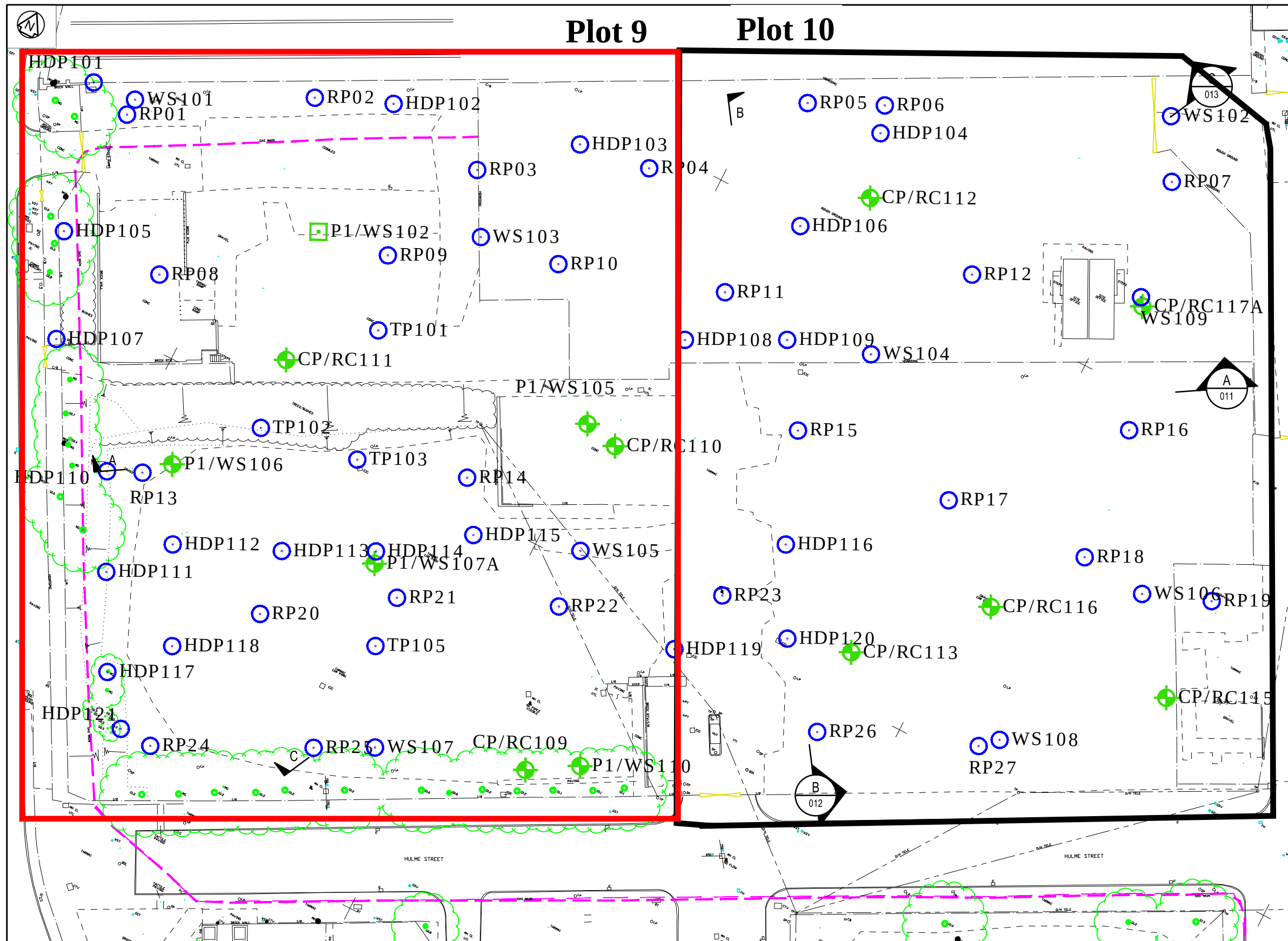
Date: **19.11.2019**

Drawn: **CC**

Checked: **HC**

Figure No: 1

Rev:



- NOTES:
- THIS DRAWING IS TO BE READ IN CONJUNCTION WITH ALL RELEVANT ENGINEERS DRAWINGS AND SPECIFICATIONS.
- EXPLORATORY HOLE KEY
- TERRACONSULT LTD ROTARY PROBE HOLES. & WINDOW SAMPLES - 2017
 - CUNDALL ROTARY BOREHOLES & WINDOW SAMPLES - 2016
- SERVICES KEY
- GAS MAIN

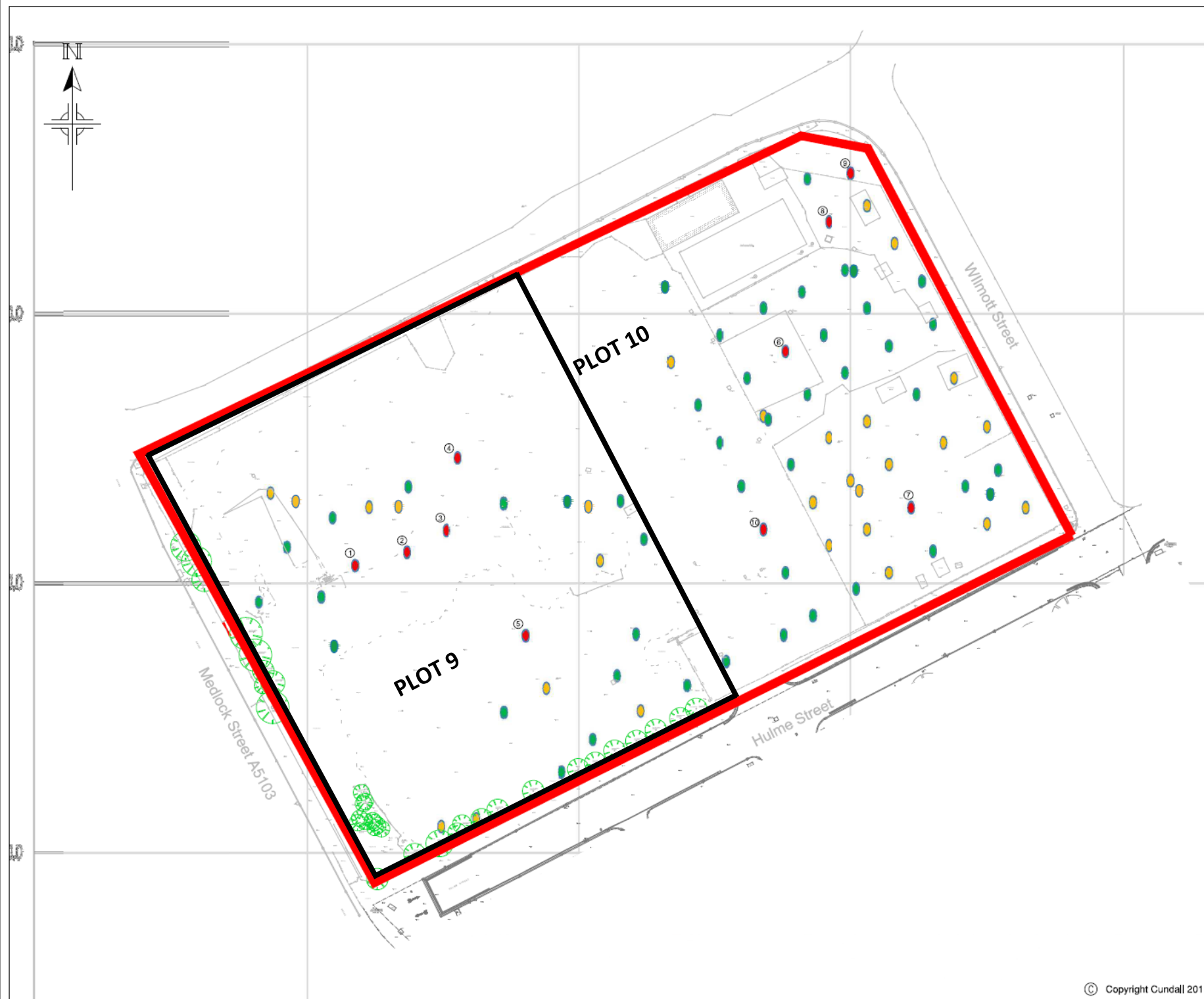


PLOT 6/7 FIRST STREET MANCHESTER

BOREHOLE HOLE LOCATION PLAN

SHEET 1 OF 4

I01	FOR INFORMATION	26/01 2018	SH MF	IB
Rev	Description	Date	By Chk	App
FOR INFORMATION				
Project No:	Scale (@A3):	Drawn:	Date:	
1620002943	1:500	SKH	JAN.18	
Drawing No:	Rev:			
RAM-XX-XX-DR-GE-010	I03			



1011906

A3

DO NOT SCALE FROM THIS DRAWING

Notes

Legend

- Not Detected
- Detected but < 0.001% Mass by Volume
- > 0.001% Mass by Volume
- ① AOP&7D4 Amosite & Crocidolite at 0.75m 2.698%
- ② AOP&7D4 Chrysotile at 0.66m 0.005%
- ③ AOP&7E4 Chrysotile at 0.5m 0.005%
- ④ AOP&7F3 Chrysotile at 0.4m 0.003%
- ⑤ AOP&7E6 Chrysotile at 0.75m 0.004%
- ⑥ AOP&7L4 Chrysotile & Amosite at 0.5m 0.004%
- ⑦ AOP&7M8 Chrysotile at 0.5m 0.001%
- ⑧ AOP&7N2 Chrysotile & Crocidolite at 0.8m 0.005%
- ⑨ AOP&7O1 Chrysotile, Amosite & Crocidolite at 1.0m 0.677%
- ⑩ AOP-7J7 Chrysotile at 0.5m 0.001%
- Site Boundary

Issue	Date	Description	By	Chkd	Verd
-------	------	-------------	----	------	------

Project
First Street: Plots 6 and 7

Client
Ask Property Developments Ltd
Architect
RTKL

Title
Asbestos Exceedances

Drawing No.
1011906.DWG.GL.021

Drawing Status
Final

Job No.
1011906

Scale
1:500 @ A3

Originator	Checked	Verified	Issue
SD	DM	KDM	-

CUNDALL

4th Floor Partnership House
Regent Farm Road, Gosforth
Newcastle-upon-Tyne
NE3 3AF
Telephone +44 (0)191 213 1515
Website: www.cundall.com

N

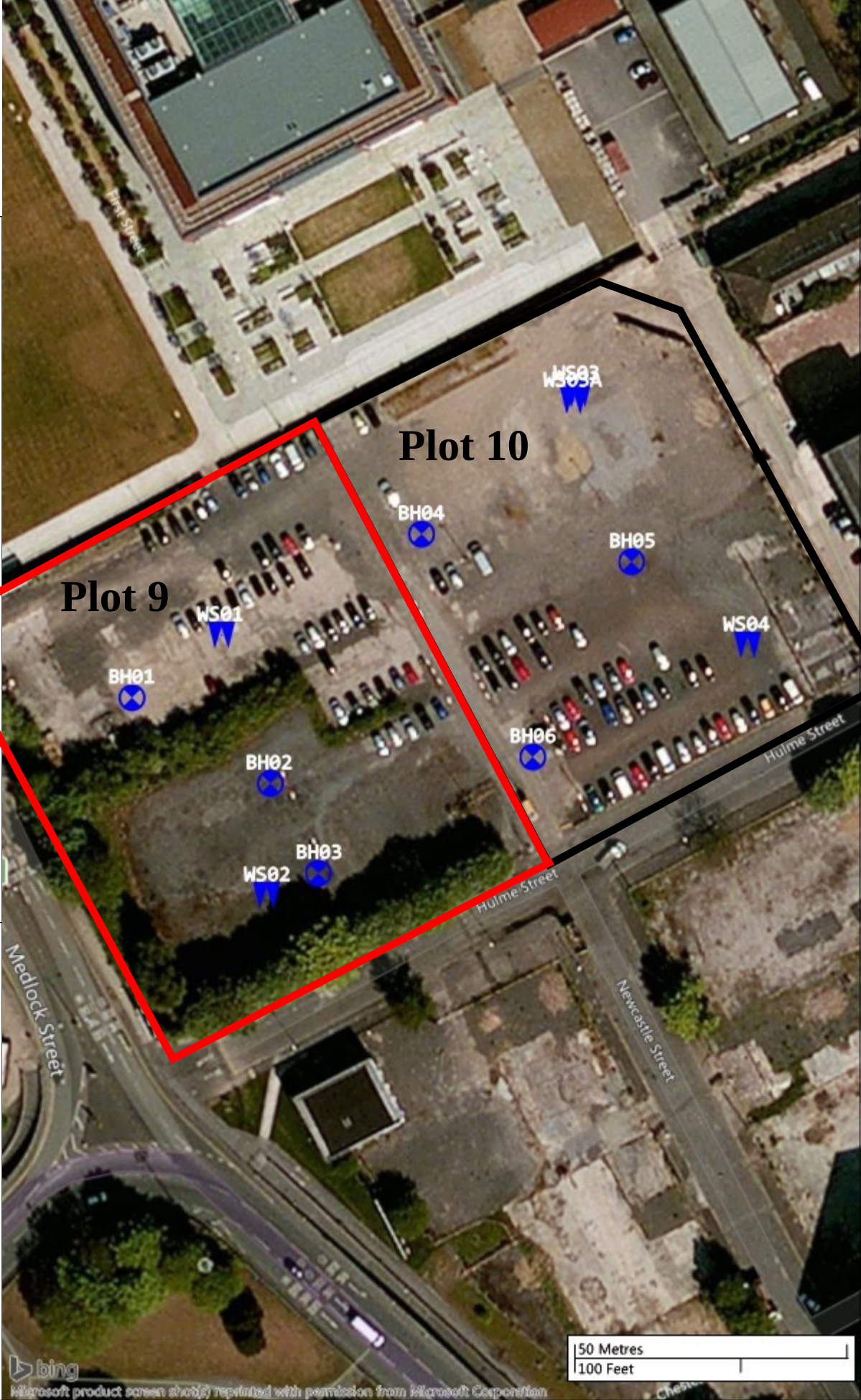
Legend Key

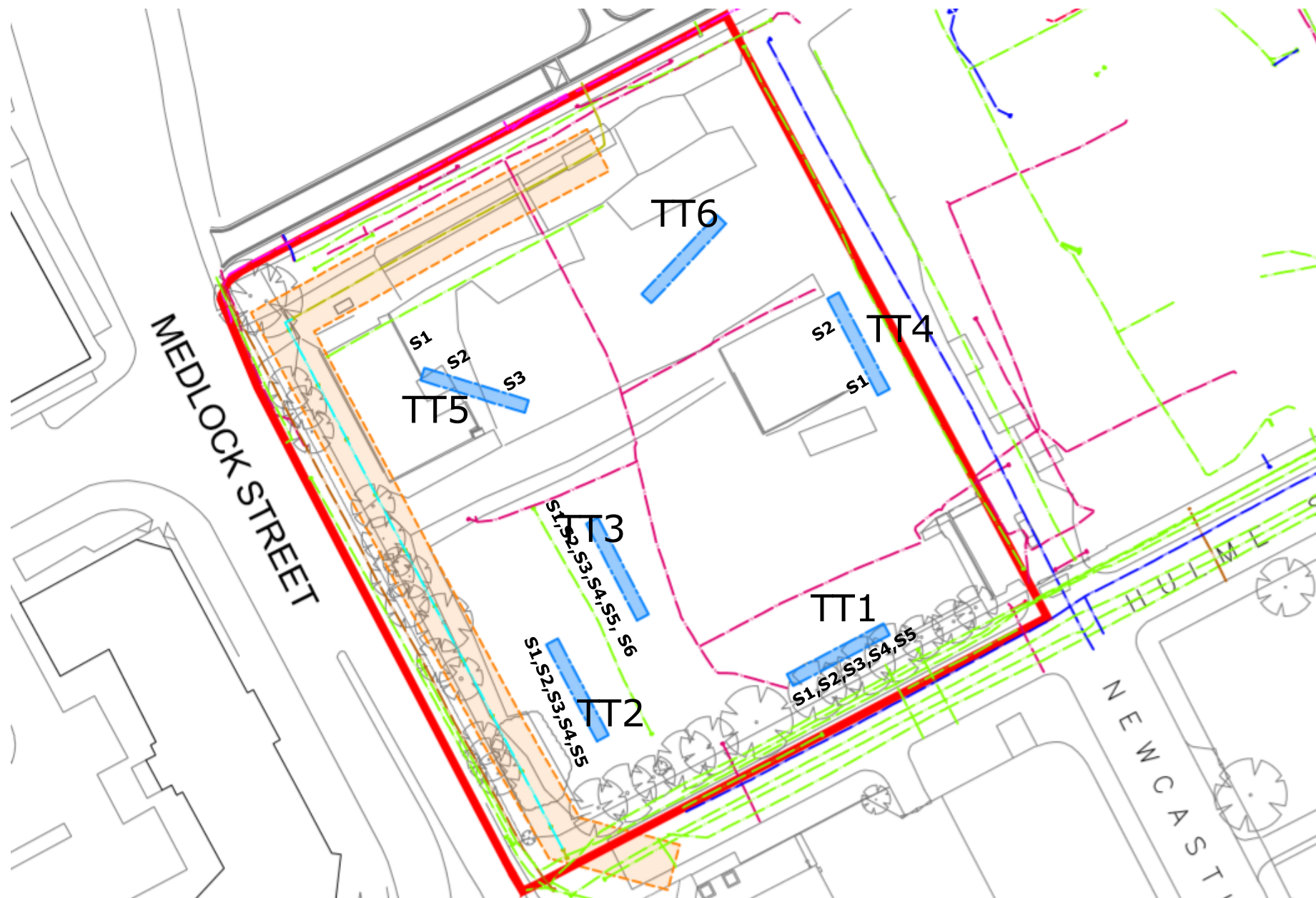
Locations By Type - RC

Locations By Type - WLS

Remarks:

None





1 Broad Gate, The Headrow
Leeds, LS1 8EQ
leeds@ramboll.co.uk
T: 0113 245 7552

Project:
First Street

Title:
Waste Classification March 2020- Trial Trench
Locations and Sample Locations

Status:

Description:
Source: PCS Trial Trench Location Plan

Scale: NTS

Drawn: CC

Checked: HC

Figure No: 1620002943

Rev: 01

**LEGISLATIVE CONTEXT
AND METHODOLOGIES
GROUND CONTAMINATION**

1. LEGISLATIVE CONTEXT

1.1.1. England

The regime for contaminated land was set out in Part 2A (ss.78A-78YC) of the Environmental Protection Act 1990 (EPA), as inserted by S.57 of The Environment Act 1995 and came into effect in England on 1st April 2000 as The Contaminated Land (England) Regulations 2000 (SI 2000/227). These regulations were subsequently revoked with the provision of The Contaminated Land (England) Regulations 2006 (SI 2006/1380) (as amended), which came into force in August 2006, and consolidated the previous regulations and amendments. Revised statutory guidance ("the Guidance") for local authorities on how to implement the regime, including the decision-making process on whether land is contaminated land in the legal sense, has been published by Defra and entered into force in April 2012.

Under Part 2A of the EPA Section 78A(2), "contaminated land" is defined as "land which appears... to be in such a condition, by reason of substances in, on or under the land, that –

- a) significant harm is being caused or there is a significant possibility of such harm being caused ; or
- b) significant pollution of controlled waters is being caused, or there is a significant possibility of such pollution being caused".

"Significant harm" is defined in the Guidance on risk based criteria and must be the result of one or more relevant 'contaminant linkages' relating to the land. The presence of a contaminant linkage relies on the Source-Pathway-Receptor concept, where all three factors must be present and potentially or actually linked for a potential risk to exist. Under the Guidance, a 'significant contaminant linkage' is one which gives rise to a level of risk sufficient to justify a piece of land being determined as contaminated land. Should the authority consider that there is an unacceptably high probability, supported by robust science-based evidence that significant harm would occur if no action is taken to stop it, the land should be deemed a Category 1: Human Health. Land should be placed into Category 2 if the authority concludes, on the basis that there is a strong case for considering that the risks from the land are of sufficient concern, that the land poses a significant possibility of significant harm. Both Category 1 and Category 2 cases would be capable of being determined as contaminated land under Part 2A on the grounds of significant possibility of significant harm to human health. If the legal test for significant possibility of significant harm is not met, the authority should place the land into Category 3. If the local authority considers that there is no risk or that the level of risk posed is low, the land should be placed into Category 4.

For six common contaminants (benzo(a)pyrene, cadmium, arsenic, benzene, hexavalent chromium and lead), a set of screening values have been developed and endorsed for use by Defra (the Category 4 Screening Levels, or C4SLs) that describe a level of risk just below the Category 3/4 boundary set in the Statutory Guidance, i.e. where concentrations are below the C4SL, there is no risk or the level of risk is acceptably low.

The pollution of controlled waters is defined in Section 78A(9) of the Act as "the entry into controlled waters of any poisonous, noxious or polluting matter or any solid waste matter". The new Guidance stresses that the Part 2A regime is designed to identify and deal with 'significant pollution' and not lesser levels of pollution. As with human health risk, Categories 1 and 2 comprise land where the local authority considers that a significant possibility of significant pollution of controlled waters exists and Categories 3 and 4 comprises cases where the authority considers that a significant possibility of such

pollution does not exist. The local authority should be satisfied that a substance is continuing to enter controlled waters or is likely to enter controlled waters. Wales

1.1.2. Wales

The regime for contaminated land was set out in Part 2A (ss.78A-78YC) of the Environmental Protection Act 1990 (EPA), as inserted by S.57 of The Environment Act 1995 and came into effect in Wales on 1st July 2001 as The Contaminated Land (Wales) Regulations 2001 (WSI 2001/2197, W.157). These regulations were subsequently revoked with the provision of The Contaminated Land (Wales) Regulations 2006 (SI 2006/2989 W.278), which consolidated the previous regulations and amendments and added in provisions regarding radioactive contaminated land. These regulations came into force on 10th December 2006 and were accompanied by statutory guidance published by the Welsh Assembly Government in December 2006 ('the Guidance') for local authorities on how to implement the regime. The 2006 statutory guidance was replaced by the Contaminated Land Statutory Guidance - 2012 (WG19243), issued by the Welsh Government.

Under Part 2A of the EPA Section 78A(2), "contaminated land" is defined as "land which appears... to be in such a condition, by reason of substances in, on or under the land, that –

a) significant harm is being caused or there is a significant possibility of such harm being caused; or

b) pollution of controlled waters is being, or is likely to be caused" .

"Significant harm" is defined in the Guidance on risk based criteria and must be the result of one or more relevant 'contaminant linkages' relating to the land. The presence of a contaminant linkage relies on the Source-Pathway-Receptor concept, where all three factors must be present and potentially or actually linked for a potential risk to exist. Under the Guidance, a 'significant contaminant linkage' is one which gives rise to a level of risk sufficient to justify a piece of land being determined as contaminated land. Should the authority consider that there is an unacceptably high probability, supported by robust science-based evidence that significant harm would occur if no action is taken to stop it, the land should be deemed a Category 1: Human Health.

Land should be placed into Category 2 if the authority concludes, on the basis that there is a strong case for considering that the risks from the land are of sufficient concern, that the land poses a significant possibility of significant harm.

Both Category 1 and Category 2 cases would be capable of being determined as contaminated land under Part 2A on the grounds of significant possibility of significant harm to human health. If the legal test for significant possibility of significant harm is not met, the authority should place the land into Category 3. If the local authority considers that there is no risk or that the level of risk posed is low, the land should be placed into Category 4.

For six common contaminants (benzo(a)pyrene, cadmium, arsenic, benzene, hexavalent chromium and lead), a set of screening values have been developed and endorsed for use by Defra² (the Category 4 Screening Levels, or C4SLs) that describe a level of risk just below the Category 3/4 boundary set in the Statutory Guidance, i.e. where concentrations are below the C4SL, there is no risk or the level of risk is acceptably low. In March 2015, the Welsh Government issued a statement reaffirming that C4SLs are a "pragmatic but still strongly precautionary approach to risk assessment of potentially contaminated land". The represent a level of a contaminant in soil that would pose a low risk to human health and would not be considered contaminated under Part 2A. The statement notes that C4SLs have been derived using toxicological methods that are robust and are considered appropriate in the UK. The Welsh Government's statement confirms that C4SLs can provide a simple test for deciding if land is suitable for use and

definitely not contaminated under Part 2A. As such, they can be used as a generic screening criteria and could be used as part of the risk assessment process under the planning regime as with Part 2A.

The pollution of controlled waters is defined in Section 78A(9) of the Act as “the entry into controlled waters of any poisonous, noxious or polluting matter or any solid waste matter”. According to the Guidance, before determining that pollution of controlled waters is being, or is likely to be, caused, the local authority should be satisfied that a substance is continuing to enter controlled waters or is likely to enter controlled waters. The term “controlled waters” in relation to Wales has the same meaning as in Part 3 of the Water Resources Act 1991, except that “ground waters” does not include waters contained in underground strata but above the saturation zone.

As with human health risk, Categories 1 and 2 comprise land where the local authority considers that a significant possibility of significant pollution of controlled waters exists and Categories 3 and 4 comprises cases where the authority considers that a significant possibility of such pollution does not exist. The local authority should be satisfied that a substance is continuing to enter controlled waters or is likely to enter controlled waters.

1.1.3. Scotland

The regime for contaminated land was set out in Part 2A (ss.78A-78YC) of the Environmental Protection Act 1990 (EPA), as inserted by S.57 of The Environment Act 1995 and came into effect in Scotland on 14th July 2000 as The Contaminated Land (Scotland) Regulations 2000 (SSI 2000/ 178). These regulations were subsequently revoked with the provision of The Contaminated Land (Scotland) Regulations 2005 (SSI 2005 /658), which came into force in April 2006 and consolidated the previous regulations and amendments and were accompanied by statutory guidance published by the Scottish Government in May 2006 (‘the Guidance’) for local authorities on how to implement the regime.

Under Part 2A of the Environmental Protection Act 1990, “contaminated land” is defined in the Contaminated Land (Scotland) Regulations 2005 (as amended) as land which appears to the local authority to be in such a condition, by reason of substances in, on or under the land, that:

- a) significant harm is being caused, or there is a significant possibility of such harm being caused; or
- b) significant pollution of the water environment is being caused or there is a significant possibility of such pollution being caused .

“Significant harm” is defined in the Guidance on risk based criteria and must be the result of a “pollutant linkage”, which may be assessed using qualitative risk assessment models. The presence of a pollutant linkage relies on the Source-Pathway-Receptor concept, where all three factors must be present and potentially or actually linked for a potential risk to exist. Where the water environment forms the receptor, ‘significant pollution’ is determined by assessing the potential for impact/harm/damage associated with the substance in the water environment and must be as a result of a significant pollutant linkage.

1.1.4. Northern Ireland

The regime for Contaminated Land in Northern Ireland was set out in the Waste and Contaminated Land (Northern Ireland) Order 1997 (as amended). Part 3 of the Waste and Contaminated Land (Northern Ireland) Order 1997 contains the main legal provisions for the introduction of a contaminated land regime in Northern Ireland, but the regime is not yet in operation. It is noted that the Contaminated Land (Northern Ireland) Regulations 2006 and associated statutory guidance were published in draft for consultation in 2006, but have yet to be finalised. Under Part 3 of the 1997 Order, contaminated land is defined as,

"any land which appears to a district council in whose district it is situated to be in such a condition, by reason of substances in, on or under the land, that -

(a) significant harm is being caused or there is a significant possibility of such harm being caused; or

(b) pollution of waterways or underground strata is being, or is likely to be, caused .

"Significant harm" is defined in the draft guidance on risk based criteria and must be the result of a "pollutant linkage", which may be assessed using qualitative risk assessment models. The presence of a pollutant linkage relies on the Source-Pathway-Receptor concept, where all three factors must be present and potentially or actually linked for a potential risk to exist.

1.1.5. The Channel Islands

There is no formal contaminated land regime in the Channel Islands, as they are not part of the UK, and as such they usually adopt either the English or French legislation or create their own.

1.1.6. Isle of Man

There is no formal contaminated land regime in the Isle of Man, and they usually adopt a best 'practice approach' from a European country of choice on this basis.

1.1.7. Risk Assessment Framework

"Significant harm" or "significant pollution of controlled waters" is defined in the Guidance on risk based criteria and must be the result of one or more relevant 'contaminant linkages' relating to the land.

The presence of a contaminant linkage relies on the Source-Pathway-Receptor concept, where all three factors must be present and potentially or actually linked for a potential risk to exist. For a risk of pollution or environmental harm to occur as a result of ground contamination, all of the following elements must be present:

- A source - a substance that is capable of causing pollution or harm;
- A receptor - something which could be adversely affected by the contaminant; and
- A pathway - a route by which the contaminant can reach the receptor.

If one of these elements is absent there can be no significant risk. If all are present then the magnitude of the risk is a function of the magnitude and mobility of the source, the sensitivity of the receptor and the nature of the migration pathway.

The Environment Agency Contaminated Land Report CLR 11 Model Procedures for the Management of Land Contamination provides the technical framework for structured decision making about land contamination. CLR 11 advocates a phased approach to risk assessment comprising:

- Preliminary Risk Assessment (PRA) – desk study and qualitative assessment
- Generic Quantitative Risk Assessment (GQRA) – assessment of contaminant concentrations against generic assessment criteria.
- Detailed Quantitative Risk Assessment (DQRA) – detailed site specific risk assessment and development of site-specific assessment criteria.

Each of these phases follows the same basic steps but adds site specific details and further certainty into the assessment as the stages progress. The basic steps are:

- Hazard identification and hazard assessment – development or refinement of the source-pathway-receptor conceptual model, and identification of potential pollutant linkages.
- Risk Estimation – qualitative risk estimation predicting magnitude and probability of potential consequences that may arise as a result of a hazard.

- Risk Evaluation – deciding whether a risk is unacceptable.

2. RISK ESTIMATION

An assessment of environmental risks is made for each potential pollutant linkage identified.

Risk estimation has been completed in accordance with the guidance provided in:

- NHBC and Environment Agency 2008. Guidance for the Safe Development of Housing on Land Affected by Contamination. R&D Publication 66: 2008.

The following is taken directly from NHBC/EA 2008. The key to the classification is that the designation of risk is based upon the consideration of both:

- a) the magnitude of the potential consequence (*i.e.*, severity) [takes into account both the potential severity of the hazard and the sensitivity of the receptor];
- b) the magnitude of probability (*i.e.*, likelihood) [takes into account both the presence of the hazard and receptor and the integrity of the pathway].

Table 1: Classification of Consequence (after NHBC/EA 2008)

Category	Definition
Severe	Highly elevated concentrations likely to result in "significant harm" to human health as defined by the EPA 1990, Part 2A, if exposure occurs. Equivalent to EA Category 1 pollution incident including persistent and/or extensive effects on water quality; leading to closure of a potable abstraction point; major impact on amenity value or major damage to agriculture or commerce. Major damage to aquatic or other ecosystems, which is likely to result in a substantial adverse change in its functioning or harm to a species of special interest that endangers the long-term maintenance of the population. Catastrophic damage to crops, buildings or property.
Medium	Elevated concentrations which could result in "significant harm" to human health as defined by the EPA 1990, Part 2A if exposure occurs. Equivalent to EA Category 2 pollution incident including significant effect on water quality; notification required to abstractors; reduction in amenity value or significant damage to agriculture or commerce. Significant damage to aquatic or other ecosystems, which may result in a substantial adverse change in its functioning or harm to a species of special interest that may endanger the long-term maintenance of the population. Significant damage to crops, buildings or property.
Mild	Exposure to human health unlikely to lead to "significant harm". Equivalent to EA Category 3 pollution incident including minimal or short lived effect on water quality; marginal effect on amenity value, agriculture or commerce. Minor or short lived damage to aquatic or other ecosystems, which is unlikely to result in a substantial adverse change in its functioning or harm to a species of special interest that would endanger the long-term maintenance of the population. Minor damage to crops, buildings or property.
Minor	No measurable effect on humans. Equivalent to insubstantial pollution incident with no observed effect on water quality or ecosystems. Repairable effects of damage to buildings, structures and services.

* For these purposes, disease is to be taken to mean an unhealthy condition of the body or a part of it and can include, for example, cancer, liver dysfunction or extensive skin ailments. Mental dysfunction is included only insofar as it is attributable to the effects of a pollutant on the body of the person concerned.

The likelihood of an event (probability) takes into account both the presence of the hazard and target and the integrity of the pathway and has been assessed based on the categories given below.

Table 2: Classification of Probability (after NHBC/EA 2008)

Category	Definition
High Likelihood	There is pollutant linkage and an event would appear very likely in the short-term and almost inevitable over the long-term, or there is evidence at the receptor of harm or pollution.
Likely	There is pollutant linkage and all the elements are present and in the right place which means that it is probable that an event will occur. Circumstances are such that an event is not inevitable, but possible in the short-term and likely over the long-term.
Low Likelihood	There is pollutant linkage and circumstances are possible under which an event could occur. However, it is by no means certain that even over a long period such an event would take place, and is less likely in the shorter term.
Unlikely	There is pollutant linkage but circumstances are such that it is improbable that an event would occur even in the very long-term.

The potential severity of the risk and the probability of the risk occurring have been combined in accordance with the following matrix in order to give a level of risk for each potential hazard.

Table 3: The Classification of Risk (after NHBC/EA 2008)

		Consequence			
		Severe	Medium	Mild	Minor
Probability	High Likelihood	Very high	High	Moderate	Low
	Likely	High	Moderate	Moderate/ Low	Low
	Low Likelihood	Moderate	Moderate/ Low	Low	Very low
	Unlikely	Moderate/ Low	Low	Very low	Very low

Very high risk

There is a high probability that severe harm could arise to a designated receptor from an identified hazard at the site without remediation action OR there is evidence that severe harm to a designated receptor is already occurring. Realisation of that risk is likely to present a substantial liability to be site owner/or occupier. Investigation is required as a matter of urgency and remediation works likely to follow in the short-term.

High risk

Harm is likely to arise to a designated receptor from an identified hazard at the site without remediation action. Realisation of the risk is likely to present a substantial liability to the site owner/or occupier. Investigation is required as a matter of urgency to clarify the risk. Remediation works may be necessary in the short-term and are likely over the longer term.

Moderate risk

It is possible that harm could arise to a designated receptor from an identified hazard. However, it is either relatively unlikely that any such harm would be severe, and if any harm were to occur it is more likely, that the harm would be relatively mild. Further investigative work is normally required to clarify the risk and to determine the potential liability to site owner/occupier. Some remediation works may be required in the longer term.

Low risk

It is possible that harm could arise to a designated receptor from identified hazard, but it is likely at worst, that this harm if realised would normally be mild. It is unlikely that the site owner/or occupier would face substantial liabilities from such a risk. Further investigative work (which is likely to be limited) to clarify the risk may be required. Any subsequent remediation works are likely to be relatively limited.

Very low risk

It is a low possibility that harm could arise to a designated receptor, but it is likely at worst, that this harm if realised would normally be mild or minor.

No potential risk

There is no potential risk if no pollution linkage has been established.

3. GQRA METHODOLOGIES

In order to assess the significance of the chemical concentrations recorded, generic assessment criteria (GAC) must be selected. The GAC are screening concentrations which are used initially for direct comparison to the measured site concentrations.

The GAC are defined based on the critical receptors identified at the site. Receptors are considered in relation to:

- Human health receptors (e.g., site users);
- The water environment (e.g., groundwater and surface water).

Potential risks to human health are considered primarily using measured concentrations of chemicals in soil. Potential risks to the water environment are considered primarily using soil leachate and groundwater concentrations as indicative of the potentially mobile fraction of any soil impact.

Additional receptors may be relevant dependent on the site e.g., flora/fauna, water supply pipes, buried concrete.

3.1.1. Soil Assessment

In accordance with current UK guidance on legislation including Part 2A of the Environmental Protection Act 1990 and based on the principles of risk assessment, Ramboll Environment and Health has derived generic criteria for interpretation of soil and groundwater chemical analysis (Ramboll Generic Assessment Criteria – Ramboll GAC). The assessment of chemical data from an intrusive investigation is undertaken in a tiered approach, and the first stage is a Generic Quantitative Risk Assessment (GQRA). The Ramboll GAC are considered to be threshold-based screening concentrations, at which a significant risk is not considered to be present to the relevant receptors.

The Soil Guideline Values (SGVs) for 11 compounds published in 2009 by the Environment Agency, are based on a sandy loam soil with 6% soil organic matter (SOM). The 6% SOM and sandy loam soil type is not considered by Ramboll to be realistic of 'typical' UK soil conditions, and EA guidance states that at 6% SOM, SGVs may not be sufficiently protective (i.e. the values are too high to be sufficiently certain that they describe land where there is no risk to human health or the risk is negligible). For the Ramboll GAC, all the SGV inputs have been used apart from the SOM and soil type, which were amended to 1% and sand; thereby ensuring a suitably conservative Ramboll GAC appropriate for most soils and Made Ground encountered in the UK. It is noted that none of the screening criteria used in the UK, including the SGVs, have a statutory basis.

The Ramboll GAC for soil assessment are based on the generic scenarios outlined in the Contaminated Land Exposure Assessment (CLEA) methodology and guidance documents, and include inhalation, ingestion, dermal contact of soil and dust as pathways for commercial and residential scenarios; as well as ingestion of homegrown produce for residential with gardens scenario. In addition, Ramboll GAC have also been derived for the two Public Open Space land uses defined in C4SL guidance (outlined below). These have been calculated by use of two proprietary risk assessment models (CLEA Version 1.071 and the ASTM RBCA Tool Kit Version 2.6 for Chemical Releases) which have been altered, where necessary, to reflect the current UK approach to human health risk assessment as set out in Land Contamination: Risk Management (LCRM) and the CLEA guidance documents (incorporating Science Reports SC050021/SR2 (January 2009), SR3 (January 2009), SR4 (September 2009) and the SGV reports (2009)). The physiochemical data has been taken from or derived using the methodology detailed in SR7 (November 2008) and SGV reports (2009), where feasible. The toxicology data has

been taken from the current published EA toxicology documents. We have referred to all current publications and guidance issued up until June 2019.

This approach by Ramboll follows the withdrawal of CLR 7-10 (and proposed withdrawal of CLR 11 in December 2019), CLEA UK (beta), and CLEA Model versions V1.04 to V1.07 by the Environment Agency and DEFRA. The approach has been applied to all contaminants with the exception of lead and nickel, as the respective SGV has been withdrawn by the Environment Agency.

In the absence of published EA data, reference has been made to further UK published guidance in the first instance.

Reference has been made to the Defra-funded research project (SP1010), which developed a methodology to derive Category 4 Screening Levels (C4SLs) for six contaminants (benzo-a-pyrene, cadmium, arsenic, benzene, hexavalent chromium and lead). SP1010 provides technical tools and advice to be developed to help regulators and others to conform to the requirements of revised Part 2A Statutory Guidance. The C4SLs are therefore less conservative than GAC developed in accordance with published CLEA guidance as they describe a low risk as opposed to minimal risk scenario. However, consistent with the developed GAC, sites below the C4SLs are within Category 4 (lowest risk category) and therefore considered suitable for use.

Defra's Policy Companion document to the SP1010 project states that where a C4SL value has been derived for a contaminant where an SGV exists, it is anticipated that risk assessors will use the C4SL value in line with Part 2A Statutory Guidance. In the absence of a suitable C4SL, risk assessors should identify and select appropriate generic assessment criteria in accordance with established good practice. On this basis, Ramboll has adopted the use of C4SLs however minimal risk assumptions have been applied in-house Ramboll GAC for other contaminants of concern within our screening assessments.

Ramboll also attended the Land Quality Management and Chartered Institute of Environmental Health workshop for the collaborative development of 'Suitable 4 Use Levels' (S4ULs) and reference has been made to their publication 'The LQM/CIEH S4ULs for Human Health Risk Assessment, 2015'.

Review of additional UK organisation guidance including Contaminated Land: Applications in Real Environments (CL:AIRE) and partners GAC, including addendums up until 10 April 2012 has also been made. Finally, where necessary, other published sources of (non-UK) information, such as the RBCA V2.6 database has also been reviewed.

3.1.2. Water Assessment

3.1.3. England and Wales

Assessment of risks to water resources is completed in general accordance with guidance provided in the Environment Agency's Approach to groundwater protection (2018), available online <https://www.gov.uk/government/publications/groundwater-protection-position-statements>. Generic assessment criteria for waters must be selected to assess potential risks to the identified environmental receptors.

In the absence of relevant published water assessment criteria, the potential risk to human health from contaminated surface and groundwater and the potential risk to the aquatic environment from entry of pollutants (either directly or via a groundwater pathway) has been assessed using commonly accepted UK guidelines including the Water Supply (Water Quality) (England) Regulations 2000 (known as the Drinking Water Standards, or DWS) and the Environmental Quality Standards (EQS) defined in European legislation such as the Water Framework Directive (WFD) (2000/60/EC).

Revised EQS were published in December 2009 under the Priority Substances Directive (PSD) (2008/105/EC), a daughter directive of the WFD. The PSD establishes EQS for Priority Substances which have been set at levels of concentration which are safe for the

aquatic environment and for human health. A list of such dangerous substances (including those from other European legislation e.g. the Dangerous Substances Directive (76/464/EC)) and EQS has been established and is listed in the August 2010 Direction to the Environment Agency, the River Basin Districts Typology, Standards and Groundwater Threshold Values (Water Framework Directive) (England and Wales) Direction 2010. The EQS are detailed in Part 4 (Specific Pollutants) and Part 5 (Priority Substances) of the Directions.

For those determinants included in the analytical suite which do not have a corresponding UK drinking water or environmental screening criteria, reference is made to international guidance in accordance with Environment Agency guidance.

Minimum reporting values are also considered for hazardous substances for assessment of risks to groundwater resources in order to comply with the requirements of the guidance to 'prevent' input of hazardous substances to groundwater.

A methodology for the generation of the GAC for groundwater vapours (GACgwvap) was published by the Society of Brownfield Risk Assessment (SoBRA) in February 2017[1], which is based on the CLEA model. Ramboll has adopted SoBRA's approach and modified the model input parameters to reflect site conditions and generate site SSAC for groundwater contaminant sources designed to be protective of site users for a residential and/or commercial/industrial scenario as appropriate.

The SoBRA (GACgwvap) methodology uses the Environment Agency's CLEA software model. The CLEA software was originally provided for deriving assessment criteria for soils, not groundwater; however, groundwater assessment criteria can be extracted from the calculations within CLEA. CLEA assumes a steady state equilibrium between the sorbed, water and vapour phase concentrations in soil. Consequently, as part of the process of calculating soil phase concentrations, the software also calculates the vapour phase concentration and the pore water dissolved concentration (soil solution concentration) at the soil GAC. Therefore, for given soil assessment criteria derived to be protective of health, a soil solution concentration is also available within the CLEA calculations which would give rise to this vapour concentration at the tolerable risk level. This soil solution concentration is used as an inferred groundwater SSAC.

The proprietary risk assessment model, the ASTM RBCA2 Tool Kit Version 2.6 for Chemical Releases, has been used for compounds which could not be run in CLEA. The RBCA model has been altered where necessary to reflect the current UK approach to human health risk assessment, as appropriate.

3.1.4. Scotland

Assessment of risks to water resources is completed in general accordance with guidance provided in SEPA guidance WAT-PS-10-01. Generic assessment criteria for waters must be selected to assess potential risks to the identified environmental receptors.

In the absence of relevant published water assessment criteria, the potential risk to human health from contaminated surface and groundwater and the potential risk to controlled waters from entry of pollutants (either directly or via a groundwater pathway) has been assessed using commonly accepted UK guidelines including the Water Supply (Water Quality) (Scotland) Regulations 2001 (known as the Drinking Water Standards, or DWS), the Private Water Supplies (Scotland) Regulations 2006 and the Environmental Quality Standards (EQS) defined in European legislation such as the Water Framework Directive (WFD) (2000/60/EC).

Revised EQS were published in December 2009 under the Priority Substances Directive (PSD) (2008/105/EC), a daughter directive of the WFD. The PSD establishes EQS for Priority Substances which have been set at levels of concentration which are safe for the aquatic environment and for human health. A list of such dangerous substances (including those from other European legislation e.g. the Dangerous Substances Directive

(76/464/EC)) and EQS has been established and is listed in the December 2009 Scotland River Basin District (Surface Water Environmental Standards, Condition Limits and Groundwater Threshold Values) Directions 2009. The EQS are detailed in Schedule 5 (Environmental standards for dangerous substances) and Schedule 6 (Threshold values for groundwater) of the Directions.

For those determinants included in the analytical suite which do not have a corresponding UK drinking water or environmental screening criteria, reference is made to international guidance in accordance with SEPA guidance.

Minimum reporting values are also considered for hazardous substances for assessment of risks to groundwater resources in order to comply with the requirements of the guidance to 'prevent' input of hazardous substances to groundwater.

A methodology for the generation of the GAC for groundwater vapours (GACgwvap) was published by the Society of Brownfield Risk Assessment (SoBRA) in February 2017[1], which is based on the CLEA model. Ramboll has adopted SoBRA's approach and modified the model input parameters to reflect site conditions and generate site SSAC for groundwater contaminant sources designed to be protective of site users for a residential and/or commercial/industrial scenario as appropriate.

The SoBRA (GACgwvap) methodology uses the Environment Agency's CLEA software model. The CLEA software was originally provided for deriving assessment criteria for soils, not groundwater; however, groundwater assessment criteria can be extracted from the calculations within CLEA. CLEA assumes a steady state equilibrium between the sorbed, water and vapour phase concentrations in soil. Consequently, as part of the process of calculating soil phase concentrations, the software also calculates the vapour phase concentration and the pore water dissolved concentration (soil solution concentration) at the soil GAC. Therefore, for given soil assessment criteria derived to be protective of health, a soil solution concentration is also available within the CLEA calculations which would give rise to this vapour concentration at the tolerable risk level. This soil solution concentration is used as an inferred groundwater SSAC.

The proprietary risk assessment model, the ASTM RBCA2 Tool Kit Version 2.6 for Chemical Releases, has been used for compounds which could not be run in CLEA. The RBCA model has been altered where necessary to reflect the current UK approach to human health risk assessment, as appropriate.

3.1.5. Northern Ireland

Generic assessment criteria for waters must be selected to assess potential risks to the identified environmental receptors. In the absence of relevant published water assessment criteria, the potential risks to human health and controlled waters from surface and groundwater have been assessed using commonly accepted UK guidelines including the Water Supply (Water Quality) Regulations (Northern Ireland) 2007 (known as the Drinking Water Standards, or DWS), the Private Water Supplies (Northern Ireland) Regulations 1994 and the Environmental Quality Standards (EQS) defined in European legislation such as the Water Framework Directive (WFD) (2000/60/EC).

Revised EQS were published in December 2009 under the Priority Substances Directive (2008/105/EC), a daughter directive of the WFD. The PSD establishes EQS for Priority Substances which have been set at levels of concentration which are safe for the aquatic environment and for human health. The European EQS have been transposed into Northern Irish law by the Water Framework Directive (Priority Substances and Classification) Regulations (Northern Ireland) 2011, which came into force on 14 February 2011. The EQS are detailed in Part 2 of the regulations – Environmental Standards.

Minimum reporting values are also considered for hazardous substances for assessment of risks to groundwater resources in order to comply with the requirements of the guidance to 'prevent' input of hazardous substances to groundwater.

For those determinants included in the analytical suite which do not have a corresponding UK drinking water or environmental screening criteria, reference is made to international guidance in accordance with Environment Agency guidance.

A methodology for the generation of the GAC for groundwater vapours (GACgwvap) was published by the Society of Brownfield Risk Assessment (SoBRA) in February 2017[1], which is based on the CLEA model. Ramboll has adopted SoBRA's approach and modified the model input parameters to reflect site conditions and generate site SSAC for groundwater contaminant sources designed to be protective of site users for a residential and/or commercial/industrial scenario as appropriate.

The SoBRA (GACgwvap) methodology uses the Environment Agency's CLEA software model. The CLEA software was originally provided for deriving assessment criteria for soils, not groundwater; however groundwater assessment criteria can be extracted from the calculations within CLEA. CLEA assumes a steady state equilibrium between the sorbed, water and vapour phase concentrations in soil. Consequently, as part of the process of calculating soil phase concentrations, the software also calculates the vapour phase concentration and the pore water dis-solved concentration (soil solution concentration) at the soil GAC. Therefore, for given soil assessment criteria derived to be protective of health, a soil solution concentration is also available within the CLEA calculations which would give rise to this vapour concentration at the tolerable risk level. This soil solution concentration is used as an inferred groundwater SSAC.

The proprietary risk assessment model, the ASTM RBCA2 Tool Kit Version 2.6 for Chemical Releases, has been used for compounds which could not be run in CLEA. The RBCA model has been altered where necessary to reflect the current UK approach to human health risk assessment, as appropriate.

3.1.6. Contaminant Distribution Assessment

Concentrations above the GAC are considered further in relation to vertical and lateral distribution across the site and through statistical analysis, where appropriate. This analysis is used to define 'averaging areas' within which contamination concentrations and distribution are considered likely to be similar.

For each averaging area, where appropriate, statistical analysis is then used to calculate a 'representative' concentration for each contaminant within that area and identify possible outliers of the underlying distribution of contaminant concentrations. This analysis is completed in accordance with CIEH 2008 guidance.

The initial statistical tests are used to calculate the 95% probability that the true population mean falls below the critical concentration (GAC). In practise, this involves comparing the 95th Upper Confidence Limit of the true population mean with the GAC. The Maximum Value test is then used to identify whether the maximum concentration is likely to lie outside of the assumed distribution trend and as such would represent an outlier of the general population of data across the site. Outliers above the GAC may represent localised contaminant hotspots and require further consideration.

Constituent non-detects are conservatively assigned a value equal to the reported analytical laboratory limit of detection. Any identified true outliers are excluded from the datasets used in calculation of the 95%UCL value.

4. GROUND GAS RISK ASSESSMENT

Ground gas risk is characterised using guidance provided in the following:

- BS8485:2015+A1:2019 Code of practice for the characterization and remediation from ground gas in affected developments.
- BS8576:2013. Guidance on investigations for ground gas – Permanent gases and Volatile Organic Compounds (VOCs)
- CIRIA C665, 2007. Assessing risks posed by hazardous ground gases to buildings. (Supersedes CIRIA 659).
- NHBC / RSK, 2007. Guidance on evaluation of development proposals on sites where methane and carbon dioxide are present. Report Ed 4.

The risk posed by a gas regime is assessed initially by calculating a Gas Screening Value using a combination of the gas flow rate and recorded concentrations of carbon dioxide and methane. This Gas Screening Value is then used in combination with the maximum recorded gas concentrations to determine the site's Characteristic Situation (CIRIA 665 – all site uses except low rise residential) or Traffic Light Classification (NHBC/RSK 2007 low rise residential sites only). Table A below outlines the method for defining the Characteristic Situation as detailed in CIRIA 665 and Table B outlines the method for defining the Traffic Light classification as detailed in NHBC/RSK 2007.

Table A: Proposed method for classifying gassing sites (after CIRIA C665 2007)

Characteristic Situation	Risk classification	Gas screening value of CH ₄ or CO ₂ (l/hr) ^a	Additional limiting factors	Typical source of generation
1	Very low risk	<0.07	Typically methane ≤ 1% and/or carbon dioxide ≤ 5%. Otherwise consider increase to Situation 2	Natural soils with low organic content. "Typical" Made Ground
2	Low risk	<0.7	Borehole air flow rate not to exceed 70l/hr. Otherwise consider increase to Characteristic Situation 3	Natural soil, high peat/organic content. "Typical" Made Ground
3	Moderate risk	<3.5	-	Old landfill, inert waste, mineworking flooded
4	Moderate to high risk	<15	Quantitative risk assessment required to evaluate scope of protective measures	Mineworking -susceptible to flooding, completed landfill, inert waste (WMP 26B criteria)
5	High risk	<70	-	Mineworking unflooded inactive with shallow workings near surface
6	Very high risk	>70	-	Recent landfill site

^a Gas screening value = gas concentration (%) x measured borehole flow rate (l/hr)

Table B: Proposed method for classifying gassing sites (after NHBC/RSK 2007)

Traffic Light	Methane ¹		Carbon Dioxide ¹	
	Typical Maximum Concentration ⁵ (%v/v)	Gas Screening Value (GSV) ^{2,4,6} litres per hour	Typical Maximum	Gas Screening Value

			Concentration5 (%v/v)	(GSV)2,3,4,5 litres per hour
Green				
	1	0.16	5	0.78
Amber 1				
	5	0.63	10	1.56
Amber 2				
	20	1.56	30	3.13
Red				

The CIRIA, NHBC and BS8485 guidance documents are then used to determine requirements for gas protection measures based on the site classification.

5. WATER SUPPLY PIPES

The assessment has been completed in accordance with the current UK guidance:

- Water UK. Jan 2014. Contaminated Land Assessment Guidance.
- UKWIR UK Water Industry Research Ltd, 2010. Guidance for Selection of Water Supply Pipes to be used in Brownfield Sites.

This guidance provides threshold concentrations for different pipe material for various chemical groups.

The pipeline materials considered by the guidance are PE, PVC, wrapped steel, wrapped ductile iron or copper pipe and barrier pipe. PE and PVC are assessed using threshold concentrations for various chemical groups including volatile organic compounds (VOC) with tentatively identified compounds (TICs), semi-volatile organic compounds (SVOC) with TICs, and mineral oils. Wrapped steel, wrapped ductile iron and copper pipe are assessed using corrosive properties.

Regional water companies may have adopted additional more stringent thresholds which they apply locally, thus consultation with the water authority must always be completed prior to final determination of water supply pipe materials.

6. WASTE CLASSIFICATION

The main steps in classifying waste are:

1. Is it really a waste or can it be reused, recycled or recovered?
2. If the material is not to be utilised in some way and it is waste then classify to ascertain if hazardous or non-hazardous. In order to do this, guidance regarding the definition and classification of hazardous waste is utilised, the two main documents being EA, 2015 'Technical Guidance WM3: Waste Classification - Guidance on the classification and assessment of waste' and the European Waste Catalogue (EWC 2002).
3. Use the results of this initial waste classification to follow one of the following routes:

Hazardous			Non-Hazardous		
Pre-treat the waste.			Thought likely to be inert: (e.g. insoluble and inorganic in nature)		Thought unlikely to be inert: (e.g. may contain peat or other high organic content material)
Complete WAC (Waste Acceptance Criteria) testing to determine class of landfill it can go to or any requirement for further pre-treatment if WAC fails.			Complete WAC test to determine class of landfill it can be disposed to		-
Pass stable non-reactive hazardous WAC: dispose of at SNRHW landfill.	Pass hazardous WAC: dispose of at hazardous landfill.	Fail: further remedial action required	Pass: dispose of at inert landfill	Fail: dispose of at non-hazardous landfill	Dispose to non-hazardous landfill (no WAC testing required by WM3).

The landfill regulations (Environment Agency, 2011 Treatment of Waste for Landfill) prescribe that hazardous waste requires pre-treatment prior to disposal to landfill. This may include physical sorting at the point of production on site, by sorting of waste soils into separate stockpiles of eg topsoil, made ground and natural gravels.

6.1. Methodology

In terms of the EWC, the soil to be excavated from this site for disposal is classed as 'Soil and Stones containing Dangerous Substances' (EWC Code 170503) or 'Soil and Stones other than those mentioned in EWC Code 170503' (EWC Code 170504). As such it is what is known as a 'Mirror Entry waste' and needs to be assessed against Threshold Levels for certain dangerous substances in order to confirm whether it needs to be classified as hazardous (170503) or non-hazardous (170504).

Data from site soil chemical testing have been assessed to classify the site soils. The assessment has been undertaken using HazWasteOnline TM, a web-based tool for classifying waste. The software utilises Environment Agency guidance and European regulations to classify samples in line with current requirements.

The assessment provided in this report fulfils the requirement of step 2 above, and allows classification of the site soils and hazardous or non-hazardous.

Asbestos: The Hazardous Waste (England and Wales) Regulations 2005 requires that any waste having an asbestos content greater than 0.1% weight/weight (w/w) be classified as Hazardous Waste. Any waste with an asbestos content of less than 0.1% w/w can be classified as non-hazardous waste, unless there are other contaminants present which would make the waste hazardous.

Where the asbestos is deemed to be of a fibrous nature the Health and Safety Executive (HSE) require that the handling in accordance with The Carriage of Dangerous Goods (etc.) Regulations 2009 (CDG2009) and the Control of Asbestos Regulations (2012).

Where friable asbestos is present but at concentrations which are below the hazardous waste threshold, escape of respirable asbestos fibres (i.e. both during packaging and transportation) must be assessed and mitigated where required.

[illegible]

-	-	-	-	Amosite	-	-	-	Chrysotile	-	sotile & Am	sotile & Am	Amosite	-	sotile, Am	Amosite	Chrysotile	sotile & Am	Chrysotile	Chrysotile	sotile & Am	sotile & Am	Chrysotile	-	-	sotile & Croc	Chrysotile	-	Chrysotile	& Amosite	sotile & Croc	Chrysotile	sotile & Am	-	-	Chrysotile	Chrysotile	Chrysotile
Not-detected	Not-detected	Not-detected	Not-detected	Detected	Not-detected	Not-detected	Not-detected	Detected	Not-detected	Detected	Detected	Detected	Not-detected	Detected	Detected	Detected	Detected	Detected	Detected	Detected	Detected	Detected	Not-detected	Not-detected	Detected	Detected	Not-detected	Detected	Detected	Detected	Detected	Detected	Not-detected	Detected	Detected	Detected	Detected
-	-	-	-	< 0.001	-	-	-	0.001	-	< 0.001	< 0.001	< 0.001	-	0.004	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	0.005	< 0.001	-	< 0.001	0.677	< 0.001	< 0.001	0.003	-	< 0.001	< 0.001	< 0.001	
-	-	-	-	< 0.001	-	-	-	0.001	-	< 0.001	< 0.001	< 0.001	-	0.004	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	< 0.001	-	-	0.005	< 0.001	-	< 0.001	0.677	< 0.001	< 0.001	0.003	-	< 0.001	< 0.001	< 0.001	

Cundall 2016 Laboratory Data							
Screened for Commercial	Sample Reference		WS101	WS106	CP/RC110	CP/RC111	WS102
	Depth (m)		0.00	0.00	0.30	0.30	1.00-1.20
	Date Sampled		18/04/2016	18/04/2016	27/04/2016	25/04/2016	20/04/2016
Analytical Parameter (Soil Analysis)	Units	Ramboll GAC Comm/Ind					
Stone Content	%		< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Moisture Content	%		3	12	10	12	19
Total mass of sample received	kg		2	2	1.2	1.7	1.2
Asbestos in Soil Screen / Identification Name	Type		Chrysotile	-	Chrysotile & Amosite	Chrysotile	-
Asbestos in Soil	Type		Detected	Not-detected	Detected	Detected	-
Asbestos Quantification (Stage 2)	%		< 0.001	-	< 0.001	< 0.001	-
Asbestos Quantification Total	%		< 0.001	-	< 0.001	< 0.001	-
General Inorganics							
pH	pH Units		8.9	8.4	8.5	8.5	8.3
Free Cyanide	mg/kg	49	< 1	< 1	< 1	< 1	< 1
Total Sulphate as SO ₄	mg/kg		500	1100	2300	4100	2100
Water Soluble Sulphate (2:1 Leachate Equiv)	g/l		0.021	0.14	0.13	1.0	0.045
Sulphide	mg/kg		11	11	1.1	20	18
Organic Matter	%		7.6	4.7	2.1	1.7	3.2
Electrical Conductivity							
Redox Potential							
Speciated PAHs							
Naphthalene	mg/kg	1100	0.61	1.3	0.87	< 0.05	0.47
Acenaphthylene	mg/kg	76000	0.53	< 0.10	1.2	0.45	< 0.10
Acenaphthene	mg/kg	75000	0.48	0.37	1.3	0.2	< 0.10
Fluorene	mg/kg	60000	0.37	0.47	1	0.23	< 0.10
Phenanthrene	mg/kg	22000	3.4	3.7	7.5	1.2	1.5
Anthracene	mg/kg	520000	1.8	0.95	2.2	0.5	0.22
Fluoranthene	mg/kg	23000	9.8	4.6	15	2.6	2
Pyrene	mg/kg	54000	17	4.7	12	2.3	2
Benzo(a)anthracene	mg/kg		5.2	2.5	8.5	1.3	1.2
Chrysene	mg/kg		7.2	2.9	6.7	0.99	1
Benzo(b)fluoranthene	mg/kg		24	3.4	8.2	1.8	1.2
Benzo(k)fluoranthene	mg/kg		7.6	1.2	3.7	0.78	0.67
Benzo(a)pyrene	mg/kg	76	26	3	7	1.6	1
Indeno(1,2,3-cd)pyrene	mg/kg		16	1.3	3.4	0.54	0.6
Dibenz(a,h)anthracene	mg/kg		3	0.4	0.87	< 0.10	< 0.10
Benzo(ghi)perylene	mg/kg		20	1.8	3.9	0.71	0.84
Total PAH							
Speciated Total EPA-16 PAHs	mg/kg		143	32.6	82.9	15.3	12.7
Heavy Metals / Metalloids							
Arsenic (aqua regia extractable)	mg/kg	640	12	17	35	15	14
Cadmium (aqua regia extractable)	mg/kg	410	< 0.2	0.6	< 0.2	< 0.2	0.9
Chromium (hexavalent)	mg/kg	49	< 4.0	< 4.0	< 4.0	< 4.0	< 4.0
Chromium (III)	mg/kg	8600	24	51	17	20	15
Chromium (aqua regia extractable)	mg/kg		24	51	17	20	15
Copper (aqua regia extractable)	mg/kg	68000	94	82	96	83	78
Lead (aqua regia extractable)	mg/kg	2300	150	190	500	330	580
Mercury (aqua regia extractable)	mg/kg	1100	0.8	0.8	0.5	< 0.3	0.6
Nickel (aqua regia extractable)	mg/kg	980	22	33	64	42	20
Selenium (aqua regia extractable)	mg/kg	12000	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Zinc (aqua regia extractable)	mg/kg	730000	160	350	300	130	360
Monoaromatics							
Benzene	ug/kg	15			-	< 1.0	< 1.0
Toluene	ug/kg	33000			-	< 1.0	< 1.0
Ethylbenzene	ug/kg	3200			-	< 1.0	< 1.0
p & m-xylene	ug/kg	3400			-	< 1.0	< 1.0
o-xylene	ug/kg	3700			-	< 1.0	< 1.0
MTBE (Methyl Tertiary Butyl Ether)	ug/kg	3800			-	< 1.0	< 1.0

Cundall 2016 Laboratory Data								
Screened for Commercial		Sample Reference		WS101	WS106	CP/RC110	CP/RC111	WS102
			Depth (m)	0.00	0.00	0.30	0.30	1.00-1.20
			Date Sampled	18/04/2016	18/04/2016	27/04/2016	25/04/2016	20/04/2016
Analytical Parameter (Soil Analysis)		Units	Ramboll GAC Comm/Ind					
Petroleum Hydrocarbons								
TPH-CWG - Aliphatic >EC5 - EC6		mg/kg	2400			-	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC6 - EC8		mg/kg	5300			-	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC8 - EC10		mg/kg	1300			-	< 0.1	< 0.1
TPH-CWG - Aliphatic >EC10 - EC12		mg/kg	6100			-	< 1.0	< 1.0
TPH-CWG - Aliphatic >EC12 - EC16		mg/kg	43000			-	< 2.0	6.5
TPH-CWG - Aliphatic >EC16 - EC21		mg/kg	1000000			-	< 8.0	160
TPH-CWG - Aliphatic >EC21 - EC35		mg/kg	1000000			-	< 8.0	920
TPH-CWG - Aliphatic (EC5 - EC35)		mg/kg				-	< 10	1100
TPH-CWG - Aromatic >EC5 - EC7		mg/kg				-		< 0.1
TPH-CWG - Aromatic >EC7 - EC8		mg/kg				-		< 0.1
TPH-CWG - Aromatic >EC8 - EC10		mg/kg	2200			-		< 0.1
TPH-CWG - Aromatic >EC10 - EC12		mg/kg	11000			-		< 1.0
TPH-CWG - Aromatic >EC12 - EC16		mg/kg	35000			-		2.7
TPH-CWG - Aromatic >EC16 - EC21		mg/kg	29000			-	13	42
TPH-CWG - Aromatic >EC21 - EC35		mg/kg	29000			-	24	500
TPH-CWG - Aromatic (EC5 - EC35)		mg/kg				-	38	540
total				0	0		75	1640
Petroleum Hydrocarbons								
Mineral Oil (C10 - C20)								
Mineral Oil (C11 - C20)								
Mineral Oil (C21 - C40)								

Cundalls 2016 Water Data

Analytical Report Number: 16-15736
Project / Site name: Plots 6,7,8, First Street, Manchester

Lab Sample Number							565076
Sample Reference							WS101
Sample Number							1
Depth (m)							0.00
Date Sampled							18/04/2016
Time Taken							None Supplied
Analytical Parameter (Leachate Analysis)	Units	Limit of detection	Accreditation Status	EQS	DWS	MRV	

General Inorganics

pH	pH Units	N/A	ISO 17025	<5,9>			8.4
Total Cyanide	µg/l	10	ISO 17025	1	50		< 10
Sulphate as SO ₄	µg/l	0.1	ISO 17025	400000	250000		2190
Sulphide	µg/l	5	NONE				< 5.0

Total Phenols

Total Phenols (monohydric)	µg/l	10	ISO 17025	7.7			< 10
----------------------------	------	----	-----------	-----	--	--	------

Speciated PAHs

Naphthalene	µg/l	0.01	NONE	2			< 0.01
Acenaphthylene	µg/l	0.01	NONE				< 0.01
Acenaphthene	µg/l	0.01	NONE				< 0.01
Fluorene	µg/l	0.01	NONE				< 0.01
Phenanthrene	µg/l	0.01	NONE				< 0.01
Anthracene	µg/l	0.01	NONE	0.1			< 0.01
Fluoranthene	µg/l	0.01	NONE	0.0063			< 0.01
Pyrene	µg/l	0.01	NONE				< 0.01
Benzo(a)anthracene	µg/l	0.01	NONE			<0.01	< 0.01
Chrysene	µg/l	0.01	NONE			<0.01	< 0.01
Benzo(b)fluoranthene	µg/l	0.01	NONE	0.00017	0.075	<0.01	< 0.01
Benzo(k)fluoranthene	µg/l	0.01	NONE	0.0017	0.05	<0.01	< 0.01
Benzo(a)pyrene	µg/l	0.01	NONE	0.00017	0.005	<0.01	< 0.01
Indeno(1,2,3-cd)pyrene	µg/l	0.01	NONE	0.0017	0.05	<0.01	< 0.01
Dibenz(a,h)anthracene	µg/l	0.01	NONE			<0.01	< 0.01
Benzo(ghi)perylene	µg/l	0.01	NONE	0.00017	0.05	<0.01	< 0.01

Total PAH

Total EPA-16 PAHs	µg/l	0.2	NONE				< 0.2
-------------------	------	-----	------	--	--	--	-------

Heavy Metals / Metalloids

Arsenic (dissolved)	µg/l	1.1	ISO 17025	50	7.5	5	< 1.1
Cadmium (dissolved)	µg/l	0.08	ISO 17025	0.25	5	<0.05	< 0.08
Chromium (dissolved)	µg/l	0.4	ISO 17025	4.7	50		1.1
Copper (dissolved)	µg/l	0.7	ISO 17025	1			9.9
Lead (dissolved)	µg/l	1	ISO 17025	1.2	5	<0.2	14
Mercury (dissolved)	µg/l	0.5	ISO 17025	0.07	1	<0.05	< 0.5
Nickel (dissolved)	µg/l	0.3	ISO 17025	4			0.8
Selenium (dissolved)	µg/l	4	ISO 17025		7.5		< 4.0
Zinc (dissolved)	µg/l	0.4	ISO 17025	10.9			15

Petroleum Hydrocarbons

Petroleum Range Organics (C6 - C10)	µg/l	10	NONE	10	1	< 10	< 10
Diesel Range Organics (C10 - C25)	µg/l	10	NONE				< 10
Oil Range Organics (C25 - C40)	µg/l	10	NONE				< 10

Exceedance of EQS
Exceedance of DWS
Exceedance of both EQS and DWS

Ramboll 2017 Ground Investigation Asbestos data

Hole ID	Bottom Depth	Asbestos ID	Asbestos Quantification %
HDP102	0.3	N.D.	
HDP102	1	N.D.	
HDP103	1	N.D.	
HDP108	0.8	N.D.	
HDP108	0.8	N.D.	
HDP110	0.5	N.D.	
HDP110	0.5	N.D.	
HDP111	0.4	N.D.	
HDP112	0.2	N.D.	
HDP113	0.5	N.D.	
HDP114	1	N.D.	
HDP115	0.3	N.D.	
HDP117	0.6	N.D.	
HDP117	0.6	N.D.	
HDP119	0.6	N.D.	
HDP121	0.5	N.D.	
HDP121	0.5	N.D.	
RP13	0.5	N.D.	
RP14	0.5	N.D.	
RP24	0.8	N.D.	
RP25	0.25	N.D.	
TP101	0.5	N.D.	
TP101	2.6	N.D.	
TP102	0.25	N.D.	
TP102	0.25	N.D.	
TP103	1	N.D.	
TP103	1	N.D.	
TP105	3	N.D.	
TP105	0.5	N.D.	
WS103	0.2		0.001, Chrysotile Detected
WS105	1		<0.001, Chrysotile Loose Fibres Detected
WS107	0.5	N.D.	
WS107	2	N.D.	
WS107	4	N.D.	

Ramboll 2017 Soil Data

			Hole ID		HDP108	HDP110	HDP114	HDP117	HDP121	TP101	TP102	TP103	TP105	WS103	WS105	WS107	WS107	HDP101	HDP101	HDP101	RP01	RP01	RP01	RP01
			Bottom Depth		0.8	0.5	1	0.6	0.5	2.6	0.25	1	0.5	0.2	1	2	4	0.5	0.5	0.25	0.25	0.5	0.5	
			AGS Sample ID		HDP108		HDP114			TP101	TP102	TP103	TP105	WS103	WS105	WS107	WS107	HDP101	HDP101	HDP101	RP01	RP01	RP01	RP01
Determinand	Units	No Samples Analyzed	Positives Found	GAC Commercial/ Industrial	Mean	Max																		
Acenaphthene	mg/kg	20	8	75000	2.07	6.5	4.4	<0.1	1.1	0.8<0.1		1<0.2	6.5<1.0	0.4<0.1	<0.1		0.2							
Acenaphthylene	mg/kg	20	6	76000	1.23	2.4	1.1	1.3<0.1	1.8	0.7<0.1	<1.0	<0.2	2.4<1.0	0.1<0.1	<0.1	<0.1	<0.1							
Anthracene	mg/kg	20	9	520000	3.36	12	6.4	3.7<0.1	3.5	1.8<0.1		1.2<0.2	12<1.0	0.9<0.1	<0.1	0.4								
Arsenic	mg/kg	20	20	640	22.7	220	10	17	18	12	5	15	31	14	11	220	4	7	29	-	-	-	-	-
Benzene	ug/kg	7		15				<10.0	<10.0			<10.0				<10.0								
Benzo[a]Anthracene	mg/kg	20	9		6.33	19	12	7.1<0.1	7.5	4.3<0.1	2.1<0.2	19<1.0	3.2<0.1	<0.1		1.5								
Benzo[a]Pyrene	mg/kg	20	9	76	5.79	16	11	7.2<0.1	6.9	4.1<0.1	1.9<0.2	16<1.0	3.6<0.1	<0.1		2.1								
Benzo[b]fluoranthene	mg/kg	20	9		5.73	14	13	7<0.1	5.6	4<0.1	2.1<0.2	16<1.0	4.3<0.1	<0.1		2.2								
Benzo[ghi]Perylene	mg/kg	20	9		3.79	12	7.7	3.9<0.1	3.6	2.5<0.1	1.3<0.2	12<1.0	2.3<0.1	<0.1		1.2								
Benzo[k]fluoranthene	mg/kg	20	9		4.24	16	5.2	3.4<0.1	5.1	2.4<0.1	1.5<0.2	16<1.0	3.8<0.1	<0.1		1.7								
Boron (water-soluble)	mg/kg	20		240000				<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Cadmium	mg/kg	20	6	410	2	4<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Chromium	mg/kg	20	20	8600	18.1	59	14	17	16	21	13	12	17	24	20	58	11	22	17	-	-	-	-	-
Chrysene	mg/kg	20	9		7.01	23	14	6.9<0.1	6.8	4<0.1	2.7<0.2	23<1.0	3.8<0.1	<0.1		1.5								
Copper	mg/kg	20	20	68000	60.9	380	74	59	27	55	35	24	40	110	99	330	7	23	95	-	-	-	-	-
Cyanide (Total)	mg/kg	20	6	49	7	16<1.0		16<1.0	6	6<1.0		2<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Dibenz[ah]Anthracene	mg/kg	20	7		1.99	5	3.1	1.7<0.1	1.6	1.2<0.1	<1.0	<0.2	5<1.0	1.1<0.1	<0.1	0.5								
Ethylbenzene	ug/kg	7		3200				<10.0	<10.0	<10.0			<10.0			<10.0								
Fluoranthene	mg/kg	20	11	23000	11	39	26	15<0.1	14	8.8<0.1	6.3	1.3	39	1.9	5.1<0.1	<0.1	3.2							
Fluorene	mg/kg	20	7	60000	2.36	7.3	4	2.3<0.1	1.8	0.8<0.1	<1.0	<0.2	7.3<1.0	0.3<0.1	<0.1	0.1								
Indeno(1,2,3-cd)Pyrene	mg/kg	20	9	76	3.4	11	6.8	3.3<0.1	3	2.3<0.1	1.2<0.2	11<1.0	2.3<0.1	<0.1		1.2								
Lead	mg/kg	20	20	2300	353	1600	150	210	86	180	92	50	120	570	340	320	600	14	14	170	-	-	-	-
M/P Xylene	mg/kg	7		3300				<10.0	<10.0	<10.0			<10.0			<10.0								
Mercury	mg/kg	20	5	1100	3.8	10<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	2<1.0	1	1<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Methyl tert-Butyl Ether	ug/kg	7		3800				<10.0	<10.0	<10.0			<10.0			<10.0								
Moisture	%	20	20		14.7	38	12	19	8.1	15	15	26	17	16	9.6	8.9	17	9.9	12	-	-	-	-	-
Naphthalene	mg/kg	20	8	110	3.26	8.6	5.1	15<0.1	2.7	3<0.1	1.2<0.2	8.6<1.0	0.4<0.1	<0.1		0.1								
Nickel	mg/kg	20	20	980	26	160	20	20	18	24	17	13	17	32	23	23	160	10	31	32	-	-	-	-
Ortho-Xylene	ug/kg	7		3700				<10.0	<10.0	<10.0			<10.0			<10.0								
PAH (total)	mg/kg	20	11		71.2	270	170	96<0.1	91	55<0.1	34	2.5	270	4.6	40<0.1	<0.1	21							
Phenanthrene	mg/kg	20	10	22000	10.7	42	24	12<0.1	13	5.4<0.1	5.8<0.2	42	1	3.3<0.1	<0.1	1.3								
Phenols (Mono)	mg/kg	20		380	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0	<1.0
Pyrene	mg/kg	20	11	54000	10.7	37	25	15<0.1	15	8.6<0.1	6	1.2	37	1.8	4.9<0.1	<0.1	3.2							
Retained on 10mm sieve	%	20			<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Soil Organic Matter	%	20	19		5.55	15	8.9	4.8	1.7	4.9	4.4	2.7	4	7	10	5.7	13<0.1	1.9	-	-	-	-	-	-
Sulphate	g/l	20	19		0.123	1.2	0.2	0.06	0.01	0.32	1.2	0.02	0.07	0.02	0.02	0.07	0.01	0.05	-	0.05	-	-	-	-
TPH (C10-C12 aliphatic)	mg/kg	7	2	6100	6.5	9		9	4<1.0			<1.0				<1.0								
TPH (C10-C12 aromatic)	mg/kg	7	3	11000	11	18		18	12	3		<2.0				<2.0								
TPH (C10-C15)	mg/kg	20	14	6100	281	990	560	690<1.0	990	360	98	310<1.0	410	180	99	<1.0	<1.0	-	-	(13) 560	-	-	-	-
TPH (C12-C16 aliphatic)	mg/kg	7	4	43000	9.25	17		17	13	5			2			<1.0								
TPH (C12-C16 aromatic)	mg/kg	7	5	35000	38.4	96		96	40	12			5			<1.0								
TPH (C16-C21 aliphatic)	mg/kg	7	4	1000000	9.5	16		16	16	4		2				<1.0								
TPH (C16-C21 aromatic)	mg/kg	7	6	29000	104	270		270	160	70			19			<1.0								
TPH (C21-C35 aliphatic)	mg/kg	7	5	1000000	44.6	130		66	150	30		6				<2.0								
TPH (C21-C35 aromatic)	mg/kg	7	7	29000	183	470		470	330	180		25				4								
TPH (C5-C6 aliphatic)	ug/kg	7		2400				<100.0	<100.0	<100.0		<100.0				<100.0								
TPH (C5-C7 aromatic)	ug/kg	7						<100.0	<100.0	<100.0		<100.0				<100.0								
TPH (C6-C8 aliphatic)	ug/kg	7		5300				<100.0	<100.0	<100.0		<100.0				<100.0								
TPH (C7-C8 aromatic)	ug/kg	7						<100.0	<100.0	<100.0		<100.0				<100.0								
TPH (C8-C10 aliphatic)	ug/kg	7		1300				<100.0	<100.0	<100.0		<100.0				<100.0								
TPH (C8-C10 aromatic)	ug/kg	7		2300				<100.0	<100.0	<100.0		<100.0				<100.0								
Toluene	ug/kg	7		33000				<10.0	<10.0	<10.0		<10.0				<10.0								
Zinc	mg/kg	20	20	730000	289	1100	62	110	61	170	87	34	120	250	330	980	580	28	63	250	-	-	-	-
pH		20	20		8.48	10	7.8	8.8	7.9	9.8	8.7	7.9	8.3	8.2	8.3	10	7.8	7.7	8.1	-	-	-	-	-

Ramboll 2017 Water And Leachate

Customer Sample Reference					RP20	RP01	WS103	WS107
Type					Groundwater	Leachate	Leachate	Leachate
Determinand	Units	EQS	DWS	MRV				
Acenaphthene	ug/l				0.02	0.27	0.07	0.02
Acenaphthylene	ug/l				<0.01	0.27	0.07	0.02
Anthracene	ug/l	0.1			0.01	0.52	0.16	0.01
Arsenic	ug/l	50	7.5	5	0.4	3.6	2.9	<0.2
Benzo(a)Anthracene	ug/l			<0.01	0.01	1.5	0.47	0.01
Benzo(a)Pyrene	ug/l	0.0017	0.005	<0.01	<0.01	2.5	0.56	0.01
Benzo(b)fluoranthene	ug/l	0.0017	0.075	<0.01	<0.01	2.1	0.65	0.02
Benzo(ghi)Perylene	ug/l	0.0017	0.05	<0.01	<0.01	2.3	0.56	0.01
Benzo(k)fluoranthene	ug/l	0.0017	0.05	<0.01	<0.01	1.6	0.41	0.01
Boron	mg/l		0.75		0.16	0.01	0.02	0.01
Cadmium	ug/l	0.25	5	<0.05	0.05	<0.02	0.02	<0.02
Chromium	ug/l	4.7	50		<1.0	1	2	<1.0
Chrysene	ug/l			<0.01	0.01	1.6	0.54	0.02
Copper	ug/l	1			<0.5	1.6	2.6	0.5
Cyanide(Total)	mg/l	1	50		<0.05	<0.05	<0.05	<0.05
Dibenzo(ah)Anthracene	ug/l			<0.01	<0.01	0.32	0.09	<0.01
Fluoranthene	ug/l	0.0063			0.01	3	0.94	0.03
Fluorene	ug/l				0.02	0.18	0.04	0.03
Indeno(123-cd)Pyrene	ug/l	0.0017	0.05	<0.01	<0.01	1.7	0.41	0.01
Lead	ug/l	1.2	5	<0.2	<0.3	0.9	2.3	<0.3
Mercury	ug/l	0.07	1	<0.05	<0.05	<0.05	<0.05	<0.05
Naphthalene	ug/l	2			0.04	0.25	0.1	0.06
Nickel	ug/l	4			6	<1.0	<1.0	<1.0
PAH(total)	ug/l				0.16	22	6.4	0.35
Phenanthrene	ug/l				0.02	1.1	0.41	0.06
Phenol	ug/l	7.7			<0.5	<0.5	0.8	<0.5
Pyrene	ug/l				0.02	2.9	0.89	0.03
Sulphate	mg/l	400	250		290	5.3	11	1.6
TPH (C10-C35)	mg/l	0.01	0.09		0.27	0.96	0.05	0.03
Zinc	ug/l	10.9			6	6	4	3
pH		<5, 9>			6.9	8.4	8.5	8.5

key

blue - exceeds EQS

Green - exceeds DWS

Pink - exceeds EQS and DWS

Ramboll 2019 Soils Data

Customer Sample Reference			GAC Commercial/ Industrial	Max	WS01	WS02
Depth					3.5	2.8
Bottom Depth					3.6	
Determinant	LOD	Units				
Total Organic Carbon	0.1	%			0.9	1.2
Loss on Ignition	0.1	%			2.4	3.6
BTEX (Sum)	0.04	mg/kg			(13) <0.040	(13) <0.040
PCB EC7 (Sum)	0.007	mg/kg			(9) <0.070	(107) <0.007
Total Petroleum Hydrocarbons C10-C40 (Sum)	1	mg/kg			(13) 5800	(13) 7
PAH (Sum)	1.6	mg/kg			<1.6	<1.6
pH					5.8	7.7
Acid Neutralising Capacity (pH 4)	2	Mol/kg			<2	<2
Acid Neutralising Capacity (pH 7)	2	Mol/kg			<2	<2
Phenols (Total-Mono)	1	mg/kg			<1	<1
Moisture @105C	0.1	%			5.8	8.3
Retained on 10mm sieve	0.1	%				<0.1
Asbestos ID					ND	ND
Arsenic	2	mg/kg	640	6	<2	6
Boron (water-soluble)	1	mg/kg	240000	0	<1	<1
Cadmium	1	mg/kg	410	0	<1	<1
Chromium	1	mg/kg	8600	21	11	21
Chromium (trivalent)	2	mg/kg		21	11	21
Chromium (hexavalent)	0.1	mg/kg		0	<0.1	<0.1
Copper	1	mg/kg	68000	22	12	22
Lead	1	mg/kg	2300	11	7	11
Mercury	1	mg/kg	1100	0	<1	<1
Nickel	1	mg/kg	980	31	13	31
Selenium	3	mg/kg		0	<3	<3
Zinc	1	mg/kg	730000	55	38	55
(Water Soluble) Sulphate expressed as SO4	0.05	g/l		0.09	<0.01	0.09
Sulphide	10	mg/kg		0	<10	<10
Cyanide (Total)	1	mg/kg	49	0	<1	<1
Benzene	10	ug/kg	15	0	(13) <10	(13) <10
Toluene	10	ug/kg	33000	0	<10	<10
EthylBenzene	10	ug/kg	3200	0	<10	<10
Meta/Para-Xylene	10	ug/kg	3300	0	<10	<10
Ortho-Xylene	10	ug/kg	3700	0	<10	<10
Polychlorinated biphenyl BZ#101	1	ug/kg			(9) <10	<1
Polychlorinated biphenyl BZ#118	1	ug/kg			(9) <10	<1
Polychlorinated biphenyl BZ#138	1	ug/kg			(9) <10	<1
Polychlorinated biphenyl BZ#153	1	ug/kg			(9) <10	<1
Polychlorinated biphenyl BZ#180	1	ug/kg			(9) <10	<1
Polychlorinated biphenyl BZ#28	1	ug/kg			(9) <10	<1
Polychlorinated biphenyl BZ#52	1	ug/kg			(9) <10	<1
Naphthalene	0.1	mg/kg	110	0	<0.1	<0.1
Acenaphthylene	0.1	mg/kg	76000	0	<0.1	<0.1
Acenaphthene	0.1	mg/kg	75000	0.1	0.1	<0.1
Fluorene	0.1	mg/kg	60000	0	<0.1	<0.1
Phenanthrene	0.1	mg/kg	22000	0	<0.1	<0.1
Anthracene	0.1	mg/kg	520000	0	<0.1	<0.1
Fluoranthene	0.1	mg/kg	23000	0	<0.1	<0.1
Pyrene	0.1	mg/kg	54000	0	<0.1	<0.1
Benzo(a)Anthracene	0.1	mg/kg			<0.1	<0.1
Chrysene	0.1	mg/kg			<0.1	<0.1
Benzo(b)fluoranthene	0.1	mg/kg			<0.1	<0.1
Benzo(k)fluoranthene	0.1	mg/kg			<0.1	<0.1
Benzo(a)Pyrene	0.1	mg/kg	76	0	<0.1	<0.1
Indeno(123-cd)Pyrene	0.1	mg/kg	76	0	<0.1	<0.1
Dibenzo(ah)Anthracene	0.1	mg/kg			<0.1	<0.1
Benzo(ghi)Perylene	0.1	mg/kg			<0.1	<0.1
Coronene	0.1	mg/kg			<0.1	<0.1
PAH EA(8)	0.1	mg/kg			<0.1	<0.1
Total Petroleum Hydrocarbons (C5-C10)	0.1	mg/kg			<0.10	<0.10
Total Petroleum Hydrocarbons (C10-C12)	1	mg/kg	6100	0	(9,13) <10	(13) <1
Total Petroleum Hydrocarbons (C12-C16)	1	mg/kg	35000	0	(13) 45	(13) <1
Total Petroleum Hydrocarbons (C16-C21)	1	mg/kg	29000	0	(13) 170	(13) <1
Total Petroleum Hydrocarbons (C21-C35)	1	mg/kg	29000	0	(13) 5300	(13) 7
Total Petroleum Hydrocarbons (C35-C40)	1	mg/kg	29000	0	(13) 280	(13) <1
Total Petroleum Hydrocarbons C5-C40 (sum)	10	mg/kg			(13) 5800	(13) 7

Analytical Report Number: 20-93903

Project / Site name: First Street, Manchester
Your Order No: 1620034045

Lab Sample Number				1479281	1479282	1479283	1479284	1479285	1479286	1479287	1479288	1479289	1479291	1479292	1479293	1479294	1479295	1479296	1479297	1479298	1479299	1479300
Sample Reference				Y11	Y11	Y11	Y11	Y11	Y14	Y14	Y15	Y15	Y15	Y12	Y12	Y12	Y12	Y13	Y13	Y13	Y13	
Sample Number				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	
Depth (m)				0.025-20	0.30-5.50	0.025-20	0.02-1.00	0.50-1.00	0.10-1.00	0.025-50	0.025-50	0.025-50	1.00-1.20	0.025-50	0.025-50	0.025-50	1.00-1.20	0.025-50	0.025-50	0.025-50	0.025-50	
Date Sampled				16/03/2020	16/03/2020	16/03/2020	16/03/2020	16/03/2020	16/03/2020	16/03/2020	16/03/2020	16/03/2020	16/03/2020	19/03/2020	19/03/2020	19/03/2020	19/03/2020	19/03/2020	19/03/2020	19/03/2020	19/03/2020	
Time Taken				None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	None Supplied	
Analytical Parameter (Soil Analysis)				usage	maximum per cent	Analysis	Analysis	Analysis	Analysis	Analysis	Analysis	Analysis	Analysis	Analysis	Analysis	Analysis	Analysis	Analysis	Analysis	Analysis	Analysis	
Stone Content	%	0.1	NONE	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	
	%	N/A	NONE	16	14	12	9.8	14	15	15	14	10	16	7.4	10	17	9.6	25	12	13	10	
	%	0.001	NONE	1.7	1.9	2.0	2.0	2.0	2.0	1.7	1.8	2.0	2.0	1.8	2.0	1.9	2.0	1.9	2.0	2.0	1.5	
	%	0.001	NONE	0.071	-	-	-	-	-	-	-	-	-	0.001	< 0.001	-	-	-	-	-	-	
Asbestos in Soil Screen / Identification Name				Type	N/A	ISO 17025	Asbestos	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Asbestos in Soil				Type	N/A	ISO 17025	Detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Detected	Detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	Not-detected	
Asbestos Quantification (Phase 2)				%	0.001	ISO 17025	0.071	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Asbestos Quantification Total				%	0.001	ISO 17025	0.071	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
General Inorganics				unit	N/A	HCERTS	7.7	8.2	8	8.1	9.2	8.5	8.3	8.4	9.1	7.7	8.8	8.3	7.9	8.4	8.2	
Total Cations				mg/kg	1	HCERTS	49	4.00	4	< 1	< 1	< 1	< 1	< 1	< 1	< 1	2	< 1	< 1	< 1	< 1	< 1
Water Soluble Sulphate as SO ₄ 16hr extraction (2:1)				mg/kg	2.5	HCERTS	2100.00	57	61	80	41	210	74	74	83	180	460	1200	310	570	2100	
Water soluble SO ₄ 16hr extraction (2:1) calcinate (mg/kg)				g/L	0.00125	HCERTS	1.10	0.028	0.03	0.04	0.021	0.11	0.037	0.037	0.041	0.092	0.23	0.58	0.16	0.28	1.1	
Total Phenols				mg/kg	1	HCERTS	1.30	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Total Phenols (monohydrate)				mg/kg	1	HCERTS	1.30	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0	< 1.0
Speciated PAHs				mg/kg	0.05	HCERTS	110	7.70	1.7	< 0.05	< 0.05	0.32	< 0.05	0.52	< 0.05	0.81	0.68	< 0.05	1.5	< 0.05	< 0.05	< 0.05
Acenaphthylene				mg/kg	0.05	HCERTS	76000	1.10	0.53	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.63	0.44	< 0.05	0.37	< 0.05	< 0.05	< 0.05
Acenaphthylene				mg/kg	0.05	HCERTS	76000	1.10	0.53	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.63	0.44	< 0.05	0.37	< 0.05	< 0.05	< 0.05
Fluorene				mg/kg	0.05	HCERTS	60000	2.40	2.6	< 0.05	< 0.05	0.38	< 0.05	0.53	< 0.05	1.5	0.5	< 0.05	2.6	< 0.05	< 0.05	< 0.05
Phenanthrene				mg/kg	0.05	HCERTS	22000	20.00	24	0.71	0.77	3.8	0.98	8.3	0.31	11	4.2	< 0.05	18	< 0.05	< 0.05	< 0.05
Anthracene				mg/kg	0.05	HCERTS	7200	7.20	7.2	0.18	0.21	0.80	0.22	1.5	< 0.05	3.8	1.7	< 0.05	4.5	< 0.05	< 0.05	< 0.05
Fluoranthene				mg/kg	0.05	HCERTS	23000	40.00	42	0.86	1	4.5	1.8	8	0.54	23	9.3	< 0.05	24	< 0.05	< 0.05	< 0.05
Pyrene				mg/kg	0.05	HCERTS	29000	38.00	38	0.95	0.99	3.9	1.6	8	0.51	24	10	< 0.05	21	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05
Chrysene				mg/kg	0.05	HCERTS	36000	16.00	16	0.53	0.48	2.1	1.2	4.4	0.26	12	4.9	< 0.05	8	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05
Benzo[a]fluoranthene				mg/kg	0.05	HCERTS	22000	22.00	22	0.72	0.7	2.1	1.5	4.8	0.3	14	5	< 0.05	13	< 0.05	< 0.05	< 0.05

APPENDIX D

GAS MONITORING DATA

Plot 9 - Gas monitoring data

BH ID	No of Rounds	Peak Concentrations				CS	ADJ. CS	Notes
		Flow	CH4	CO2	GSV			
CP/RC111	2	0.1	0.1	0.4	0.0004	1	1	Dual install: No1 - 1.0-2.0mbgl and No2 - 4.0-6.0mbgl. Peat layer within BH but response zones do not cover peat layer (peat from 29.05-27.85mAOD/1.8 to 3.0mbgl) so will be removed with Basement dig.
RP20	2	0.1	1.5	9.3	0.0093	1	2	(R2 CO2= 5.6%). Response zone within Sandstone (6-16mbgl) Geology underlying SST is more SST Marl then coal measures, and 250-350m from a recorded fault. Also depleted o2 at o.1%). BH destroyed after R2.
WS103	1(4)	0.1	0.1	0.9	0.0009	1	1	Response zone with MG from 2-4. BH flooded on 3 occasions.
WS105	2	0.1	0.1	3.3	0.0033	1	1	Response zone 3.50-5m within granular MG.
WS107	6	0.1	0.1	2.4	0.0001	1	1	Response zone 1-3m within granular and cohesive MG.

link to geological mapping <http://www.largeimages.bgs.ac.uk/iip/mapsportal.html?id=1009338>

Offsite gas monitoring

RP17	6	0.1	0.1	0.5	0.0005	1	1	installed within base of cohesive till and sandstone -6m to 12m
RP18	6	0.1	0.1	0.3	0.0003	1	1	1-4 within granular MG
WS102	6	0.1	0.1	1.2	0.0012	1	1	1-3within granular MG
WS104	6	0.1	0.1	0.8	0.0008	1	1	1-2within granular MG
WS108	6	0.1	0.1	0.1	0.0033	1	1	4-5 within PEAT however base of well dips at 3.64 after each round!

Worst Case (RP20 in Plot 9) 0.1 1.5 9.3 0.0093 1 2

CS2 threshold > 0.07 GSV
Order of magnitude lower.

1. WASTE CLASSIFICATION

1.1. Methodology

The assessment has been undertaken using available soil chemical data and HazWasteOnline, a web-based tool for classifying waste. The software utilises Environment Agency guidance and European regulations to classify samples in line with current requirements. Further details of the waste classification methodology are provided in Appendix B.

1.2. Summary Waste Classification

The waste assessment undertaken by Ramboll in October 2019 for Plot 9 and 10 stated that a total of 31 soil samples from Cundall's investigation (2016), 20 soil samples from Ramboll's investigation (2017), and 3 samples from the 2019 investigation were analysed for a range of chemical contaminants.

On Plot 9 only, this equates to three samples from the Cundall's Investigation (2016), 12 samples from Ramboll investigation (2017), three samples from the Ramboll investigation (2019) and 21 samples from the most recent Ramboll Investigation (2020).

The Hazwasteonline output is included within Appendix E.

From previous investigations, one sample on Plot 9 was hazardous due to elevated hydrocarbons and one sample for asbestos above the hazardous WAC. The *Ramboll Plot 9 and Plot 10 Waste Classification Letter Report (November 2019)* states that WS102 was determined hazardous due to elevated TPH concentrations of 1640mg/kg with associated elevated benzo(a)pyrene at a depth of between 1.0-1.20m bgl within the made ground. There is nothing to suggest a hotspot of hydrocarbon impacts in this area and statistical analysis considering this material type as a whole indicated an overall classification of non-hazardous for this material.

Table 7.1 summarises the waste classification available for different soil types.

Table 7.1 Summary of Waste Classification by material type Plot 9

Stratum	Total number of samples	Number of hazardous samples Location: hazardous properties	Number of non-hazardous samples
Made Ground Black Ashy Material	6	0	6
Made Ground Cohesive / Mixed	18	1 WS102 (Cundalls 2016) 1-1.2m bgl. Asbestos impact in discrete location.	17
Possible Made Ground/Reworked Natural	7	0	7
Alluvium and Peat	1	0	1
Glaciofluvial Deposits	5	0	5

Current data suggests the asbestos contamination is within discrete areas; of note are areas of backfill in and around underground infrastructure (note was made of a bunker during meeting discussions, however, the location of this has not been ascertained). A localised area in the centre of Plot 9 has been identified as a potential asbestos hotspot. Data from the recent investigation identified asbestos in three out of 21 samples with all concentrations below the WAC limit for hazardous waste.

1.3. Waste Acceptance Criteria (WAC) Analysis

21 samples from the March 2020 sampling were analysed for the inert landfill WAC suite. Laboratory certificates are provided in Appendix F for reference.

Results are discussed in more detail in the Ramboll March 2020 letter report.

In summary, the black ashy material will be suitable for non-hazardous landfill but will not pass the WAC for inert landfill.

The cohesive made ground, possible made ground / reworked glacial deposits and glacial deposits all have very similar results with slightly elevated antimony and/or fluoride in some samples. It would be prudent to check with the receiving facility on their facility acceptance criteria as they may be able to accept this material at an inert waste landfill site.

1.4. Conclusion

The ground conditions identified during all stages of investigation completed so far are summarised in Table 7.2 based on the Ramboll March 2020 letter report. This provides an estimate of the likely potential split of material types anticipated to be encountered during the proposed development excavation and their likely landfill class for disposal costing purposes at this stage.

Table 7.2 – Summary of materials and waste classification

Strata	Waste classification	Landfill class based on WAC analysis
Made Ground Granular (hardstanding materials)	Non-hazardous. Allowance for localised asbestos impacts which would be classified as hazardous	Non-hazardous. Asbestos impacted materials – hazardous asbestos facility.
Made Ground Black Ashy Material	Non-hazardous. Allowance for localised asbestos impacts which would be classified as hazardous.	Non-hazardous. Asbestos impacted materials – hazardous asbestos facility.
Made Ground Cohesive Mixed	Non-hazardous. Potential for localised pockets of asbestos containing materials (ACMs) in deeper made ground in foundation backfill. Hand picking of asbestos should allow the quantities of materials classified as hazardous to be minimised.	WAC data similar for all strata, not always easy to distinguish natural and reworked natural deposits. WAC failed for leachable antimony and fluoride. Exceedances were generally only marginal. Check with the Landfill facility on their acceptance criteria as they may be able to accept this material at an inert waste landfill site. Potential for small volume of hazardous material due to asbestos.
Possible Made Ground / reworked glacial clays	Non-hazardous.	WAC data similar for all strata, not always easy to distinguish natural and reworked natural deposits.
Glaciofluvial	Non-hazardous.	WAC failed for leachable antimony and fluoride. Exceedances were generally only marginal. Check

		with the Landfill facility on their acceptance criteria as they may be able to accept this material at an inert waste landfill site.
Alluvium	Non-hazardous.	Non-hazardous (organic content makes it unlikely this will pass inert WAC.)
Sandstone	Non-hazardous.	Inert

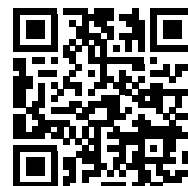
The data suggests that there may be a small percentage of soils impacted with a quantifiable amount of asbestos but below the WAC limit. This may require consideration in relation to type of landfill which could accept this material.

If there are any previously unidentified areas of contamination noted via visual or olfactory evidence during any excavations, these will have to be stockpiled separately and analysis will be required to determine the likely nature of the material and delineate any potentially impacted areas.

All the chemical data should be sent to the receiving landfill to determine if they are able to accept the waste prior to disposal.

The classification of waste reported above must be confirmed by the receiving landfill prior to disposal, under Duty of Care. Any material to be disposed of as hazardous or inert must have WAC analysis provided to confirm appropriate class of landfill.

Waste Classification Report



LRQ57-ZC4M7-GUME2

Job name

Plot 9 First Street 1620002943

Description/Comments

Project

Site

Related Documents

#	Name	Description
None		

Waste Stream Template

Ramboll typical metals, hydrocarbons and misc

Classified by

Name:
Hazel Comyn
Date:
23 Oct 2019 11:42 GMT
Telephone:
07870 809 789

Company:
Ramboll UK Ltd
1 Broad Gate
The Headrow
Leeds
LS1 8EQ

Report

Created by: Hazel Comyn
Created date: 23 Oct 2019 11:42 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	WS01	3.50	Non Hazardous		2
2	WS02	2.80	Non Hazardous		5
3	WS04	3.50	Hazardous	HP 14	8

Appendices	Page
Appendix A: Classifier defined and non CLP determinands	11
Appendix B: Rationale for selection of metal species	12
Appendix C: Version	13

Classification of sample: WS01

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

Sample details

Sample Name:	WS01	LoW Code:	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	3.50 m	Entry:		17 05 04 (Soil and stones other than those mentioned in 17 05 03)
Moisture content:	5.8% (dry weight correction)			

Hazard properties

None identified

Determinands

Moisture content: 5.8% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	pH				5.8 pH		5.8	pH	5.8 pH		
2	arsenic { arsenic trioxide }				<2 mg/kg	1.32	<2.641	mg/kg	<0.000264 %		<LOD
	033-003-00-0	215-481-4	1327-53-3								
3	boron { boron tribromide/trichloride/trifluoride (combined) }				<1 mg/kg	13.43	<13.43	mg/kg	<0.00134 %		<LOD
			10294-33-4, 10294-34-5, 7637-07-2								
4	cadmium { cadmium sulfide }			1	<1 mg/kg	1.285	<1.285	mg/kg	<0.0001 %		<LOD
	048-010-00-4	215-147-8	1306-23-6								
5	chromium { chromium(III) oxide }				11 mg/kg	1.462	15.196	mg/kg	0.00152 %	✓	
		215-160-9	1308-38-9								
6	copper { dicopper oxide; copper (I) oxide }				12 mg/kg	1.126	12.77	mg/kg	0.00128 %	✓	
	029-002-00-X	215-270-7	1317-39-1								
7	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	7 mg/kg		6.616	mg/kg	0.000662 %	✓	
	082-001-00-6										
8	mercury { mercury dichloride }				<1 mg/kg	1.353	<1.353	mg/kg	<0.000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7								
9	nickel { nickel dihydroxide }				13 mg/kg	1.579	19.408	mg/kg	0.00194 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
10	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<3 mg/kg	2.554	<7.661	mg/kg	<0.000766 %		<LOD
	034-002-00-8										
11	zinc { zinc sulphate }				38 mg/kg	2.469	88.689	mg/kg	0.00887 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
12	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, }				<1 mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
	ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }									
	006-007-00-5									
13	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
14	acenaphthene				0.1 mg/kg		0.0945 mg/kg	0.00000945 %	✓	
		201-469-6	83-32-9							
15	acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8							
16	anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7							
17	benzo[a]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
18	benzo[a]pyrene; benzo[def]chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
19	benzo[b]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
20	benzo[ghi]perylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2							
21	benzo[k]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
22	chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
23	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
24	fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0							
25	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7							
26	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5							
27	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
28	phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8							
29	pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0							
30	confirm TPH has NOT arisen from diesel or petrol				☑					
31	TPH (C6 to C40) petroleum group				5800 mg/kg		5482.042 mg/kg	0.548 %	✓	
			TPH							
Total:								0.566 %		

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 Hazard unlikely given composition and site conditions

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.548%)

Classification of sample: WS02


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

Sample details

Sample Name:	WS02	LoW Code:	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	2.80 m	Entry:		17 05 04 (Soil and stones other than those mentioned in 17 05 03)
Moisture content:	8.3%			
(dry weight correction)				

Hazard properties

None identified

Determinands

Moisture content: 8.3% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	pH				7.7 pH		7.7 pH	7.7 pH		
2	arsenic { arsenic trioxide }				6 mg/kg	1.32	7.315 mg/kg	0.000731 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	boron { boron tribromide/trichloride/trifluoride (combined) }				<1 mg/kg	13.43	<13.43 mg/kg	<0.00134 %		<LOD
			10294-33-4, 10294-34-5, 7637-07-2							
4	cadmium { cadmium sulfide }			1	<1 mg/kg	1.285	<1.285 mg/kg	<0.0001 %		<LOD
	048-010-00-4	215-147-8	1306-23-6							
5	chromium { chromium(III) oxide }				21 mg/kg	1.462	28.34 mg/kg	0.00283 %	✓	
		215-160-9	1308-38-9							
6	copper { dicopper oxide; copper (I) oxide }				22 mg/kg	1.126	22.871 mg/kg	0.00229 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
7	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	11 mg/kg		10.157 mg/kg	0.00102 %	✓	
	082-001-00-6									
8	mercury { mercury dichloride }				<1 mg/kg	1.353	<1.353 mg/kg	<0.000135 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
9	nickel { nickel dihydroxide }				31 mg/kg	1.579	45.212 mg/kg	0.00452 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
10	selenium { selenium compounds with the exception of cadmium selenide and those specified elsewhere in this Annex }				<3 mg/kg	2.554	<7.661 mg/kg	<0.000766 %		<LOD
	034-002-00-8									
11	zinc { zinc sulphate }				55 mg/kg	2.469	125.403 mg/kg	0.0125 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
12	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
	ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }									
	006-007-00-5									
13	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
14	acenaphthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-469-6	83-32-9							
15	acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8							
16	anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-371-1	120-12-7							
17	benzo[a]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
18	benzo[a]pyrene; benzo[def]chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
19	benzo[b]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
20	benzo[ghi]perylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-883-8	191-24-2							
21	benzo[k]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
22	chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
23	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
24	fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-912-4	206-44-0							
25	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-695-5	86-73-7							
26	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-893-2	193-39-5							
27	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
28	phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		201-581-5	85-01-8							
29	pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		204-927-3	129-00-0							
30	confirm TPH has NOT arisen from diesel or petrol				☒					
31	TPH (C6 to C40) petroleum group				7 mg/kg		6.464 mg/kg	0.000646 %	✓	
			TPH							
Total:								0.0274 %		

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 Hazard unlikely given composition and site conditions

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00064%)

Classification of sample: WS04

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

Sample details

Sample Name:	WS04	LoW Code:	
Sample Depth:	3.50 m	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	19%	Entry:	17 05 03 * (Soil and stones containing hazardous substances)
	(dry weight correction)		

Hazard properties

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

Hazard Statements hit:

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

Because of determinands:

dicopper oxide; copper (I) oxide: (compound conc.: 0.123%)

lead compounds with the exception of those specified elsewhere in this Annex: (Note 1 conc.: 0.118%)

zinc sulphate: (compound conc.: 0.133%)

Determinands

Moisture content: 19% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	pH				8.2	pH		8.2	pH	8.2 pH		
2	arsenic { arsenic trioxide }				25	mg/kg	1.32	27.738	mg/kg	0.00277 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
3	boron { boron tribromide/trichloride/trifluoride (combined) }				<1	mg/kg	13.43	<13.43	mg/kg	<0.00134 %		<LOD
			10294-33-4, 10294-34-5, 7637-07-2									
4	cadmium { cadmium sulfide }			1	1	mg/kg	1.285	1.08	mg/kg	0.000084 %	✓	
	048-010-00-4	215-147-8	1306-23-6									
5	chromium { chromium(III) oxide }				15	mg/kg	1.462	18.423	mg/kg	0.00184 %	✓	
		215-160-9	1308-38-9									
6	copper { dicopper oxide; copper (I) oxide }				1300	mg/kg	1.126	1229.962	mg/kg	0.123 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
7	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	1400	mg/kg		1176.471	mg/kg	0.118 %	✓	
	082-001-00-6											
8	mercury { mercury dichloride }				5	mg/kg	1.353	5.687	mg/kg	0.000569 %	✓	
	080-010-00-X	231-299-8	7487-94-7									
9	nickel { nickel dihydroxide }				21	mg/kg	1.579	27.874	mg/kg	0.00279 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
10	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<3 mg/kg	2.554	<7.661 mg/kg	<0.000766 %		<LOD
	034-002-00-8									
11	zinc { zinc sulphate }				640 mg/kg	2.469	1328.025 mg/kg	0.133 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
12	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
13	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
14	acenaphthene				0.4 mg/kg		0.336 mg/kg	0.0000336 %	✓	
		201-469-6	83-32-9							
15	acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		205-917-1	208-96-8							
16	anthracene				1.2 mg/kg		1.008 mg/kg	0.000101 %	✓	
		204-371-1	120-12-7							
17	benzo[a]anthracene				4 mg/kg		3.361 mg/kg	0.000336 %	✓	
	601-033-00-9	200-280-6	56-55-3							
18	benzo[a]pyrene; benzo[def]chrysene				2.9 mg/kg		2.437 mg/kg	0.000244 %	✓	
	601-032-00-3	200-028-5	50-32-8							
19	benzo[b]fluoranthene				2.6 mg/kg		2.185 mg/kg	0.000218 %	✓	
	601-034-00-4	205-911-9	205-99-2							
20	benzo[ghi]perylene				2 mg/kg		1.681 mg/kg	0.000168 %	✓	
		205-883-8	191-24-2							
21	benzo[k]fluoranthene				2.1 mg/kg		1.765 mg/kg	0.000176 %	✓	
	601-036-00-5	205-916-6	207-08-9							
22	chrysene				4.1 mg/kg		3.445 mg/kg	0.000345 %	✓	
	601-048-00-0	205-923-4	218-01-9							
23	dibenz[a,h]anthracene				0.5 mg/kg		0.42 mg/kg	0.000042 %	✓	
	601-041-00-2	200-181-8	53-70-3							
24	fluoranthene				7.1 mg/kg		5.966 mg/kg	0.000597 %	✓	
		205-912-4	206-44-0							
25	fluorene				0.3 mg/kg		0.252 mg/kg	0.0000252 %	✓	
		201-695-5	86-73-7							
26	indeno[123-cd]pyrene				1.5 mg/kg		1.261 mg/kg	0.000126 %	✓	
		205-893-2	193-39-5							
27	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
28	phenanthrene				5.7 mg/kg		4.79 mg/kg	0.000479 %	✓	
		201-581-5	85-01-8							
29	pyrene				6.4 mg/kg		5.378 mg/kg	0.000538 %	✓	
		204-927-3	129-00-0							
30	confirm TPH has NOT arisen from diesel or petrol				☑					
31	TPH (C6 to C40) petroleum group				79 mg/kg		66.387 mg/kg	0.00664 %	✓	
			TPH							
Total:								0.394 %		

Key

- User supplied data
- Determinand values ignored for classification, see column 'Conc. Not Used' for reason
- Hazardous result
- Determinand defined or amended by HazWasteOnline (see Appendix A)
- Speciated Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD Below limit of detection
- 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 Hazard unlikely given composition and site conditions

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00664%)

Appendix A: Classifier defined and non CLP determinands

▪ pH (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

▪ boron tribromide/trichloride/trifluoride (combined) (CAS Number: 10294-33-4, 10294-34-5, 7637-07-2)

Conversion factor: 13.43
Description/Comments: Combines the hazard statements and the average of the conversion factors for boron tribromide, boron trichloride and boron trifluoride
Data source: N/A
Data source date: 06 Aug 2015
Hazard Statements: Skin Corr. 1B H314 , Skin Corr. 1A H314 , Acute Tox. 2 H300 , Acute Tox. 2 H330 , EUH014

▪ chromium(III) oxide (EC Number: 215-160-9, CAS Number: 1308-38-9)

Conversion factor: 1.462
Description/Comments: Data from C&L Inventory Database
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 17 Jul 2015
Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Repr. 1B H360FD , Skin Sens. 1 H317 , Resp. Sens. 1 H334 , Skin Irrit. 2 H315 , STOT SE 3 H335 , Eye Irrit. 2 H319 , Acute Tox. 4 H302 , Acute Tox. 4 H332

▪ lead compounds with the exception of those specified elsewhere in this Annex

CLP index number: 082-001-00-6
Description/Comments: Least-worst case: Lead REACH Consortium considers some lead compounds Carcinogenic category 2B
Data source: Regulation 1272/2008/EC - Classification, labelling and packaging of substances and mixtures. (CLP)
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 2A (Sup 7, 87) 2006; Lead REACH Consortium
www.reach-lead.eu/substanceinformation.html. Review date 29/09/2015

▪ 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

▪ 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

▪ 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

▪ 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

• **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

• **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

• **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

• **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2 H351

• **phenanthrene** (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 06 Aug 2015
Hazard Statements: 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

• **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

• **confirm TPH has NOT arisen from diesel or petrol**

Description/Comments: Chapter 3, section 4b requires a positive confirmation for benzo[a]pyrene to be used as a marker in evaluating Carc. 1B; H350 (HP 7) and Muta. 1B; H340 (HP 11)
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

• **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

Appendix B: Rationale for selection of metal species

arsenic {arsenic trioxide}

Worst case species based on risk phrases

boron {boron tribromide/trichloride/trifluoride (combined)}

Worst case species based on risk phrases

cadmium {cadmium sulfide}

Worst case species based on risk phrases

chromium {chromium(III) oxide}

Worst case species based on risk phrases

copper {dicopper oxide; copper (I) oxide}

Most likely common species

lead {lead compounds with the exception of those specified elsewhere in this Annex}

Worst case species based on risk phrases

mercury {mercury dichloride}

Worst case species based on risk phrases

nickel {nickel dihydroxide}

Worst case species based on risk phrases

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

Worst case species based on risk phrases

zinc {zinc sulphate}

Worst case species based on risk phrases

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

Worst case species

Appendix C: Version

HazWasteOnline Classification Engine: **WM3 1st Edition v1.1, May 2018**

HazWasteOnline Classification Engine Version: 2019.256.4006.8076 (13 Sep 2019)

HazWasteOnline Database: 2019.256.4006.8076 (13 Sep 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



TJVXV-89JLU-B39GN

Job name

Representative Granular MG sample 95th percentile

Description/Comments

Project

Site

Related Documents

#	Name	Description
None		

Waste Stream Template

Ramboll typical metals, hydrocarbons and misc

Classified by

Name:
Hazel Comyn
Date:
12 Nov 2019 12:24 GMT
Telephone:
07870 809 789

Company:
Ramboll UK Ltd
1 Broad Gate
The Headrow
Leeds
LS1 8EQ

Report

Created by: Hazel Comyn
Created date: 12 Nov 2019 12:24 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	Sample 1		Non Hazardous		2

Appendices

	Page
Appendix A: Classifier defined and non CLP determinands	3
Appendix B: Rationale for selection of metal species	3
Appendix C: Version	3

Classification of sample: Sample 1

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

Sample details

Sample Name:	LoW Code:
Sample 1	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% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	benzo[a]pyrene; benzo[def]chrysene				6.85 mg/kg		6.85 mg/kg	0.000685 %	✓	
	601-032-00-3	200-028-5	50-32-8							
2	confirm TPH has NOT arisen from diesel or petrol				☒					
3	TPH (C6 to C40) petroleum group				994.95 mg/kg		994.95 mg/kg	0.0995 %	✓	
			TPH							
Total:								0.1 %		

Key

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

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 TPH unlikely to be flammable under site conditions

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0995%)

Appendix A: Classifier defined and non CLP determinands

confirm TPH has NOT arisen from diesel or petrol

Description/Comments: Chapter 3, section 4b requires a positive confirmation for benzo[a]pyrene to be used as a marker in evaluating Carc. 1B; H350 (HP 7) and Muta. 1B; H340 (HP 11)
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

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

Appendix B: Rationale for selection of metal species

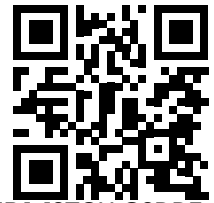
None used in this classification

Appendix C: Version

HazWasteOnline Classification Engine: **WM3 1st Edition v1.1, May 2018**
HazWasteOnline Classification Engine Version: 2019.312.4049.8147 (08 Nov 2019)
HazWasteOnline Database: 2019.312.4049.8147 (08 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



A4JPJ-J3TQX-G8DD7

Job name

Plot 6 and 7 First Street

Description/Comments

Project

Site

Waste Stream Template

Ramboll Generic Waste Stream

Classified by

Name:
Hazel Comyn
Date:
13/10/2017 09:05:29 UTC
Telephone:
01132 458812

Company:
Ramboll UK Ltd
3rd Floor, Halsbury House, Chancellor Court
21 The Calls
Leeds
LS2 7EH

Report

Created by: Hazel Comyn
Created date: 13/10/2017 09:05 UTC

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	CP/RC101A	0.6	Non Hazardous		3
2	CP/RC105	0.3	Non Hazardous		5
3	CP/RC102	0.3	Non Hazardous		7
4	CP/RC102A	0.6	Non Hazardous		9
5	CP/RC101B	0.6	Non Hazardous		11
6	CP/RC101B[1]	1.50-1.60	Non Hazardous		13
7	CP/RC115	1	Non Hazardous		15
8	CP/RC115[1]	2.7	Non Hazardous		17
9	CP/RC101A[1]	3.3	Non Hazardous		19
10	WS101		Non Hazardous		21
11	WS106		Non Hazardous		23
12	CP/RC117A	0.6	Non Hazardous		25
13	CP/RC117A[1]	1.9	Non Hazardous		27
14	CP/RC107	1	Non Hazardous		29
15	CP/RC112	0.6	Non Hazardous		31
16	CP/RC112[1]	3.5	Non Hazardous		33

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
17	CP/RC110	0.3	Non Hazardous	HP 7, HP 11	35
18	CP/RC111	0.3	Non Hazardous		37
19	TP103	3.10-3.30	Non Hazardous		39
20	TP109	0.10-0.30	Non Hazardous		40
21	TP111	0.30-0.50	Non Hazardous		42
22	CP/RC116	2.9	Non Hazardous		44
23	WS102	1.00-1.20	Hazardous		46
24	CP/RC104A	1.70-1.80	Non Hazardous		49
25	CP/RC103	0.3	Non Hazardous		51
26	CP/RC106A	0.6	Non Hazardous		53
27	CP/RC108	0.3	Non Hazardous		55
28	CP/RC101B[2]	1	Non Hazardous		57
29	CP/RC107[1]	1	Non Hazardous		58
30	TP103[1]	0.80-1.00	Non Hazardous		59
31	TP112	1.30-1.50	Non Hazardous		60

Appendices	Page
Appendix A: Classifier defined and non CLP determinands	61
Appendix B: Rationale for selection of metal species	62
Appendix C: Version	63

Classification of sample: CP/RC101A

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

Sample details

Sample Name:	LoW Code:	
CP/RC101A	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.6 m		
Moisture content:		
12%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 12% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		0.21 mg/kg		0.188 mg/kg	0.0000187 %	✓	
2	acenaphthylene	205-917-1	208-96-8		0.26 mg/kg		0.232 mg/kg	0.0000232 %	✓	
3	anthracene	204-371-1	120-12-7		0.75 mg/kg		0.67 mg/kg	0.000067 %	✓	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4		17 mg/kg	1.32	20.041 mg/kg	0.002 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6		2 mg/kg		1.786 mg/kg	0.000179 %	✓	
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5		1.5 mg/kg		1.339 mg/kg	0.000134 %	✓	
7	benzo[b]fluoranthene	601-034-00-4	205-911-9		2.2 mg/kg		1.964 mg/kg	0.000196 %	✓	
8	benzo[ghi]perylene	205-883-8	191-24-2		0.96 mg/kg		0.857 mg/kg	0.0000857 %	✓	
9	benzo[k]fluoranthene	601-036-00-5	205-916-6		0.6 mg/kg		0.536 mg/kg	0.0000536 %	✓	
10	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
11	chromium { chromium(III) oxide }	215-160-9	1308-38-9		23 mg/kg	1.462	30.014 mg/kg	0.003 %	✓	
12	chrysene	601-048-00-0	205-923-4		1.8 mg/kg		1.607 mg/kg	0.000161 %	✓	
13	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7		91 mg/kg	1.126	91.478 mg/kg	0.00915 %	✓	
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5			<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<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		dibenz[a,h]anthracene				0.19	mg/kg		0.17	mg/kg	0.000017 %	✓	
		601-041-00-2	200-181-8	53-70-3									
16	•	fluoranthene				4.5	mg/kg		4.018	mg/kg	0.000402 %	✓	
			205-912-4	206-44-0									
17	•	fluorene				0.32	mg/kg		0.286	mg/kg	0.0000286 %	✓	
			201-695-5	86-73-7									
18	•	indeno[123-cd]pyrene				0.74	mg/kg		0.661	mg/kg	0.0000661 %	✓	
			205-893-2	193-39-5									
19	🧪	lead { • lead compounds with the exception of those specified elsewhere in this Annex }			1	360	mg/kg		321.429	mg/kg	0.0321 %	✓	
		082-001-00-6											
20	🧪	mercury { mercury dichloride }				0.4	mg/kg	1.353	0.483	mg/kg	0.0000483 %	✓	
		080-010-00-X	231-299-8	7487-94-7									
21		naphthalene				0.2	mg/kg		0.179	mg/kg	0.0000179 %	✓	
		601-052-00-2	202-049-5	91-20-3									
22	🧪	nickel { nickel dihydroxide }				20	mg/kg	1.579	28.205	mg/kg	0.00282 %	✓	
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
23	•	pH				8.4	pH		8.4	pH	8.4 pH		
				PH									
24	•	phenanthrene				2.8	mg/kg		2.5	mg/kg	0.00025 %	✓	
			201-581-5	85-01-8									
25	•	pyrene				4.1	mg/kg		3.661	mg/kg	0.000366 %	✓	
			204-927-3	129-00-0									
26	🧪	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
		034-002-00-8											
27	🧪	zinc { zinc sulphate }				180	mg/kg	2.469	396.851	mg/kg	0.0397 %	✓	
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
Total:									0.0914 %				

Key

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

Classification of sample: CP/RC105

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

Sample details

Sample Name:	LoW Code:	
CP/RC105	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.3 m		
Moisture content:		
15%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 15% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	6.8 mg/kg	1.32	7.807 mg/kg	0.000781 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
8	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
10	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
11	chromium { chromium(III) oxide }	215-160-9	1308-38-9		40 mg/kg	1.462	50.837 mg/kg	0.00508 %	✓	
12	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
13	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	18 mg/kg	1.126	17.623 mg/kg	0.00176 %	✓	
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5			<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<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		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
		601-041-00-2	200-181-8	53-70-3										
16	•	fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
			205-912-4	206-44-0										
17	•	fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
			201-695-5	86-73-7										
18	•	indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
			205-893-2	193-39-5										
19	🧪	lead { • lead compounds with the exception of those specified elsewhere in this Annex }			1	45	mg/kg		39.13	mg/kg	0.00391 %	✓		
		082-001-00-6												
20	🧪	mercury { mercury dichloride }				0.5	mg/kg	1.353	0.588	mg/kg	0.0000588 %	✓		
		080-010-00-X	231-299-8	7487-94-7										
21		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
		601-052-00-2	202-049-5	91-20-3										
22	🧪	nickel { nickel dihydroxide }				25	mg/kg	1.579	34.337	mg/kg	0.00343 %	✓		
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]										
23	•	pH				7.2	pH		7.2	pH	7.2 pH			
				PH										
24	•	phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
			201-581-5	85-01-8										
25	•	pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
			204-927-3	129-00-0										
26	🧪	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD	
		034-002-00-8												
27	🧪	zinc { zinc sulphate }				50	mg/kg	2.469	107.361	mg/kg	0.0107 %	✓		
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]										
Total:											0.0264 %			

Key

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

Classification of sample: CP/RC102

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

Sample details

Sample Name:	LoW Code:	
CP/RC102	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.3 m		
Moisture content:		
17%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 17% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	8.1 mg/kg	1.32	9.141 mg/kg	0.000914 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
8	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
10	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
11	chromium { chromium(III) oxide }	215-160-9	1308-38-9		27 mg/kg	1.462	33.728 mg/kg	0.00337 %	✓	
12	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
13	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	25 mg/kg	1.126	24.057 mg/kg	0.00241 %	✓	
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5			<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<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		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
16	•	fluoranthene											
			205-912-4	206-44-0		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
17	•	fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
18	•	indeno[123-cd]pyrene											
			205-893-2	193-39-5									
19	🧪	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	16	mg/kg		13.675	mg/kg	0.00137 %	✓	
		082-001-00-6											
20	🧪	mercury { mercury dichloride }											
		080-010-00-X	231-299-8	7487-94-7									
21		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
22	🧪	nickel { nickel dihydroxide }											
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
23	•	pH				7.4	pH		7.4	pH	7.4 pH		
				PH									
24	•	phenanthrene											
			201-581-5	85-01-8									
25	•	pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
26	🧪	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }											
		034-002-00-8											
27	🧪	zinc { zinc sulphate }				75	mg/kg	2.469	158.288	mg/kg	0.0158 %	✓	
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
Total:													

Key

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

Classification of sample: CP/RC102A

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

Sample details

Sample Name:	LoW Code:	
CP/RC102A	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.6 m		
Moisture content:		
16%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 16% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	7 mg/kg	1.32	7.967 mg/kg	0.000797 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.23 mg/kg		0.198 mg/kg	0.0000198 %	✓	
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.23 mg/kg		0.198 mg/kg	0.0000198 %	✓	
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.22 mg/kg		0.19 mg/kg	0.000019 %	✓	
8	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.14 mg/kg		0.121 mg/kg	0.0000121 %	✓	
10	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
11	chromium { chromium(III) oxide }	215-160-9	1308-38-9		19 mg/kg	1.462	23.939 mg/kg	0.00239 %	✓	
12	chrysene	601-048-00-0	205-923-4	218-01-9	0.19 mg/kg		0.164 mg/kg	0.0000164 %	✓	
13	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	21 mg/kg	1.126	20.382 mg/kg	0.00204 %	✓	
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5			<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<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		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
		601-041-00-2	200-181-8	53-70-3										
16	•	fluoranthene				0.42	mg/kg		0.362	mg/kg	0.0000362 %	✓		
			205-912-4	206-44-0										
17	•	fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
			201-695-5	86-73-7										
18	•	indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
			205-893-2	193-39-5										
19	🧬	lead { • lead compounds with the exception of those specified elsewhere in this Annex }			1	32	mg/kg		27.586	mg/kg	0.00276 %	✓		
		082-001-00-6												
20	🧬	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD	
		080-010-00-X	231-299-8	7487-94-7										
21		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
		601-052-00-2	202-049-5	91-20-3										
22	🧬	nickel { nickel dihydroxide }				15	mg/kg	1.579	20.425	mg/kg	0.00204 %	✓		
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]										
23	•	pH				8.1	pH		8.1	pH	8.1 pH			
				PH										
24	•	phenanthrene				0.27	mg/kg		0.233	mg/kg	0.0000233 %	✓		
			201-581-5	85-01-8										
25	•	pyrene				0.46	mg/kg		0.397	mg/kg	0.0000397 %	✓		
			204-927-3	129-00-0										
26	🧬	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD	
		034-002-00-8												
27	🧬	zinc { zinc sulphate }				60	mg/kg	2.469	127.722	mg/kg	0.0128 %	✓		
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]										
Total:											0.0236 %			

Key

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

Classification of sample: CP/RC101B

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

Sample details

Sample Name:	LoW Code:	
CP/RC101B	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.6 m		
Moisture content:		
9.7%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 9.7% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		0.19 mg/kg		0.173 mg/kg	0.0000173 %	✓	
2	acenaphthylene	205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
3	anthracene	204-371-1	120-12-7		0.38 mg/kg		0.346 mg/kg	0.0000346 %	✓	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4		18 mg/kg	1.32	21.664 mg/kg	0.00217 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6		1.5 mg/kg		1.367 mg/kg	0.000137 %	✓	
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5		1.4 mg/kg		1.276 mg/kg	0.000128 %	✓	
7	benzo[b]fluoranthene	601-034-00-4	205-911-9		1.7 mg/kg		1.55 mg/kg	0.000155 %	✓	
8	benzo[ghi]perylene	205-883-8	191-24-2		0.95 mg/kg		0.866 mg/kg	0.0000866 %	✓	
9	benzo[k]fluoranthene	601-036-00-5	205-916-6		0.76 mg/kg		0.693 mg/kg	0.0000693 %	✓	
10	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
11	chromium { chromium(III) oxide }	215-160-9	1308-38-9		29 mg/kg	1.462	38.637 mg/kg	0.00386 %	✓	
12	chrysene	601-048-00-0	205-923-4		1.3 mg/kg		1.185 mg/kg	0.000119 %	✓	
13	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7		160 mg/kg	1.126	164.213 mg/kg	0.0164 %	✓	
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5			<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<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		dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg		<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3								
16	•	fluoranthene				2.9 mg/kg		2.644 mg/kg		0.000264 %	✓	
			205-912-4	206-44-0								
17	•	fluorene				0.13 mg/kg		0.119 mg/kg		0.0000119 %	✓	
			201-695-5	86-73-7								
18	•	indeno[123-cd]pyrene				0.7 mg/kg		0.638 mg/kg		0.0000638 %	✓	
			205-893-2	193-39-5								
19	🧪	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	530 mg/kg		483.136 mg/kg		0.0483 %	✓	
		082-001-00-6										
20	🧪	mercury { mercury dichloride }				0.4 mg/kg	1.353	0.494 mg/kg		0.0000494 %	✓	
		080-010-00-X	231-299-8	7487-94-7								
21		naphthalene				<0.05 mg/kg		<0.05 mg/kg		<0.000005 %		<LOD
		601-052-00-2	202-049-5	91-20-3								
22	🧪	nickel { nickel dihydroxide }				24 mg/kg	1.579	34.556 mg/kg		0.00346 %	✓	
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
23	•	pH				8.6 pH		8.6 pH		8.6 pH		
				PH								
24	•	phenanthrene				1.6 mg/kg		1.459 mg/kg		0.000146 %	✓	
			201-581-5	85-01-8								
25	•	pyrene				2.7 mg/kg		2.461 mg/kg		0.000246 %	✓	
			204-927-3	129-00-0								
26	🧪	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg		<0.000255 %		<LOD
		034-002-00-8										
27	🧪	zinc { zinc sulphate }				230 mg/kg	2.469	517.719 mg/kg		0.0518 %	✓	
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [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 Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: CP/RC101B[1]

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

Sample details

Sample Name:	LoW Code:	
CP/RC101B[1]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1.50-1.60 m		
Moisture content:		
17%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 17% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	acenaphthene	201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
3	anthracene	204-371-1	120-12-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	19 mg/kg	1.32	21.441 mg/kg	0.00214 %	✓		
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
8	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
10	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %			<LOD
11	chromium { chromium(III) oxide }	215-160-9	1308-38-9		22 mg/kg	1.462	27.482 mg/kg	0.00275 %	✓		
12	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
13	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	48 mg/kg	1.126	46.19 mg/kg	0.00462 %	✓		
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5			<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<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		dibenz[a,h]anthracene			1	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
16	•	fluoranthene											
			205-912-4	206-44-0		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
17	•	fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
18	•	indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
19	🧪	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	120	mg/kg		102.564	mg/kg	0.0103 %	✓	
		082-001-00-6											
20	🧪	mercury { mercury dichloride }				0.7	mg/kg	1.353	0.81	mg/kg	0.000081 %	✓	
		080-010-00-X	231-299-8	7487-94-7									
21		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
22	🧪	nickel { nickel dihydroxide }				23	mg/kg	1.579	31.05	mg/kg	0.0031 %	✓	
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
23	•	pH				8.3	pH		8.3	pH	8.3 pH		
			PH										
24	•	phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
25	•	pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
26	🧪	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
		034-002-00-8											
27	🧪	zinc { zinc sulphate }				69	mg/kg	2.469	145.625	mg/kg	0.0146 %	✓	
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
Total:											0.0381 %		

Key

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

Classification of sample: CP/RC115

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

Sample details

Sample Name:	LoW Code:	
CP/RC115	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1 m		
Moisture content:		
10%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 10% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	7.2 mg/kg	1.32	8.642 mg/kg	0.000864 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.43 mg/kg		0.391 mg/kg	0.0000391 %	✓	
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.55 mg/kg		0.5 mg/kg	0.00005 %	✓	
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.58 mg/kg		0.527 mg/kg	0.0000527 %	✓	
8	benzo[ghi]perylene	205-883-8	191-24-2		0.32 mg/kg		0.291 mg/kg	0.0000291 %	✓	
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.24 mg/kg		0.218 mg/kg	0.0000218 %	✓	
10	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	0.3 mg/kg	1.285	0.351 mg/kg	0.0000273 %	✓	
11	chromium { chromium(III) oxide }	215-160-9	1308-38-9		28 mg/kg	1.462	37.203 mg/kg	0.00372 %	✓	
12	chrysene	601-048-00-0	205-923-4	218-01-9	0.45 mg/kg		0.409 mg/kg	0.0000409 %	✓	
13	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	47 mg/kg	1.126	48.106 mg/kg	0.00481 %	✓	
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5			<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<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		dibenz[a,h]anthracene			1	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
16	•	fluoranthene											
			205-912-4	206-44-0		0.74	mg/kg		0.673	mg/kg	0.0000673 %	✓	
17	•	fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
18	•	indeno[123-cd]pyrene				0.24	mg/kg		0.218	mg/kg	0.0000218 %	✓	
			205-893-2	193-39-5									
19	🧪	lead { • lead compounds with the exception of those specified elsewhere in this Annex }			1	160	mg/kg		145.455	mg/kg	0.0145 %	✓	
		082-001-00-6											
20	🧪	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
		080-010-00-X	231-299-8	7487-94-7									
21		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
22	🧪	nickel { nickel dihydroxide }				17	mg/kg	1.579	24.41	mg/kg	0.00244 %	✓	
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
23	•	pH				11	pH		11	pH	11pH		
				PH									
24	•	phenanthrene				0.39	mg/kg		0.355	mg/kg	0.0000355 %	✓	
			201-581-5	85-01-8									
25	•	pyrene				0.84	mg/kg		0.764	mg/kg	0.0000764 %	✓	
			204-927-3	129-00-0									
26	🧪	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
		034-002-00-8											
27	🧪	zinc { zinc sulphate }				250	mg/kg	2.469	561.204	mg/kg	0.0561 %	✓	
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
Total:											0.0835 %		

Key

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

Classification of sample: CP/RC115[1]

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

Sample details

Sample Name:	LoW Code:	
CP/RC115[1]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
2.7 m		
Moisture content:		
17%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 17% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
3	anthracene	204-371-1	120-12-7		0.18 mg/kg		0.154 mg/kg	0.0000154 %	✓	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4		13 mg/kg	1.32	14.67 mg/kg	0.00147 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6		0.83 mg/kg		0.709 mg/kg	0.0000709 %	✓	
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5		0.93 mg/kg		0.795 mg/kg	0.0000795 %	✓	
7	benzo[b]fluoranthene	601-034-00-4	205-911-9		0.88 mg/kg		0.752 mg/kg	0.0000752 %	✓	
8	benzo[ghi]perylene	205-883-8	191-24-2		0.5 mg/kg		0.427 mg/kg	0.0000427 %	✓	
9	benzo[k]fluoranthene	601-036-00-5	205-916-6		0.46 mg/kg		0.393 mg/kg	0.0000393 %	✓	
10	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
11	chromium { chromium(III) oxide }	215-160-9	1308-38-9		18 mg/kg	1.462	22.485 mg/kg	0.00225 %	✓	
12	chrysene	601-048-00-0	205-923-4		0.75 mg/kg		0.641 mg/kg	0.0000641 %	✓	
13	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7		40 mg/kg	1.126	38.492 mg/kg	0.00385 %	✓	
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5			<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<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		dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD	
		601-041-00-2	200-181-8	53-70-3								
16	•	fluoranthene				1.4 mg/kg		1.197 mg/kg	0.00012 %	✓		
			205-912-4	206-44-0								
17	•	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD	
			201-695-5	86-73-7								
18	•	indeno[123-cd]pyrene				0.39 mg/kg		0.333 mg/kg	0.0000333 %	✓		
			205-893-2	193-39-5								
19	🧬	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	160 mg/kg		136.752 mg/kg	0.0137 %	✓		
		082-001-00-6										
20	🧬	mercury { mercury dichloride }				1.1 mg/kg	1.353	1.273 mg/kg	0.000127 %	✓		
		080-010-00-X	231-299-8	7487-94-7								
21		naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
		601-052-00-2	202-049-5	91-20-3								
22	🧬	nickel { nickel dihydroxide }				17 mg/kg	1.579	22.95 mg/kg	0.00229 %	✓		
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
23	•	pH				8.6 pH		8.6 pH	8.6 pH			
				PH								
24	•	phenanthrene				1.1 mg/kg		0.94 mg/kg	0.000094 %	✓		
			201-581-5	85-01-8								
25	•	pyrene				1.6 mg/kg		1.368 mg/kg	0.000137 %	✓		
			204-927-3	129-00-0								
26	🧬	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD	
		034-002-00-8										
27	🧬	zinc { zinc sulphate }				68 mg/kg	2.469	143.515 mg/kg	0.0144 %	✓		
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
								Total:	0.0393 %			

Key

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

Classification of sample: CP/RC101A[1]

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

Sample details

Sample Name:	LoW Code:	
CP/RC101A[1]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
3.3 m		
Moisture content:		
13%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 13% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	17 mg/kg	1.32	19.863 mg/kg	0.00199 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
8	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
10	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
11	chromium { chromium(III) oxide }	215-160-9	1308-38-9		32 mg/kg	1.462	41.389 mg/kg	0.00414 %	✓	
12	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
13	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	200 mg/kg	1.126	199.272 mg/kg	0.0199 %	✓	
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5			<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<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		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
		601-041-00-2	200-181-8	53-70-3										
16	■	fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
			205-912-4	206-44-0										
17	■	fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
			201-695-5	86-73-7										
18	■	indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
			205-893-2	193-39-5										
19	🧬	lead { ■ lead compounds with the exception of those specified elsewhere in this Annex }			1	520	mg/kg		460.177	mg/kg	0.046 %	✓		
		082-001-00-6												
20	🧬	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD	
		080-010-00-X	231-299-8	7487-94-7										
21		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD	
		601-052-00-2	202-049-5	91-20-3										
22	🧬	nickel { nickel dihydroxide }				24	mg/kg	1.579	33.547	mg/kg	0.00335 %	✓		
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]										
23	■	pH				9.4	pH		9.4	pH	9.4 pH			
				PH										
24	■	phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
			201-581-5	85-01-8										
25	■	pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
			204-927-3	129-00-0										
26	🧬	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD	
		034-002-00-8												
27	🧬	zinc { zinc sulphate }				210	mg/kg	2.469	458.896	mg/kg	0.0459 %	✓		
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]										
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 Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: WS101

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

Sample details

Sample Name:	LoW Code:
WS101	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
3%	Entry:
(dry weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 3% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		0.48 mg/kg		0.466 mg/kg	0.0000466 %	✓	
2	acenaphthylene	205-917-1	208-96-8		0.53 mg/kg		0.515 mg/kg	0.0000515 %	✓	
3	anthracene	204-371-1	120-12-7		1.8 mg/kg		1.748 mg/kg	0.000175 %	✓	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4		12 mg/kg	1.32	15.382 mg/kg	0.00154 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6		5.2 mg/kg		5.049 mg/kg	0.000505 %	✓	
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5		26 mg/kg		25.243 mg/kg	0.00252 %	✓	
7	benzo[b]fluoranthene	601-034-00-4	205-911-9		24 mg/kg		23.301 mg/kg	0.00233 %	✓	
8	benzo[ghi]perylene	205-883-8	191-24-2		20 mg/kg		19.417 mg/kg	0.00194 %	✓	
9	benzo[k]fluoranthene	601-036-00-5	205-916-6		7.6 mg/kg		7.379 mg/kg	0.000738 %	✓	
10	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
11	chromium { chromium(III) oxide }	215-160-9	1308-38-9		24 mg/kg	1.462	34.056 mg/kg	0.00341 %	✓	
12	chrysene	601-048-00-0	205-923-4		7.2 mg/kg		6.99 mg/kg	0.000699 %	✓	
13	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7		94 mg/kg	1.126	102.751 mg/kg	0.0103 %	✓	
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5			<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
15	dibenz[a,h]anthracene	601-041-00-2	200-181-8		3 mg/kg		2.913 mg/kg	0.000291 %	✓	

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number								
16		fluoranthene				9.8 mg/kg		9.515 mg/kg	0.000951 %	✓		
			205-912-4	206-44-0								
17		fluorene				0.37 mg/kg		0.359 mg/kg	0.0000359 %	✓		
			201-695-5	86-73-7								
18		indeno[123-cd]pyrene				16 mg/kg		15.534 mg/kg	0.00155 %	✓		
			205-893-2	193-39-5								
19		lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	150 mg/kg		145.631 mg/kg	0.0146 %	✓		
			082-001-00-6									
20		mercury { mercury dichloride }				0.8 mg/kg	1.353	1.051 mg/kg	0.000105 %	✓		
			080-010-00-X	231-299-8								
21		naphthalene				0.61 mg/kg		0.592 mg/kg	0.0000592 %	✓		
			601-052-00-2	91-20-3								
22		nickel { nickel dihydroxide }				22 mg/kg	1.579	33.737 mg/kg	0.00337 %	✓		
			028-008-00-X	235-008-5 [1] 234-348-1 [2]								
23		pH				8.9 pH		8.9 pH	8.9 pH			
				PH								
24		phenanthrene				3.4 mg/kg		3.301 mg/kg	0.00033 %	✓		
			201-581-5	85-01-8								
25		pyrene				17 mg/kg		16.505 mg/kg	0.00165 %	✓		
			204-927-3	129-00-0								
26		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD	
			034-002-00-8									
27		zinc { zinc sulphate }				160 mg/kg	2.469	383.58 mg/kg	0.0384 %	✓		
			030-006-00-9	231-793-3 [1] 231-793-3 [2]								
Total:									0.086 %			

Key

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

Classification of sample: WS106

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

Sample details

Sample Name:	LoW Code:
WS106	Chapter:
Moisture content:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
12%	Entry:
(dry weight correction)	17 05 04 (Soil and stones other than those mentioned in 17 05 03)

Hazard properties

None identified

Determinands

Moisture content: 12% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	acenaphthene	201-469-6	83-32-9		0.37 mg/kg		0.33	mg/kg	0.000033 %	✓	
2	acenaphthylene	205-917-1	208-96-8		<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
3	anthracene	204-371-1	120-12-7		0.95 mg/kg		0.848	mg/kg	0.0000848 %	✓	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	17 mg/kg	1.32	20.041	mg/kg	0.002 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	2.5 mg/kg		2.232	mg/kg	0.000223 %	✓	
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	3 mg/kg		2.679	mg/kg	0.000268 %	✓	
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	3.4 mg/kg		3.036	mg/kg	0.000304 %	✓	
8	benzo[ghi]perylene	205-883-8	191-24-2		1.8 mg/kg		1.607	mg/kg	0.000161 %	✓	
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	1.2 mg/kg		1.071	mg/kg	0.000107 %	✓	
10	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	0.6 mg/kg	1.285	0.689	mg/kg	0.0000536 %	✓	
11	chromium { chromium(III) oxide }	215-160-9	1308-38-9		51 mg/kg	1.462	66.553	mg/kg	0.00666 %	✓	
12	chrysene	601-048-00-0	205-923-4	218-01-9	2.9 mg/kg		2.589	mg/kg	0.000259 %	✓	
13	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	82 mg/kg	1.126	82.431	mg/kg	0.00824 %	✓	
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5			<1 mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
15	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	0.4 mg/kg		0.357	mg/kg	0.0000357 %	✓	

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
16		fluoranthene				4.6	mg/kg		4.107	mg/kg	0.000411 %	✓	
			205-912-4	206-44-0									
17		fluorene				0.47	mg/kg		0.42	mg/kg	0.000042 %	✓	
			201-695-5	86-73-7									
18		indeno[123-cd]pyrene				1.3	mg/kg		1.161	mg/kg	0.000116 %	✓	
			205-893-2	193-39-5									
19		lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	190	mg/kg		169.643	mg/kg	0.017 %	✓	
			082-001-00-6										
20		mercury { mercury dichloride }				0.8	mg/kg	1.353	0.967	mg/kg	0.0000967 %	✓	
			080-010-00-X	231-299-8									
21		naphthalene				1.3	mg/kg		1.161	mg/kg	0.000116 %	✓	
			601-052-00-2	202-049-5									
22		nickel { nickel dihydroxide }				33	mg/kg	1.579	46.539	mg/kg	0.00465 %	✓	
			028-008-00-X	235-008-5 [1] 234-348-1 [2]									
23		pH				8.4	pH		8.4	pH	8.4 pH		
				PH									
24		phenanthrene				3.7	mg/kg		3.304	mg/kg	0.00033 %	✓	
			201-581-5	85-01-8									
25		pyrene				4.7	mg/kg		4.196	mg/kg	0.00042 %	✓	
			204-927-3	129-00-0									
26		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
			034-002-00-8										
27		zinc { zinc sulphate }				350	mg/kg	2.469	771.655	mg/kg	0.0772 %	✓	
			030-006-00-9	231-793-3 [1] 231-793-3 [2]									
Total:									0.119 %				

Key

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

Classification of sample: CP/RC117A

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

Sample details

Sample Name:	LoW Code:	
CP/RC117A	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.6 m		
Moisture content:		
12%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 12% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	acenaphthene	201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
3	anthracene	204-371-1	120-12-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	12 mg/kg	1.32	14.146 mg/kg	0.00141 %	✓		
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	1.4 mg/kg		1.25 mg/kg	0.000125 %	✓		
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	1.2 mg/kg		1.071 mg/kg	0.000107 %	✓		
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.85 mg/kg		0.759 mg/kg	0.0000759 %	✓		
8	benzo[ghi]perylene	205-883-8	191-24-2		0.61 mg/kg		0.545 mg/kg	0.0000545 %	✓		
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.71 mg/kg		0.634 mg/kg	0.0000634 %	✓		
10	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %			<LOD
11	chromium { chromium(III) oxide }	215-160-9	1308-38-9		10 mg/kg	1.462	13.05 mg/kg	0.0013 %	✓		
12	chrysene	601-048-00-0	205-923-4	218-01-9	1.5 mg/kg		1.339 mg/kg	0.000134 %	✓		
13	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	38 mg/kg	1.126	38.2 mg/kg	0.00382 %	✓		
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5			<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<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		dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD	
		601-041-00-2	200-181-8	53-70-3								
16	•	fluoranthene				1.6 mg/kg		1.429 mg/kg	0.000143 %	✓		
			205-912-4	206-44-0								
17	•	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD	
			201-695-5	86-73-7								
18	•	indeno[123-cd]pyrene				0.38 mg/kg		0.339 mg/kg	0.0000339 %	✓		
			205-893-2	193-39-5								
19	🧪	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	430 mg/kg		383.929 mg/kg	0.0384 %	✓		
		082-001-00-6										
20	🧪	mercury { mercury dichloride }				0.5 mg/kg	1.353	0.604 mg/kg	0.0000604 %	✓		
		080-010-00-X	231-299-8	7487-94-7								
21		naphthalene				0.32 mg/kg		0.286 mg/kg	0.0000286 %	✓		
		601-052-00-2	202-049-5	91-20-3								
22	🧪	nickel { nickel dihydroxide }				15 mg/kg	1.579	21.154 mg/kg	0.00212 %	✓		
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
23	•	pH				8.4 pH		8.4 pH	8.4 pH			
				PH								
24	•	phenanthrene				0.82 mg/kg		0.732 mg/kg	0.0000732 %	✓		
			201-581-5	85-01-8								
25	•	pyrene				2.7 mg/kg		2.411 mg/kg	0.000241 %	✓		
			204-927-3	129-00-0								
26	🧪	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD	
		034-002-00-8										
27	🧪	zinc { zinc sulphate }				240 mg/kg	2.469	529.135 mg/kg	0.0529 %	✓		
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
Total:									0.102 %			

Key

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

Classification of sample: CP/RC117A[1]

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

Sample details

Sample Name:	LoW Code:	
CP/RC117A[1]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1.9 m		
Moisture content:		
21%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 21% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	18 mg/kg	1.32	19.641 mg/kg	0.00196 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
8	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
10	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
11	chromium { chromium(III) oxide }	215-160-9	1308-38-9		12 mg/kg	1.462	14.495 mg/kg	0.00145 %	✓	
12	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
13	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	53 mg/kg	1.126	49.316 mg/kg	0.00493 %	✓	
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5			<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<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		dibenz[a,h]anthracene			1	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
16	•	fluoranthene											
			205-912-4	206-44-0		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
17	•	fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
18	•	indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
19	🧪	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	54	mg/kg		44.628	mg/kg	0.00446 %	✓	
		082-001-00-6											
20	🧪	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
		080-010-00-X	231-299-8	7487-94-7									
21		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
22	🧪	nickel { nickel dihydroxide }				33	mg/kg	1.579	43.077	mg/kg	0.00431 %	✓	
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
23	•	pH				7.3	pH		7.3	pH	7.3 pH		
				PH									
24	•	phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
25	•	pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
26	🧪	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
		034-002-00-8											
27	🧪	zinc { zinc sulphate }				170	mg/kg	2.469	346.926	mg/kg	0.0347 %	✓	
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
Total:											0.0525 %		

Key

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

Classification of sample: CP/RC107

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

Sample details

Sample Name:	LoW Code:	
CP/RC107	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1 m		
Moisture content:		
6.8%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 6.8% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
3	anthracene	204-371-1	120-12-7		0.36 mg/kg		0.337 mg/kg	0.0000337 %	✓	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4		6.6 mg/kg	1.32	8.159 mg/kg	0.000816 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6		0.74 mg/kg		0.693 mg/kg	0.0000693 %	✓	
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5		0.6 mg/kg		0.562 mg/kg	0.0000562 %	✓	
7	benzo[b]fluoranthene	601-034-00-4	205-911-9		0.84 mg/kg		0.787 mg/kg	0.0000787 %	✓	
8	benzo[ghi]perylene	205-883-8	191-24-2		0.38 mg/kg		0.356 mg/kg	0.0000356 %	✓	
9	benzo[k]fluoranthene	601-036-00-5	205-916-6		0.27 mg/kg		0.253 mg/kg	0.0000253 %	✓	
10	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
11	chromium { chromium(III) oxide }	215-160-9	1308-38-9		19 mg/kg	1.462	26.001 mg/kg	0.0026 %	✓	
12	chrysene	601-048-00-0	205-923-4		0.68 mg/kg		0.637 mg/kg	0.0000637 %	✓	
13	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7		15 mg/kg	1.126	15.813 mg/kg	0.00158 %	✓	
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5			<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<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		dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg		<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3								
16	•	fluoranthene				1.9 mg/kg		1.779 mg/kg		0.000178 %	✓	
			205-912-4	206-44-0								
17	•	fluorene				<0.1 mg/kg		<0.1 mg/kg		<0.00001 %		<LOD
			201-695-5	86-73-7								
18	•	indeno[123-cd]pyrene				0.37 mg/kg		0.346 mg/kg		0.0000346 %	✓	
			205-893-2	193-39-5								
19	🧪	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	32 mg/kg		29.963 mg/kg		0.003 %	✓	
		082-001-00-6										
20	🧪	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg		<0.0000406 %		<LOD
		080-010-00-X	231-299-8	7487-94-7								
21		naphthalene				<0.05 mg/kg		<0.05 mg/kg		<0.000005 %		<LOD
		601-052-00-2	202-049-5	91-20-3								
22	🧪	nickel { nickel dihydroxide }				20 mg/kg	1.579	29.579 mg/kg		0.00296 %	✓	
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
23	•	pH				8.1 pH		8.1 pH		8.1 pH		
				PH								
24	•	phenanthrene				1.8 mg/kg		1.685 mg/kg		0.000169 %	✓	
			201-581-5	85-01-8								
25	•	pyrene				1.6 mg/kg		1.498 mg/kg		0.00015 %	✓	
			204-927-3	129-00-0								
26	🧪	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg		<0.000255 %		<LOD
		034-002-00-8										
27	🧪	zinc { zinc sulphate }				73 mg/kg	2.469	168.781 mg/kg		0.0169 %	✓	
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
Total:										0.0293 %		

Key

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

Classification of sample: CP/RC112

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

Sample details

Sample Name:	LoW Code:	
CP/RC112	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.6 m		
Moisture content:		
13%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 13% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		3.5 mg/kg		3.097 mg/kg	0.00031 %	✓	
2	acenaphthylene	205-917-1	208-96-8		0.32 mg/kg		0.283 mg/kg	0.0000283 %	✓	
3	anthracene	204-371-1	120-12-7		5.4 mg/kg		4.779 mg/kg	0.000478 %	✓	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4		25 mg/kg	1.32	29.211 mg/kg	0.00292 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6		12 mg/kg		10.619 mg/kg	0.00106 %	✓	
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5		11 mg/kg		9.735 mg/kg	0.000973 %	✓	
7	benzo[b]fluoranthene	601-034-00-4	205-911-9		13 mg/kg		11.504 mg/kg	0.00115 %	✓	
8	benzo[ghi]perylene	205-883-8	191-24-2		7.3 mg/kg		6.46 mg/kg	0.000646 %	✓	
9	benzo[k]fluoranthene	601-036-00-5	205-916-6		5.2 mg/kg		4.602 mg/kg	0.00046 %	✓	
10	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
11	chromium { chromium(III) oxide }	215-160-9	1308-38-9		19 mg/kg	1.462	24.575 mg/kg	0.00246 %	✓	
12	chrysene	601-048-00-0	205-923-4		11 mg/kg		9.735 mg/kg	0.000973 %	✓	
13	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7		89 mg/kg	1.126	88.676 mg/kg	0.00887 %	✓	
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5			<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<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		dibenz[a,h]anthracene				1.4	mg/kg		1.239	mg/kg	0.000124 %	✓	
		601-041-00-2	200-181-8	53-70-3									
16	•	fluoranthene				26	mg/kg		23.009	mg/kg	0.0023 %	✓	
			205-912-4	206-44-0									
17	•	fluorene				2.4	mg/kg		2.124	mg/kg	0.000212 %	✓	
			201-695-5	86-73-7									
18	•	indeno[123-cd]pyrene				5.8	mg/kg		5.133	mg/kg	0.000513 %	✓	
			205-893-2	193-39-5									
19	🧪	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	230	mg/kg		203.54	mg/kg	0.0204 %	✓	
		082-001-00-6											
20	🧪	mercury { mercury dichloride }				0.6	mg/kg	1.353	0.719	mg/kg	0.0000719 %	✓	
		080-010-00-X	231-299-8	7487-94-7									
21		naphthalene				3.1	mg/kg		2.743	mg/kg	0.000274 %	✓	
		601-052-00-2	202-049-5	91-20-3									
22	🧪	nickel { nickel dihydroxide }				31	mg/kg	1.579	43.331	mg/kg	0.00433 %	✓	
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
23	•	pH				8.7	pH		8.7	pH	8.7 pH		
				PH									
24	•	phenanthrene				21	mg/kg		18.584	mg/kg	0.00186 %	✓	
			201-581-5	85-01-8									
25	•	pyrene				23	mg/kg		20.354	mg/kg	0.00204 %	✓	
			204-927-3	129-00-0									
26	🧪	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
		034-002-00-8											
27	🧪	zinc { zinc sulphate }				170	mg/kg	2.469	371.487	mg/kg	0.0371 %	✓	
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
Total:									0.09 %				

Key

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

Classification of sample: CP/RC112[1]

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

Sample details

Sample Name:	LoW Code:	
CP/RC112[1]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
3.5 m		
Moisture content:		
13%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 13% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		0.98 mg/kg		0.867 mg/kg	0.0000867 %	✓	
2	acenaphthylene	205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
3	anthracene	204-371-1	120-12-7		1.4 mg/kg		1.239 mg/kg	0.000124 %	✓	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4		2.9 mg/kg	1.32	3.388 mg/kg	0.000339 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6		3.3 mg/kg		2.92 mg/kg	0.000292 %	✓	
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5		3 mg/kg		2.655 mg/kg	0.000265 %	✓	
7	benzo[b]fluoranthene	601-034-00-4	205-911-9		3.7 mg/kg		3.274 mg/kg	0.000327 %	✓	
8	benzo[ghi]perylene	205-883-8	191-24-2		1.8 mg/kg		1.593 mg/kg	0.000159 %	✓	
9	benzo[k]fluoranthene	601-036-00-5	205-916-6		0.98 mg/kg		0.867 mg/kg	0.0000867 %	✓	
10	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
11	chromium { chromium(III) oxide }	215-160-9	1308-38-9		11 mg/kg	1.462	14.228 mg/kg	0.00142 %	✓	
12	chrysene	601-048-00-0	205-923-4		2.6 mg/kg		2.301 mg/kg	0.00023 %	✓	
13	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7		23 mg/kg	1.126	22.916 mg/kg	0.00229 %	✓	
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5			<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<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		dibenz[a,h]anthracene				0.32	mg/kg		0.283	mg/kg	0.0000283 %	✓		
		601-041-00-2	200-181-8	53-70-3										
16	•	fluoranthene				8.7	mg/kg		7.699	mg/kg	0.00077 %	✓		
			205-912-4	206-44-0										
17	•	fluorene				0.62	mg/kg		0.549	mg/kg	0.0000549 %	✓		
			201-695-5	86-73-7										
18	•	indeno[123-cd]pyrene				1.5	mg/kg		1.327	mg/kg	0.000133 %	✓		
			205-893-2	193-39-5										
19	🚫	lead { • lead compounds with the exception of those specified elsewhere in this Annex }			1	38	mg/kg		33.628	mg/kg	0.00336 %	✓		
		082-001-00-6												
20	🚫	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD	
		080-010-00-X	231-299-8	7487-94-7										
21		naphthalene				0.13	mg/kg		0.115	mg/kg	0.0000115 %	✓		
		601-052-00-2	202-049-5	91-20-3										
22	🚫	nickel { nickel dihydroxide }				14	mg/kg	1.579	19.569	mg/kg	0.00196 %	✓		
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]										
23	•	pH				8.8	pH		8.8	pH	8.8 pH			
				PH										
24	•	phenanthrene				6.9	mg/kg		6.106	mg/kg	0.000611 %	✓		
			201-581-5	85-01-8										
25	•	pyrene				7.7	mg/kg		6.814	mg/kg	0.000681 %	✓		
			204-927-3	129-00-0										
26	🚫	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD	
		034-002-00-8												
27	🚫	zinc { zinc sulphate }				59	mg/kg	2.469	128.928	mg/kg	0.0129 %	✓		
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]										
Total:											0.0266 %			

Key

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

Classification of sample: CP/RC110

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

Sample details

Sample Name:	LoW Code:	
CP/RC110	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.3 m		
Moisture content:		
10%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 10% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		1.3 mg/kg		1.182 mg/kg	0.000118 %	✓	
2	acenaphthylene	205-917-1	208-96-8		1.2 mg/kg		1.091 mg/kg	0.000109 %	✓	
3	anthracene	204-371-1	120-12-7		2.2 mg/kg		2 mg/kg	0.0002 %	✓	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4		35 mg/kg	1.32	42.01 mg/kg	0.0042 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6		8.5 mg/kg		7.727 mg/kg	0.000773 %	✓	
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5		7 mg/kg		6.364 mg/kg	0.000636 %	✓	
7	benzo[b]fluoranthene	601-034-00-4	205-911-9		8.2 mg/kg		7.455 mg/kg	0.000745 %	✓	
8	benzo[ghi]perylene	205-883-8	191-24-2		3.9 mg/kg		3.545 mg/kg	0.000355 %	✓	
9	benzo[k]fluoranthene	601-036-00-5	205-916-6		3.7 mg/kg		3.364 mg/kg	0.000336 %	✓	
10	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
11	chromium { chromium(III) oxide }	215-160-9	1308-38-9		17 mg/kg	1.462	22.588 mg/kg	0.00226 %	✓	
12	chrysene	601-048-00-0	205-923-4		6.7 mg/kg		6.091 mg/kg	0.000609 %	✓	
13	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7		96 mg/kg	1.126	98.259 mg/kg	0.00983 %	✓	
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5			<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<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		dibenz[a,h]anthracene				0.87	mg/kg		0.791	mg/kg	0.0000791 %	✓	
		601-041-00-2	200-181-8	53-70-3									
16	•	fluoranthene				15	mg/kg		13.636	mg/kg	0.00136 %	✓	
			205-912-4	206-44-0									
17	•	fluorene				1	mg/kg		0.909	mg/kg	0.0000909 %	✓	
			201-695-5	86-73-7									
18	•	indeno[123-cd]pyrene				3.4	mg/kg		3.091	mg/kg	0.000309 %	✓	
			205-893-2	193-39-5									
19	🧪	lead { • lead compounds with the exception of those specified elsewhere in this Annex }			1	500	mg/kg		454.545	mg/kg	0.0455 %	✓	
		082-001-00-6											
20	🧪	mercury { mercury dichloride }				0.5	mg/kg	1.353	0.615	mg/kg	0.0000615 %	✓	
		080-010-00-X	231-299-8	7487-94-7									
21		naphthalene				0.87	mg/kg		0.791	mg/kg	0.0000791 %	✓	
		601-052-00-2	202-049-5	91-20-3									
22	🧪	nickel { nickel dihydroxide }				64	mg/kg	1.579	91.898	mg/kg	0.00919 %	✓	
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
23	•	pH				8.5	pH		8.5	pH	8.5 pH		
				PH									
24	•	phenanthrene				7.5	mg/kg		6.818	mg/kg	0.000682 %	✓	
			201-581-5	85-01-8									
25	•	pyrene				12	mg/kg		10.909	mg/kg	0.00109 %	✓	
			204-927-3	129-00-0									
26	🧪	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
		034-002-00-8											
27	🧪	zinc { zinc sulphate }				300	mg/kg	2.469	673.444	mg/kg	0.0673 %	✓	
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
Total:									0.146 %				

Key

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

Classification of sample: CP/RC111

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

Sample details

Sample Name:	LoW Code:	
CP/RC111	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.3 m		
Moisture content:		
12%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 12% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		0.2 mg/kg		0.179 mg/kg	0.0000179 %	✓	
2	acenaphthylene	205-917-1	208-96-8		0.45 mg/kg		0.402 mg/kg	0.0000402 %	✓	
3	anthracene	204-371-1	120-12-7		0.5 mg/kg		0.446 mg/kg	0.0000446 %	✓	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4		15 mg/kg	1.32	17.683 mg/kg	0.00177 %	✓	
5	benzene	601-020-00-8	200-753-7		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
6	benzo[a]anthracene	601-033-00-9	200-280-6		1.3 mg/kg		1.161 mg/kg	0.000116 %	✓	
7	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5		1.6 mg/kg		1.429 mg/kg	0.000143 %	✓	
8	benzo[b]fluoranthene	601-034-00-4	205-911-9		1.8 mg/kg		1.607 mg/kg	0.000161 %	✓	
9	benzo[ghi]perylene	205-883-8	191-24-2		0.71 mg/kg		0.634 mg/kg	0.0000634 %	✓	
10	benzo[k]fluoranthene	601-036-00-5	205-916-6		0.78 mg/kg		0.696 mg/kg	0.0000696 %	✓	
11	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
12	chromium { chromium(III) oxide }	215-160-9	1308-38-9		20 mg/kg	1.462	26.099 mg/kg	0.00261 %	✓	
13	chrysene	601-048-00-0	205-923-4		0.99 mg/kg		0.884 mg/kg	0.0000884 %	✓	
14	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7		83 mg/kg	1.126	83.436 mg/kg	0.00834 %	✓	
15	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides,				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
	ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }										
	006-007-00-5										
16	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
	601-041-00-2	200-181-8	53-70-3								
17	ethylbenzene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	601-023-00-4	202-849-4	100-41-4								
18	fluoranthene				2.6 mg/kg		2.321 mg/kg	0.000232 %		✓	
		205-912-4	206-44-0								
19	fluorene				0.23 mg/kg		0.205 mg/kg	0.0000205 %		✓	
		201-695-5	86-73-7								
20	indeno[123-cd]pyrene				0.54 mg/kg		0.482 mg/kg	0.0000482 %		✓	
		205-893-2	193-39-5								
21	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	330 mg/kg		294.643 mg/kg	0.0295 %		✓	
	082-001-00-6										
22	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
	080-010-00-X	231-299-8	7487-94-7								
23	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-052-00-2	202-049-5	91-20-3								
24	nickel { nickel dihydroxide }				42 mg/kg	1.579	59.231 mg/kg	0.00592 %		✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
25	pH				8.5 pH		8.5 pH	8.5 pH			
			PH								
26	phenanthrene				1.2 mg/kg		1.071 mg/kg	0.000107 %		✓	
		201-581-5	85-01-8								
27	pyrene				2.3 mg/kg		2.054 mg/kg	0.000205 %		✓	
		204-927-3	129-00-0								
28	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %			<LOD
	034-002-00-8										
29	toluene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	601-021-00-3	203-625-9	108-88-3								
30	TPH (C6 to C40) petroleum group				75 mg/kg		66.964 mg/kg	0.0067 %		✓	
			TPH								
31	xylene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]								
32	zinc { zinc sulphate }				130 mg/kg	2.469	286.615 mg/kg	0.0287 %		✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
Total:									0.0857 %		

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) on Flam. Liq. 1; H224, Flam. Liq. 2; H225, Flam. Liq. 3; H226: Force this Hazardous property to non hazardous because TPH composition and concentration under site conditions make hazard unlikely

Classification of sample: TP103

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

Sample details

Sample Name:	LoW Code:	
TP103	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
3.10-3.30 m		
Moisture content:		
13%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 13% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	benzene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
2	ethylbenzene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
3	toluene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
4	TPH (C6 to C40) petroleum group				69.3 mg/kg		61.327 mg/kg	0.00613 %	✓	
			TPH							
5	xylene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
Total:								0.00653 %		

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)
<LOD	Below limit of detection

Supplementary Hazardous Property Information

HP 3(i) on Flam. Liq. 1; H224, Flam. Liq. 2; H225, Flam. Liq. 3; H226: **Force this Hazardous property to non hazardous because TPH composition and concentration under site conditions make hazard unlikely**

Classification of sample: TP109

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

Sample details

Sample Name:	LoW Code:
TP109	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.10-0.30 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
15%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 15% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	acenaphthene	201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
3	anthracene	204-371-1	120-12-7		0.17 mg/kg		0.148 mg/kg	0.0000148 %		✓	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	25 mg/kg	1.32	28.703 mg/kg	0.00287 %		✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	1.1 mg/kg		0.957 mg/kg	0.0000957 %		✓	
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.68 mg/kg		0.591 mg/kg	0.0000591 %		✓	
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.91 mg/kg		0.791 mg/kg	0.0000791 %		✓	
8	benzo[ghi]perylene	205-883-8	191-24-2		0.52 mg/kg		0.452 mg/kg	0.0000452 %		✓	
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.5 mg/kg		0.435 mg/kg	0.0000435 %		✓	
10	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %			<LOD
11	chromium { chromium(III) oxide }	215-160-9	1308-38-9		19 mg/kg	1.462	24.147 mg/kg	0.00241 %		✓	
12	chrysene	601-048-00-0	205-923-4	218-01-9	1.1 mg/kg		0.957 mg/kg	0.0000957 %		✓	
13	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	71 mg/kg	1.126	69.511 mg/kg	0.00695 %		✓	
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5			<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<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	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
	601-041-00-2	200-181-8	53-70-3								
16	fluoranthene				2.2 mg/kg		1.913 mg/kg	0.000191 %		✓	
		205-912-4	206-44-0								
17	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
		201-695-5	86-73-7								
18	indeno[123-cd]pyrene				0.33 mg/kg		0.287 mg/kg	0.0000287 %		✓	
		205-893-2	193-39-5								
19	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	150 mg/kg		130.435 mg/kg	0.013 %		✓	
	082-001-00-6										
20	mercury { mercury dichloride }				0.8 mg/kg	1.353	0.942 mg/kg	0.0000942 %		✓	
	080-010-00-X	231-299-8	7487-94-7								
21	naphthalene				0.17 mg/kg		0.148 mg/kg	0.0000148 %		✓	
	601-052-00-2	202-049-5	91-20-3								
22	nickel { nickel dihydroxide }				21 mg/kg	1.579	28.843 mg/kg	0.00288 %		✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
23	pH		PH		6.5 pH		6.5 pH	6.5 pH			
24	phenanthrene				1.1 mg/kg		0.957 mg/kg	0.0000957 %		✓	
		201-581-5	85-01-8								
25	pyrene				2.1 mg/kg		1.826 mg/kg	0.000183 %		✓	
		204-927-3	129-00-0								
26	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %			<LOD
	034-002-00-8										
27	zinc { zinc sulphate }				99 mg/kg	2.469	212.574 mg/kg	0.0213 %		✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
Total:									0.051 %		

Key

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

Classification of sample: TP111

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

Sample details

Sample Name:	LoW Code:
TP111	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.30-0.50 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
16%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 16% Dry Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number								
1		acenaphthene				0.27 mg/kg		0.233 mg/kg	0.0000233 %	✓		
			201-469-6	83-32-9								
2		acenaphthylene				0.19 mg/kg		0.164 mg/kg	0.0000164 %	✓		
			205-917-1	208-96-8								
3		anthracene				0.38 mg/kg		0.328 mg/kg	0.0000328 %	✓		
			204-371-1	120-12-7								
4		arsenic { arsenic trioxide }				37 mg/kg	1.32	42.114 mg/kg	0.00421 %	✓		
			033-003-00-0	215-481-4								
5		benzo[a]anthracene				3.6 mg/kg		3.103 mg/kg	0.00031 %	✓		
			601-033-00-9	200-280-6								
6		benzo[a]pyrene; benzo[def]chrysene				2 mg/kg		1.724 mg/kg	0.000172 %	✓		
			601-032-00-3	200-028-5								
7		benzo[b]fluoranthene				2.7 mg/kg		2.328 mg/kg	0.000233 %	✓		
			601-034-00-4	205-911-9								
8		benzo[ghi]perylene				1.2 mg/kg		1.034 mg/kg	0.000103 %	✓		
			205-883-8	191-24-2								
9		benzo[k]fluoranthene				1.1 mg/kg		0.948 mg/kg	0.0000948 %	✓		
			601-036-00-5	205-916-6								
10		cadmium { cadmium sulfide }			1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD	
			048-010-00-4	215-147-8								
11		chromium { chromium(III) oxide }				29 mg/kg	1.462	36.539 mg/kg	0.00365 %	✓		
			215-160-9	1308-38-9								
12		chrysene				2.6 mg/kg		2.241 mg/kg	0.000224 %	✓		
			601-048-00-0	205-923-4								
13		copper { dicopper oxide; copper (I) oxide }				140 mg/kg	1.126	135.883 mg/kg	0.0136 %	✓		
			029-002-00-X	215-270-7								
14		cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD	
			006-007-00-5									

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
15	dibenz[a,h]anthracene				0.2 mg/kg		0.172 mg/kg	0.0000172 %	✓	
	601-041-00-2	200-181-8	53-70-3							
16	fluoranthene				4.4 mg/kg		3.793 mg/kg	0.000379 %	✓	
		205-912-4	206-44-0							
17	fluorene				0.2 mg/kg		0.172 mg/kg	0.0000172 %	✓	
		201-695-5	86-73-7							
18	indeno[123-cd]pyrene				0.85 mg/kg		0.733 mg/kg	0.0000733 %	✓	
		205-893-2	193-39-5							
19	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	540 mg/kg		465.517 mg/kg	0.0466 %	✓	
	082-001-00-6									
20	mercury { mercury dichloride }				3.6 mg/kg	1.353	4.2 mg/kg	0.00042 %	✓	
	080-010-00-X	231-299-8	7487-94-7							
21	naphthalene				0.36 mg/kg		0.31 mg/kg	0.000031 %	✓	
	601-052-00-2	202-049-5	91-20-3							
22	nickel { nickel dihydroxide }				35 mg/kg	1.579	47.657 mg/kg	0.00477 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
23	pH		PH		8.2 pH		8.2 pH	8.2 pH		
24	phenanthrene				2.2 mg/kg		1.897 mg/kg	0.00019 %	✓	
		201-581-5	85-01-8							
25	pyrene				5.1 mg/kg		4.397 mg/kg	0.00044 %	✓	
		204-927-3	129-00-0							
26	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
27	zinc { zinc sulphate }				390 mg/kg	2.469	830.194 mg/kg	0.083 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
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 Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD** Below limit of detection
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: CP/RC116

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

Sample details

Sample Name:	LoW Code:
CP/RC116	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
2.9 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
14%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 14% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	acenaphthene	201-469-6	83-32-9		<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	3.9 mg/kg	1.32	4.517	mg/kg	0.000452 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
8	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
10	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
11	chromium { chromium(III) oxide }	215-160-9	1308-38-9		6.1 mg/kg	1.462	7.821	mg/kg	0.000782 %	✓	
12	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
13	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	13 mg/kg	1.126	12.839	mg/kg	0.00128 %	✓	
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5			<1 mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<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	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
	601-041-00-2	200-181-8	53-70-3								
16	fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
		205-912-4	206-44-0								
17	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
		201-695-5	86-73-7								
18	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
		205-893-2	193-39-5								
19	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	15 mg/kg		13.158 mg/kg	0.00132 %		✓	
	082-001-00-6										
20	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %			<LOD
	080-010-00-X	231-299-8	7487-94-7								
21	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-052-00-2	202-049-5	91-20-3								
22	nickel { nickel dihydroxide }				8.8 mg/kg	1.579	12.193 mg/kg	0.00122 %		✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
23	pH		PH		8.4 pH		8.4 pH	8.4 pH			
24	phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
		201-581-5	85-01-8								
25	pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
		204-927-3	129-00-0								
26	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				2.5 mg/kg	2.554	5.6 mg/kg	0.00056 %		✓	
	034-002-00-8										
27	zinc { zinc sulphate }				25 mg/kg	2.469	54.151 mg/kg	0.00542 %		✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
Total:									0.0114 %		

Key

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

Classification of sample: WS102

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

Sample details

Sample Name:	LoW Code:
WS102	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
1.00-1.20 m	Entry:
Moisture content:	17 05 03 * (Soil and stones containing hazardous substances)
19%	
(dry weight correction)	

Hazard properties

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.: 0.138%)

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.: 0.138%)

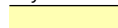
Determinands

Moisture content: 19% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	acenaphthene	201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg		<0.00001 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg		<0.00001 %		<LOD
3	anthracene	204-371-1	120-12-7		0.22 mg/kg		0.185 mg/kg		0.0000185 %	✓	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4		14 mg/kg	1.32	15.533 mg/kg		0.00155 %	✓	
5	benzene	601-020-00-8	200-753-7		<1 mg/kg		<1 mg/kg		<0.0001 %		<LOD
6	benzo[a]anthracene	601-033-00-9	200-280-6		1.2 mg/kg		1.008 mg/kg		0.000101 %	✓	
7	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5		1 mg/kg		0.84 mg/kg		0.000084 %	✓	
8	benzo[b]fluoranthene	601-034-00-4	205-911-9		1.2 mg/kg		1.008 mg/kg		0.000101 %	✓	

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
9	benzo[ghi]perylene	205-883-8	191-24-2		0.84 mg/kg		0.706 mg/kg	0.0000706 %	✓	
10	benzo[k]fluoranthene	601-036-00-5	205-916-6		0.67 mg/kg		0.563 mg/kg	0.0000563 %	✓	
11	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	0.9 mg/kg	1.285	0.972 mg/kg	0.0000756 %	✓	
12	chromium { chromium(III) oxide }	215-160-9	1308-38-9		15 mg/kg	1.462	18.423 mg/kg	0.00184 %	✓	
13	chrysene	601-048-00-0	205-923-4	218-01-9	1 mg/kg		0.84 mg/kg	0.000084 %	✓	
14	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	78 mg/kg	1.126	73.798 mg/kg	0.00738 %	✓	
15	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
16	dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
17	ethylbenzene	601-023-00-4	202-849-4	100-41-4	<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
18	fluoranthene	205-912-4	206-44-0		2 mg/kg		1.681 mg/kg	0.000168 %	✓	
19	fluorene	201-695-5	86-73-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
20	indeno[123-cd]pyrene	205-893-2	193-39-5		0.6 mg/kg		0.504 mg/kg	0.0000504 %	✓	
21	lead { lead compounds with the exception of those specified elsewhere in this Annex }	082-001-00-6			580 mg/kg		487.395 mg/kg	0.0487 %	✓	
22	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7	0.6 mg/kg	1.353	0.682 mg/kg	0.0000682 %	✓	
23	naphthalene	601-052-00-2	202-049-5	91-20-3	0.47 mg/kg		0.395 mg/kg	0.0000395 %	✓	
24	nickel { nickel dihydroxide }	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]	20 mg/kg	1.579	26.546 mg/kg	0.00265 %	✓	
25	pH		PH		8.3 pH		8.3 pH	8.3 pH		
26	phenanthrene	201-581-5	85-01-8		1.5 mg/kg		1.261 mg/kg	0.000126 %	✓	
27	pyrene	204-927-3	129-00-0		2 mg/kg		1.681 mg/kg	0.000168 %	✓	
28	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8			<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
29	toluene	601-021-00-3	203-625-9	108-88-3	<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
30	TPH (C6 to C40) petroleum group		TPH		1640 mg/kg		1378.151 mg/kg	0.138 %	✓	
31	xylene	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]	<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
32	zinc { zinc sulphate }	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]	360 mg/kg	2.469	747.014 mg/kg	0.0747 %	✓	
Total:								0.277 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i) on Flam. Liq. 1; H224, Flam. Liq. 2; H225, Flam. Liq. 3; H226: **Force this Hazardous property to non hazardous because TPH composition and concentration under site conditions make hazard unlikely**

Classification of sample: CP/RC104A

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

Sample details

Sample Name:	LoW Code:	
CP/RC104A	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1.70-1.80 m		
Moisture content:		
23%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 23% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	acenaphthene	201-469-6	83-32-9		<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	3.4 mg/kg	1.32	3.65	mg/kg	0.000365 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
8	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
10	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<0.2 mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
11	chromium { chromium(III) oxide }	215-160-9	1308-38-9		17 mg/kg	1.462	20.2	mg/kg	0.00202 %	✓	
12	chrysene	601-048-00-0	205-923-4	218-01-9	<0.05 mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
13	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	4.8 mg/kg	1.126	4.394	mg/kg	0.000439 %	✓	
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5			<1 mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<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		dibenz[a,h]anthracene			1	<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
16	•	fluoranthene											
			205-912-4	206-44-0		<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
17	•	fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-695-5	86-73-7									
18	•	indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			205-893-2	193-39-5									
19	🧪	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	15	mg/kg		12.195	mg/kg	0.00122 %	✓	
		082-001-00-6											
20	🧪	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
		080-010-00-X	231-299-8	7487-94-7									
21		naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
22	🧪	nickel { nickel dihydroxide }				23	mg/kg	1.579	29.535	mg/kg	0.00295 %	✓	
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
23	•	pH				8.1	pH		8.1	pH	8.1 pH		
				PH									
24	•	phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			201-581-5	85-01-8									
25	•	pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
			204-927-3	129-00-0									
26	🧪	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
		034-002-00-8											
27	🧪	zinc { zinc sulphate }				46	mg/kg	2.469	92.348	mg/kg	0.00923 %	✓	
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
Total:											0.0169 %		

Key

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

Classification of sample: CP/RC103

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

Sample details

Sample Name:	LoW Code:	
CP/RC103	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.3 m		
Moisture content:		
7.9%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 7.9% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	15 mg/kg	1.32	18.355 mg/kg	0.00184 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	0.5 mg/kg		0.463 mg/kg	0.0000463 %	✓	
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	0.32 mg/kg		0.297 mg/kg	0.0000297 %	✓	
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	0.62 mg/kg		0.575 mg/kg	0.0000575 %	✓	
8	benzo[ghi]perylene	205-883-8	191-24-2		<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	0.2 mg/kg		0.185 mg/kg	0.0000185 %	✓	
10	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	0.2 mg/kg	1.285	0.238 mg/kg	0.0000185 %	✓	
11	chromium { chromium(III) oxide }	215-160-9	1308-38-9		17 mg/kg	1.462	23.027 mg/kg	0.0023 %	✓	
12	chrysene	601-048-00-0	205-923-4	218-01-9	0.38 mg/kg		0.352 mg/kg	0.0000352 %	✓	
13	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	67 mg/kg	1.126	69.912 mg/kg	0.00699 %	✓	
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5			<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<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		dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD	
		601-041-00-2	200-181-8	53-70-3								
16	•	fluoranthene				0.66 mg/kg		0.612 mg/kg	0.0000612 %	✓		
			205-912-4	206-44-0								
17	•	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD	
			201-695-5	86-73-7								
18	•	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD	
			205-893-2	193-39-5								
19	🧪	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	12 mg/kg		11.121 mg/kg	0.00111 %	✓		
		082-001-00-6										
20	🧪	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD	
		080-010-00-X	231-299-8	7487-94-7								
21		naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD	
		601-052-00-2	202-049-5	91-20-3								
22	🧪	nickel { nickel dihydroxide }				52 mg/kg	1.579	76.12 mg/kg	0.00761 %	✓		
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
23	•	pH				8.8 pH		8.8 pH	8.8 pH			
				PH								
24	•	phenanthrene				0.34 mg/kg		0.315 mg/kg	0.0000315 %	✓		
			201-581-5	85-01-8								
25	•	pyrene				0.68 mg/kg		0.63 mg/kg	0.000063 %	✓		
			204-927-3	129-00-0								
26	🧪	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD	
		034-002-00-8										
27	🧪	zinc { zinc sulphate }				150 mg/kg	2.469	343.276 mg/kg	0.0343 %	✓		
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
Total:									0.0551 %			

Key

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

Classification of sample: CP/RC106A

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

Sample details

Sample Name:	LoW Code:	
CP/RC106A	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.6 m		
Moisture content:		
9.7%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 9.7% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		0.44 mg/kg		0.401 mg/kg	0.0000401 %	✓	
2	acenaphthylene	205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
3	anthracene	204-371-1	120-12-7		0.73 mg/kg		0.665 mg/kg	0.0000665 %	✓	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4		16 mg/kg	1.32	19.257 mg/kg	0.00193 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6		3.1 mg/kg		2.826 mg/kg	0.000283 %	✓	
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5		1.5 mg/kg		1.367 mg/kg	0.000137 %	✓	
7	benzo[b]fluoranthene	601-034-00-4	205-911-9		3 mg/kg		2.735 mg/kg	0.000273 %	✓	
8	benzo[ghi]perylene	205-883-8	191-24-2		0.89 mg/kg		0.811 mg/kg	0.0000811 %	✓	
9	benzo[k]fluoranthene	601-036-00-5	205-916-6		0.9 mg/kg		0.82 mg/kg	0.000082 %	✓	
10	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
11	chromium { chromium(III) oxide }	215-160-9	1308-38-9		15 mg/kg	1.462	19.985 mg/kg	0.002 %	✓	
12	chrysene	601-048-00-0	205-923-4		2.2 mg/kg		2.005 mg/kg	0.000201 %	✓	
13	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7		63 mg/kg	1.126	64.659 mg/kg	0.00647 %	✓	
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5			<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<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		dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD	
		601-041-00-2	200-181-8	53-70-3								
16	•	fluoranthene				5.3 mg/kg		4.831 mg/kg	0.000483 %	✓		
			205-912-4	206-44-0								
17	•	fluorene				0.41 mg/kg		0.374 mg/kg	0.0000374 %	✓		
			201-695-5	86-73-7								
18	•	indeno[123-cd]pyrene				0.62 mg/kg		0.565 mg/kg	0.0000565 %	✓		
			205-893-2	193-39-5								
19	🧪	lead { • lead compounds with the exception of those specified elsewhere in this Annex }			1	370 mg/kg		337.284 mg/kg	0.0337 %	✓		
		082-001-00-6										
20	🧪	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD	
		080-010-00-X	231-299-8	7487-94-7								
21		naphthalene				0.44 mg/kg		0.401 mg/kg	0.0000401 %	✓		
		601-052-00-2	202-049-5	91-20-3								
22	🧪	nickel { nickel dihydroxide }				25 mg/kg	1.579	35.996 mg/kg	0.0036 %	✓		
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
23	•	pH				8 pH		8 pH	8pH			
				PH								
24	•	phenanthrene				4.3 mg/kg		3.92 mg/kg	0.000392 %	✓		
			201-581-5	85-01-8								
25	•	pyrene				5.4 mg/kg		4.923 mg/kg	0.000492 %	✓		
			204-927-3	129-00-0								
26	🧪	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD	
		034-002-00-8										
27	🧪	zinc { zinc sulphate }				170 mg/kg	2.469	382.662 mg/kg	0.0383 %	✓		
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
Total:									0.0892 %			

Key

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

Classification of sample: CP/RC108

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

Sample details

Sample Name:	LoW Code:	
CP/RC108	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.3 m		
Moisture content:		
7.1%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 7.1% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		0.31 mg/kg		0.289 mg/kg	0.0000289 %	✓	
2	acenaphthylene	205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
3	anthracene	204-371-1	120-12-7		0.81 mg/kg		0.756 mg/kg	0.0000756 %	✓	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4		14 mg/kg	1.32	17.259 mg/kg	0.00173 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6		3.3 mg/kg		3.081 mg/kg	0.000308 %	✓	
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5		1.7 mg/kg		1.587 mg/kg	0.000159 %	✓	
7	benzo[b]fluoranthene	601-034-00-4	205-911-9		3.3 mg/kg		3.081 mg/kg	0.000308 %	✓	
8	benzo[ghi]perylene	205-883-8	191-24-2		1.1 mg/kg		1.027 mg/kg	0.000103 %	✓	
9	benzo[k]fluoranthene	601-036-00-5	205-916-6		1.4 mg/kg		1.307 mg/kg	0.000131 %	✓	
10	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1	0.2 mg/kg	1.285	0.24 mg/kg	0.0000187 %	✓	
11	chromium { chromium(III) oxide }	215-160-9	1308-38-9		18 mg/kg	1.462	24.564 mg/kg	0.00246 %	✓	
12	chrysene	601-048-00-0	205-923-4		2.3 mg/kg		2.148 mg/kg	0.000215 %	✓	
13	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7		39 mg/kg	1.126	40.999 mg/kg	0.0041 %	✓	
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }	006-007-00-5			<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<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		dibenz[a,h]anthracene				0.22	mg/kg		0.205	mg/kg	0.0000205 %	✓	
		601-041-00-2	200-181-8	53-70-3									
16	■	fluoranthene				5.2	mg/kg		4.855	mg/kg	0.000486 %	✓	
			205-912-4	206-44-0									
17	■	fluorene				0.31	mg/kg		0.289	mg/kg	0.0000289 %	✓	
			201-695-5	86-73-7									
18	■	indeno[123-cd]pyrene				0.86	mg/kg		0.803	mg/kg	0.0000803 %	✓	
			205-893-2	193-39-5									
19	🧬	lead { ■ lead compounds with the exception of those specified elsewhere in this Annex }			1	200	mg/kg		186.741	mg/kg	0.0187 %	✓	
		082-001-00-6											
20	🧬	mercury { mercury dichloride }				0.4	mg/kg	1.353	0.506	mg/kg	0.0000506 %	✓	
		080-010-00-X	231-299-8	7487-94-7									
21		naphthalene				0.93	mg/kg		0.868	mg/kg	0.0000868 %	✓	
		601-052-00-2	202-049-5	91-20-3									
22	🧬	nickel { nickel dihydroxide }				34	mg/kg	1.579	50.143	mg/kg	0.00501 %	✓	
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
23	■	pH				8.5	pH		8.5	pH	8.5 pH		
				PH									
24	■	phenanthrene				3.5	mg/kg		3.268	mg/kg	0.000327 %	✓	
			201-581-5	85-01-8									
25	■	pyrene				4.8	mg/kg		4.482	mg/kg	0.000448 %	✓	
			204-927-3	129-00-0									
26	🧬	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
		034-002-00-8											
27	🧬	zinc { zinc sulphate }				110	mg/kg	2.469	253.616	mg/kg	0.0254 %	✓	
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
Total:												0.0607 %	

Key

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

Classification of sample: CP/RC101B[2]

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

Sample details

Sample Name:	LoW Code:	
CP/RC101B[2]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
1 m		
Moisture content:		
10%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 10% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	benzene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
2	ethylbenzene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
3	pH				8.4 pH		8.4 pH	8.4 pH		
			PH							
4	toluene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
5	TPH (C6 to C40) petroleum group				264 mg/kg		240 mg/kg	0.024 %	✓	
			TPH							
6	xylene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
Total:								0.0244 %		

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)
<LOD	Below limit of detection

Supplementary Hazardous Property Information

HP 3(i) on Flam. Liq. 1; H224, Flam. Liq. 2; H225, Flam. Liq. 3; H226: **Force this Hazardous property to non hazardous because TPH composition and concentration under site conditions make hazard unlikely**

Classification of sample: CP/RC107[1]

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

Sample details

Sample Name:	LoW Code:
CP/RC107[1]	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
1 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
4.7%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 4.7% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	benzene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	601-020-00-8	200-753-7	71-43-2								
2	ethylbenzene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	601-023-00-4	202-849-4	100-41-4								
3	pH				8.2 pH		8.2 pH	8.2 pH			
			PH								
4	toluene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	601-021-00-3	203-625-9	108-88-3								
5	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %			<LOD
			TPH								
6	xylene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]								
Total:									0.0014 %		

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)
<LOD	Below limit of detection

Classification of sample: TP103[1]

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

Sample details

Sample Name:	LoW Code:	
TP103[1]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.80-1.00 m		
Moisture content:		
8.4%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 8.4% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	benzene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-020-00-8	200-753-7	71-43-2							
2	ethylbenzene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-023-00-4	202-849-4	100-41-4							
3	pH				10.2 pH		10.2 pH	10.2 pH		
			PH							
4	toluene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-021-00-3	203-625-9	108-88-3							
5	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
6	xylene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]							
Total:								0.0014 %		

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)
<LOD	Below limit of detection

Classification of sample: TP112

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

Sample details

Sample Name:	LoW Code:
TP112	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
1.30-1.50 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
6.3%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 6.3% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	benzene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	601-020-00-8	200-753-7	71-43-2								
2	ethylbenzene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	601-023-00-4	202-849-4	100-41-4								
3	pH				10.1 pH		10.1 pH	10.1 pH			
			PH								
4	toluene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	601-021-00-3	203-625-9	108-88-3								
5	TPH (C6 to C40) petroleum group				686 mg/kg		645.343 mg/kg	0.0645 %		✔	
			TPH								
6	xylene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]								
Total:									0.0649 %		

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)
<LOD	Below limit of detection

Supplementary Hazardous Property Information

HP 3(i) on Flam. Liq. 1; H224, Flam. Liq. 2; H225, Flam. Liq. 3; H226: **Force this Hazardous property to non hazardous because TPH composition and concentration under site conditions make hazard unlikely**

Appendix A: Classifier defined and non CLP determinands

• **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: 17/07/2015

Risk Phrases: R36 , R37 , R38 , N R50/53 , N R51/53

Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Aquatic Chronic 2 H411

• **acenaphthylene** (EC Number: 205-917-1, CAS Number: 208-96-8)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17/07/2015

Risk Phrases: R22 , R26 , R27 , R36 , R37 , R38

Hazard Statements: Acute Tox. 4 H302 , Acute Tox. 1 H330 , Acute Tox. 1 H310 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315

• **anthracene** (EC Number: 204-371-1, CAS Number: 120-12-7)

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17/07/2015

Risk Phrases: R36 , R37 , R38 , R43 , N R50/53

Hazard Statements: Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

• **benzo[ghi]perylene** (EC Number: 205-883-8, CAS Number: 191-24-2)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 23/07/2015

Risk Phrases: N R50/53

Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

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

Conversion factor: 1.462

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17/07/2015

Risk Phrases: R20 , R22 , R36 , R37 , R38 , R42 , R43 , R50/53 , R60 , R61

Hazard Statements: Acute Tox. 4 H332 , Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Skin Irrit. 2 H315 , Resp. Sens. 1 H334 , Skin Sens. 1 H317 , Repr. 1B H360FD , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

• **dicopper oxide; copper (I) oxide** (EC Number: 215-270-7, CAS Number: 1317-39-1)

CLP index number: 029-002-00-X

Data source: Regulation (EU) 2016/1179 of 19 July 2016 (ATP9)

Additional Risk Phrases: N R50/53 , N R50/53 >= 0.25 %

Additional Hazard Statement(s): None.

Reason for additional Hazards Statement(s)/Risk Phrase(s):

10/10/2016 - N R50/53 risk phrase sourced from: WM3 v1 still uses ecotoxic risk phrases

10/10/2016 - N R50/53 >= 0.25 % risk phrase sourced from: WM3 v1 still uses ecotoxic risk phrases

• **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

Data source: Commission Regulation (EC) No 790/2009 - 1st Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP1)

Additional Risk Phrases: None.

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

Reason for additional Hazards Statement(s)/Risk Phrase(s):

14/12/2015 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

• **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: 21/08/2015

Risk Phrases: Xn R22 , N R50/53

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

• **fluorene** (EC Number: 201-695-5, CAS Number: 86-73-7)

Description/Comments: Data from C&L Inventory Database
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 06/08/2015
Risk Phrases: N R50/53
Hazard Statements: Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

• **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 06/08/2015
Risk Phrases: R40
Hazard Statements: Carc. 2 H351

• **lead compounds with the exception of those specified elsewhere in this Annex**

CLP index number: 082-001-00-6
Data source: Regulation 1272/2008/EC - Classification, labelling and packaging of substances and mixtures. (CLP)
Additional Risk Phrases: None.
Additional Hazard Statement(s): Carc. 2 H351
Reason for additional Hazards Statement(s)/Risk Phrase(s):
03/06/2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2A (Sup 7, 87) 2006; Lead REACH Consortium
www.reach-lead.eu/substanceinformation.html. Review date 29/09/2015

• **pH** (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25/05/2015
Risk Phrases: None.
Hazard Statements: None.

• **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: 06/08/2015
Risk Phrases: R22 , R36 , R37 , R38 , R40 , R43 , N R50/53
Hazard Statements: Acute Tox. 4 H302 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Carc. 2 H351 , Skin Sens. 1 H317 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410 , Skin Irrit. 2 H315

• **pyrene** (EC Number: 204-927-3, CAS Number: 129-00-0)

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 2014
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 21/08/2015
Risk Phrases: Xi R36/37/38 , N R50/53
Hazard Statements: Skin Irrit. 2 H315 , Eye Irrit. 2 H319 , STOT SE 3 H335 , Aquatic Acute 1 H400 , Aquatic Chronic 1 H410

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

CLP index number: 601-023-00-4
Data source: Commission Regulation (EU) No 605/2014 – 6th Adaptation to Technical Progress for Regulation (EC) No 1272/2008. (ATP6)
Additional Risk Phrases: None.
Additional Hazard Statement(s): Carc. 2 H351
Reason for additional Hazards Statement(s)/Risk Phrase(s):
03/06/2015 - 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: 25/05/2015
Risk Phrases: R10 , R45 , R46 , R51/53 , R63 , R65
Hazard Statements: Flam. Liq. 3 H226 , Asp. Tox. 1 H304 , STOT RE 2 H373 , Muta. 1B H340 , Carc. 1B H350 , Repr. 2 H361d , Aquatic Chronic 2 H411

Appendix B: Rationale for selection of metal species

arsenic {arsenic trioxide}

Worst case species based on risk phrases

cadmium {cadmium sulfide}

Worst case species based on risk phrases

chromium {chromium(III) oxide}

Worst case species based on risk phrases

copper {dicopper oxide; copper (I) oxide}

Most likely common species

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

Worst case species

lead {lead compounds with the exception of those specified elsewhere in this Annex}

Worst case species based on risk phrases

mercury {mercury dichloride}

Worst case species based on risk phrases

nickel {nickel dihydroxide}

Worst case species based on risk phrases

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

Worst case species based on risk phrases

zinc {zinc sulphate}

Worst case species based on risk phrases

Appendix C: Version

HazWasteOnline Classification Engine: **WM3 1st Edition, May 2015**

HazWasteOnline Classification Engine Version: 2017.269.3405.6897 (26 Sep 2017)

HazWasteOnline Database: 2017.270.3406.6898 (28 Sep 2017)

This classification utilises the following guidance and legislation:

WM3 - Waste Classification - May 2015

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

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



YAVQ4-VNU5M-YAAUP

Job name

1620002493 Archaeological Trench Waste Assessment

Description/Comments

Project

Site

Related Documents

#	Name	Description
None		

Waste Stream Template

Ramboll typical metals, hydrocarbons and misc

Classified by

Name: Hazel Comyn	Company: Ramboll UK Ltd	HazWasteOnline™ Training Record:	
Date: 27 Mar 2020 16:17 GMT	1 Broad Gate	Course	Date
Telephone: 07870 809 789	The Headrow	Hazardous Waste Classification	01 Mar 2012
	Leeds	Advanced Hazardous Waste Classification	-
	LS1 8EQ		

Report

Created by: Hazel Comyn
Created date: 27 Mar 2020 16:17 GMT

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	TT1	0.00-0.20	Non Hazardous		3
2	TT1[2]	0.30-0.50	Non Hazardous		6
3	TT1[3]	0.60-0.70	Non Hazardous		8
4	TT1[4]	0.80-1.00	Non Hazardous		10
5	TT1[5]	0.50-1.00	Non Hazardous		13
6	TT4	0.10-1.00	Non Hazardous		16
7	TT4[2]	0.20-0.50	Non Hazardous		19
8	TT5	0.00-0.40	Non Hazardous		21
9	TT5[2]	0.50-1.00	Non Hazardous		24
10	TT5[3]	1.00-1.20	Non Hazardous		27
11	TT2	0.00-0.30	Non Hazardous		29
12	TT2[2]	0.40-0.80	Non Hazardous		32

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
13	TT2[3]	0.80-1.00	Non Hazardous		34
14	TT2[4]	0.20-0.40	Non Hazardous		36
15	TT2[5]	1.00-1.20	Non Hazardous		39
16	TT3	0.10-0.40	Non Hazardous		41
17	TT3[2]	0.10-0.20	Non Hazardous		44
18	TT3[3]	0.40-0.70	Non Hazardous		47
19	TT3[4]	0.90-1.00	Non Hazardous		49
20	TT3[5]	0.80-1.00	Non Hazardous		52
21	TT3[6]	1.20-1.30	Non Hazardous		54

Appendices	Page
Appendix A: Classifier defined and non CLP determinands	56
Appendix B: Rationale for selection of metal species	57
Appendix C: Version	58

Classification of sample: TT1

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

Sample details

Sample Name:	LoW Code:	
TT1	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.00-0.20 m		
Moisture content:		
16%		
(dry weight correction)		

Hazard properties

None identified

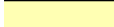
Determinands

Moisture content: 16% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	pH				7.7 pH		7.7 pH	7.7 pH		
2	asbestos				710 mg/kg		612.069 mg/kg	0.0612 %	✓	
	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	arsenic { arsenic trioxide }				13 mg/kg	1.32	14.797 mg/kg	0.00148 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
4	beryllium { beryllium oxide }				2 mg/kg	2.775	4.785 mg/kg	0.000479 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
5	boron { boron tribromide/trichloride/trifluoride (combined) }				1.4 mg/kg	13.43	16.209 mg/kg	0.00162 %	✓	
			10294-33-4, 10294-34-5, 7637-07-2							
6	cadmium { cadmium sulfide }			1	0.6 mg/kg	1.285	0.665 mg/kg	0.0000517 %	✓	
	048-010-00-4	215-147-8	1306-23-6							
7	chromium { chromium(III) oxide }				27 mg/kg	1.462	34.019 mg/kg	0.0034 %	✓	
		215-160-9	1308-38-9							
8	copper { dicopper oxide; copper (I) oxide }				49 mg/kg	1.126	47.559 mg/kg	0.00476 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	140 mg/kg		120.69 mg/kg	0.0121 %	✓	
	082-001-00-6									
10	mercury { mercury dichloride }				0.5 mg/kg	1.353	0.583 mg/kg	0.0000583 %	✓	
	080-010-00-X	231-299-8	7487-94-7							
11	nickel { nickel dihydroxide }				34 mg/kg	1.579	46.296 mg/kg	0.00463 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	034-002-00-8											
13	vanadium { divanadium pentaoxide; vanadium pentoxide }				45	mg/kg	1.785	69.253	mg/kg	0.00693 %	✓	
	023-001-00-8	215-239-8	1314-62-1									
14	zinc { zinc sulphate }				180	mg/kg	2.469	383.167	mg/kg	0.0383 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
15	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 }				4	mg/kg	1.884	6.497	mg/kg	0.00065 %	✓	
	006-007-00-5											
16	phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
17	acenaphthene				3.5	mg/kg		3.017	mg/kg	0.000302 %	✓	
		201-469-6	83-32-9									
18	acenaphthylene				0.53	mg/kg		0.457	mg/kg	0.0000457 %	✓	
		205-917-1	208-96-8									
19	anthracene				7.2	mg/kg		6.207	mg/kg	0.000621 %	✓	
		204-371-1	120-12-7									
20	benzo[a]anthracene				22	mg/kg		18.966	mg/kg	0.0019 %	✓	
	601-033-00-9	200-280-6	56-55-3									
21	benzo[a]pyrene; benzo[def]chrysene				18	mg/kg		15.517	mg/kg	0.00155 %	✓	
	601-032-00-3	200-028-5	50-32-8									
22	benzo[b]fluoranthene				22	mg/kg		18.966	mg/kg	0.0019 %	✓	
	601-034-00-4	205-911-9	205-99-2									
23	benzo[ghi]perylene				13	mg/kg		11.207	mg/kg	0.00112 %	✓	
		205-883-8	191-24-2									
24	benzo[k]fluoranthene				9	mg/kg		7.759	mg/kg	0.000776 %	✓	
	601-036-00-5	205-916-6	207-08-9									
25	chrysene				16	mg/kg		13.793	mg/kg	0.00138 %	✓	
	601-048-00-0	205-923-4	218-01-9									
26	dibenz[a,h]anthracene				2.6	mg/kg		2.241	mg/kg	0.000224 %	✓	
	601-041-00-2	200-181-8	53-70-3									
27	fluoranthene				42	mg/kg		36.207	mg/kg	0.00362 %	✓	
		205-912-4	206-44-0									
28	fluorene				2.6	mg/kg		2.241	mg/kg	0.000224 %	✓	
		201-695-5	86-73-7									
29	indeno[123-cd]pyrene				11	mg/kg		9.483	mg/kg	0.000948 %	✓	
		205-893-2	193-39-5									
30	naphthalene				1.7	mg/kg		1.466	mg/kg	0.000147 %	✓	
	601-052-00-2	202-049-5	91-20-3									
31	phenanthrene				24	mg/kg		20.69	mg/kg	0.00207 %	✓	
		201-581-5	85-01-8									
32	pyrene				38	mg/kg		32.759	mg/kg	0.00328 %	✓	
		204-927-3	129-00-0									
33	confirm TPH has NOT arisen from diesel or petrol				☒							
34	TPH (C6 to C40) petroleum group				810	mg/kg		698.276	mg/kg	0.0698 %	✓	
			TPH									
Total:										0.226 %		

Key

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

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 TPH composition and concentration under site conditions make hazard unlikely

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0698%)

Classification of sample: TT1[2]



Non Hazardous Waste

Classified as **17 05 04**

in the List of Waste

Sample details

Sample Name:	TT1[2]	LoW Code:	
Sample Depth:	0.30-0.50 m	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	14%	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
	(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 14% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	pH				8.2	pH		8.2	pH	8.2 pH		
2	arsenic { arsenic trioxide }				16	mg/kg	1.32	18.531	mg/kg	0.00185 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
3	beryllium { beryllium oxide }				0.62	mg/kg	2.775	1.509	mg/kg	0.000151 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
4	boron { boron tribromide/trichloride/trifluoride (combined) }				0.3	mg/kg	13.43	3.534	mg/kg	0.000353 %	✓	
			10294-33-4, 10294-34-5, 7637-07-2									
5	cadmium { cadmium sulfide }			1	0.7	mg/kg	1.285	0.789	mg/kg	0.0000614 %	✓	
	048-010-00-4	215-147-8	1306-23-6									
6	chromium { chromium(III) oxide }				13	mg/kg	1.462	16.667	mg/kg	0.00167 %	✓	
		215-160-9	1308-38-9									
7	copper { dicopper oxide; copper (I) oxide }				33	mg/kg	1.126	32.592	mg/kg	0.00326 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
8	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	720	mg/kg		631.579	mg/kg	0.0632 %	✓	
	082-001-00-6											
9	mercury { mercury dichloride }				0.5	mg/kg	1.353	0.594	mg/kg	0.0000594 %	✓	
	080-010-00-X	231-299-8	7487-94-7									
10	nickel { nickel dihydroxide }				13	mg/kg	1.579	18.012	mg/kg	0.0018 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	034-002-00-8											
12	vanadium { divanadium pentaoxide; vanadium pentoxide }				18	mg/kg	1.785	28.187	mg/kg	0.00282 %	✓	
	023-001-00-8	215-239-8	1314-62-1									

#	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	zinc { zinc sulphate }				86 mg/kg	2.469	186.28 mg/kg	0.0186 %		✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
	006-007-00-5										
15	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	604-001-00-2	203-632-7	108-95-2								
16	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		201-469-6	83-32-9								
17	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-917-1	208-96-8								
18	anthracene				0.18 mg/kg		0.158 mg/kg	0.0000158 %		✓	
		204-371-1	120-12-7								
19	benzo[a]anthracene				0.72 mg/kg		0.632 mg/kg	0.0000632 %		✓	
	601-033-00-9	200-280-6	56-55-3								
20	benzo[a]pyrene; benzo[def]chrysene				0.63 mg/kg		0.553 mg/kg	0.0000553 %		✓	
	601-032-00-3	200-028-5	50-32-8								
21	benzo[b]fluoranthene				0.82 mg/kg		0.719 mg/kg	0.0000719 %		✓	
	601-034-00-4	205-911-9	205-99-2								
22	benzo[ghi]perylene				0.39 mg/kg		0.342 mg/kg	0.0000342 %		✓	
		205-883-8	191-24-2								
23	benzo[k]fluoranthene				0.62 mg/kg		0.544 mg/kg	0.0000544 %		✓	
	601-036-00-5	205-916-6	207-08-9								
24	chrysene				0.53 mg/kg		0.465 mg/kg	0.0000465 %		✓	
	601-048-00-0	205-923-4	218-01-9								
25	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-041-00-2	200-181-8	53-70-3								
26	fluoranthene				0.86 mg/kg		0.754 mg/kg	0.0000754 %		✓	
		205-912-4	206-44-0								
27	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		201-695-5	86-73-7								
28	indeno[123-cd]pyrene				0.32 mg/kg		0.281 mg/kg	0.0000281 %		✓	
		205-893-2	193-39-5								
29	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-052-00-2	202-049-5	91-20-3								
30	phenanthrene				0.71 mg/kg		0.623 mg/kg	0.0000623 %		✓	
		201-581-5	85-01-8								
31	pyrene				0.86 mg/kg		0.754 mg/kg	0.0000754 %		✓	
		204-927-3	129-00-0								
32	confirm TPH has NOT arisen from diesel or petrol				☑						
33	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %			<LOD
			TPH								
Total:									0.096 %		

Key

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

Classification of sample: TT1[3]


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

Sample details

Sample Name:	LoW Code:
TT1[3]	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.60-0.70 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
12%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 12% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	pH				8 pH		8	pH	8pH		
2	arsenic { arsenic trioxide }				4.9 mg/kg	1.32	5.776	mg/kg	0.000578 %	✓	
3	beryllium { beryllium oxide }				0.41 mg/kg	2.775	1.016	mg/kg	0.000102 %	✓	
4	boron { boron tribromide/trichloride/trifluoride (combined) }				0.5 mg/kg	13.43	5.996	mg/kg	0.0006 %	✓	
5	cadmium { cadmium sulfide }			1	<0.2 mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
6	chromium { chromium(III) oxide }				12 mg/kg	1.462	15.66	mg/kg	0.00157 %	✓	
7	copper { dicopper oxide; copper (I) oxide }				13 mg/kg	1.126	13.068	mg/kg	0.00131 %	✓	
8	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	14 mg/kg		12.5	mg/kg	0.00125 %	✓	
9	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
10	nickel { nickel dihydroxide }				13 mg/kg	1.579	18.333	mg/kg	0.00183 %	✓	
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
12	vanadium { divanadium pentaoxide; vanadium pentoxide }				15 mg/kg	1.785	23.909	mg/kg	0.00239 %	✓	

#	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	zinc { zinc sulphate }				44 mg/kg	2.469	97.008 mg/kg	0.0097 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
15	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
16	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
17	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8							
18	anthracene				0.21 mg/kg		0.188 mg/kg	0.0000187 %	✓	
		204-371-1	120-12-7							
19	benzo[a]anthracene				0.7 mg/kg		0.625 mg/kg	0.0000625 %	✓	
	601-033-00-9	200-280-6	56-55-3							
20	benzo[a]pyrene; benzo[def]chrysene				0.66 mg/kg		0.589 mg/kg	0.0000589 %	✓	
	601-032-00-3	200-028-5	50-32-8							
21	benzo[b]fluoranthene				0.58 mg/kg		0.518 mg/kg	0.0000518 %	✓	
	601-034-00-4	205-911-9	205-99-2							
22	benzo[ghi]perylene				0.39 mg/kg		0.348 mg/kg	0.0000348 %	✓	
		205-883-8	191-24-2							
23	benzo[k]fluoranthene				0.38 mg/kg		0.339 mg/kg	0.0000339 %	✓	
	601-036-00-5	205-916-6	207-08-9							
24	chrysene				0.48 mg/kg		0.429 mg/kg	0.0000429 %	✓	
	601-048-00-0	205-923-4	218-01-9							
25	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
26	fluoranthene				1 mg/kg		0.893 mg/kg	0.0000893 %	✓	
		205-912-4	206-44-0							
27	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
28	indeno[123-cd]pyrene				0.28 mg/kg		0.25 mg/kg	0.000025 %	✓	
		205-893-2	193-39-5							
29	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
30	phenanthrene				0.77 mg/kg		0.688 mg/kg	0.0000688 %	✓	
		201-581-5	85-01-8							
31	pyrene				0.99 mg/kg		0.884 mg/kg	0.0000884 %	✓	
		204-927-3	129-00-0							
32	confirm TPH has NOT arisen from diesel or petrol				☑					
33	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
Total:								0.0215 %		

Key

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

Classification of sample: TT1[4]

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

Sample details

Sample Name:	LoW Code:
TT1[4]	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.80-1.00 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
9.8%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 9.8% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	pH				8.1	pH		8.1	pH	8.1 pH		
2	arsenic { arsenic trioxide }				9.4	mg/kg	1.32	11.303	mg/kg	0.00113 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
3	beryllium { beryllium oxide }				0.71	mg/kg	2.775	1.795	mg/kg	0.000179 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
4	boron { boron tribromide/trichloride/trifluoride (combined) }				0.7	mg/kg	13.43	8.562	mg/kg	0.000856 %	✓	
			10294-33-4, 10294-34-5, 7637-07-2									
5	cadmium { cadmium sulfide }			1	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
	048-010-00-4	215-147-8	1306-23-6									
6	chromium { chromium(III) oxide }				13	mg/kg	1.462	17.304	mg/kg	0.00173 %	✓	
		215-160-9	1308-38-9									
7	copper { dicopper oxide; copper (I) oxide }				46	mg/kg	1.126	47.168	mg/kg	0.00472 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
8	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	55	mg/kg		50.091	mg/kg	0.00501 %	✓	
	082-001-00-6											
9	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
10	nickel { nickel dihydroxide }				16	mg/kg	1.579	23.016	mg/kg	0.0023 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	034-002-00-8											
12	vanadium { divanadium pentaoxide; vanadium pentoxide }				20	mg/kg	1.785	32.517	mg/kg	0.00325 %	✓	
	023-001-00-8	215-239-8	1314-62-1									

#	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	zinc { zinc sulphate }				67 mg/kg	2.469	150.677 mg/kg	0.0151 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
15	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
16	acenaphthene				0.7 mg/kg		0.638 mg/kg	0.0000638 %	✓	
		201-469-6	83-32-9							
17	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8							
18	anthracene				0.82 mg/kg		0.747 mg/kg	0.0000747 %	✓	
		204-371-1	120-12-7							
19	benzo[a]anthracene				2.1 mg/kg		1.913 mg/kg	0.000191 %	✓	
	601-033-00-9	200-280-6	56-55-3							
20	benzo[a]pyrene; benzo[def]chrysene				1.9 mg/kg		1.73 mg/kg	0.000173 %	✓	
	601-032-00-3	200-028-5	50-32-8							
21	benzo[b]fluoranthene				2.2 mg/kg		2.004 mg/kg	0.0002 %	✓	
	601-034-00-4	205-911-9	205-99-2							
22	benzo[ghi]perylene				1.2 mg/kg		1.093 mg/kg	0.000109 %	✓	
		205-883-8	191-24-2							
23	benzo[k]fluoranthene				1.1 mg/kg		1.002 mg/kg	0.0001 %	✓	
	601-036-00-5	205-916-6	207-08-9							
24	chrysene				2.1 mg/kg		1.913 mg/kg	0.000191 %	✓	
	601-048-00-0	205-923-4	218-01-9							
25	dibenz[a,h]anthracene				0.26 mg/kg		0.237 mg/kg	0.0000237 %	✓	
	601-041-00-2	200-181-8	53-70-3							
26	fluoranthene				4.5 mg/kg		4.098 mg/kg	0.00041 %	✓	
		205-912-4	206-44-0							
27	fluorene				0.38 mg/kg		0.346 mg/kg	0.0000346 %	✓	
		201-695-5	86-73-7							
28	indeno[123-cd]pyrene				1 mg/kg		0.911 mg/kg	0.0000911 %	✓	
		205-893-2	193-39-5							
29	naphthalene				0.32 mg/kg		0.291 mg/kg	0.0000291 %	✓	
	601-052-00-2	202-049-5	91-20-3							
30	phenanthrene				3.8 mg/kg		3.461 mg/kg	0.000346 %	✓	
		201-581-5	85-01-8							
31	pyrene				3.9 mg/kg		3.552 mg/kg	0.000355 %	✓	
		204-927-3	129-00-0							
32	confirm TPH has NOT arisen from diesel or petrol				☑					
33	TPH (C6 to C40) petroleum group				55 mg/kg		50.091 mg/kg	0.00501 %	✓	
			TPH							
Total:								0.0423 %		

Key

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

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 TPH composition and concentration under site conditions make hazard unlikely

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00501%)

Classification of sample: TT1[5]

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

Sample details

Sample Name:	LoW Code:
TT1[5]	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.50-1.00 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
14%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 14% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	pH				9.2	pH		9.2	pH	9.2 pH		
2	arsenic { arsenic trioxide }				25	mg/kg	1.32	28.955	mg/kg	0.0029 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
3	beryllium { beryllium oxide }				1.2	mg/kg	2.775	2.921	mg/kg	0.000292 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
4	boron { boron tribromide/trichloride/trifluoride (combined) }				0.9	mg/kg	13.43	10.603	mg/kg	0.00106 %	✓	
			10294-33-4, 10294-34-5, 7637-07-2									
5	cadmium { cadmium sulfide }			1	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
	048-010-00-4	215-147-8	1306-23-6									
6	chromium { chromium(III) oxide }				21	mg/kg	1.462	26.923	mg/kg	0.00269 %	✓	
		215-160-9	1308-38-9									
7	copper { dicopper oxide; copper (I) oxide }				92	mg/kg	1.126	90.861	mg/kg	0.00909 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
8	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	600	mg/kg		526.316	mg/kg	0.0526 %	✓	
	082-001-00-6											
9	mercury { mercury dichloride }				0.9	mg/kg	1.353	1.069	mg/kg	0.000107 %	✓	
	080-010-00-X	231-299-8	7487-94-7									
10	nickel { nickel dihydroxide }				21	mg/kg	1.579	29.096	mg/kg	0.00291 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	034-002-00-8											
12	vanadium { divanadium pentaoxide; vanadium pentoxide }				32	mg/kg	1.785	50.11	mg/kg	0.00501 %	✓	
	023-001-00-8	215-239-8	1314-62-1									

#	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	zinc { zinc sulphate }				240	mg/kg	2.469	519.852	mg/kg	0.052 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
	006-007-00-5											
15	phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
16	acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9									
17	acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8									
18	anthracene				0.22	mg/kg		0.193	mg/kg	0.0000193 %	✓	
		204-371-1	120-12-7									
19	benzo[a]anthracene				1.5	mg/kg		1.316	mg/kg	0.000132 %	✓	
	601-033-00-9	200-280-6	56-55-3									
20	benzo[a]pyrene; benzo[def]chrysene				1.4	mg/kg		1.228	mg/kg	0.000123 %	✓	
	601-032-00-3	200-028-5	50-32-8									
21	benzo[b]fluoranthene				1.4	mg/kg		1.228	mg/kg	0.000123 %	✓	
	601-034-00-4	205-911-9	205-99-2									
22	benzo[ghi]perylene				0.94	mg/kg		0.825	mg/kg	0.0000825 %	✓	
		205-883-8	191-24-2									
23	benzo[k]fluoranthene				0.96	mg/kg		0.842	mg/kg	0.0000842 %	✓	
	601-036-00-5	205-916-6	207-08-9									
24	chrysene				1.2	mg/kg		1.053	mg/kg	0.000105 %	✓	
	601-048-00-0	205-923-4	218-01-9									
25	dibenz[a,h]anthracene				0.23	mg/kg		0.202	mg/kg	0.0000202 %	✓	
	601-041-00-2	200-181-8	53-70-3									
26	fluoranthene				1.8	mg/kg		1.579	mg/kg	0.000158 %	✓	
		205-912-4	206-44-0									
27	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7									
28	indeno[123-cd]pyrene				0.86	mg/kg		0.754	mg/kg	0.0000754 %	✓	
		205-893-2	193-39-5									
29	naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
30	phenanthrene				0.98	mg/kg		0.86	mg/kg	0.000086 %	✓	
		201-581-5	85-01-8									
31	pyrene				1.8	mg/kg		1.579	mg/kg	0.000158 %	✓	
		204-927-3	129-00-0									
32	confirm TPH has NOT arisen from diesel or petrol				☑							
33	TPH (C6 to C40) petroleum group				17	mg/kg		14.912	mg/kg	0.00149 %	✓	
			TPH									
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 Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD Below limit of detection
- ND Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

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 TPH composition and concentration under site conditions make hazard unlikely

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00149%)

Classification of sample: TT4

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

Sample details

Sample Name:	LoW Code:
TT4	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.10-1.00 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.1%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 0.1% Dry Weight Moisture Correction applied (MC)

#	Determinand	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number					
1	pH							
			PH					
2	arsenic { arsenic trioxide }							
	033-003-00-0	215-481-4	1327-53-3					
3	beryllium { beryllium oxide }							
	004-003-00-8	215-133-1	1304-56-9					
4	boron { boron tribromide/trichloride/trifluoride (combined) }							
			10294-33-4, 10294-34-5, 7637-07-2					
5	cadmium { cadmium sulfide }							
	048-010-00-4	215-147-8	1306-23-6	1				
6	chromium { chromium(III) oxide }							
		215-160-9	1308-38-9					
7	copper { dicopper oxide; copper (I) oxide }							
	029-002-00-X	215-270-7	1317-39-1					
8	lead { lead compounds with the exception of those specified elsewhere in this Annex }							
	082-001-00-6			1				
9	mercury { mercury dichloride }							
	080-010-00-X	231-299-8	7487-94-7					
10	nickel { nickel dihydroxide }							
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]					
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }							
	034-002-00-8							
12	vanadium { divanadium pentaoxide; vanadium pentoxide }							
	023-001-00-8	215-239-8	1314-62-1					

#	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	zinc { zinc sulphate }				330 mg/kg	2.469	814.054 mg/kg	0.0814 %		✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
	006-007-00-5										
15	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	604-001-00-2	203-632-7	108-95-2								
16	acenaphthene				0.85 mg/kg		0.849 mg/kg	0.0000849 %		✓	
		201-469-6	83-32-9								
17	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-917-1	208-96-8								
18	anthracene				1.5 mg/kg		1.499 mg/kg	0.00015 %		✓	
		204-371-1	120-12-7								
19	benzo[a]anthracene				4.8 mg/kg		4.795 mg/kg	0.00048 %		✓	
	601-033-00-9	200-280-6	56-55-3								
20	benzo[a]pyrene; benzo[def]chrysene				4.6 mg/kg		4.595 mg/kg	0.00046 %		✓	
	601-032-00-3	200-028-5	50-32-8								
21	benzo[b]fluoranthene				4.9 mg/kg		4.895 mg/kg	0.00049 %		✓	
	601-034-00-4	205-911-9	205-99-2								
22	benzo[ghi]perylene				2.7 mg/kg		2.697 mg/kg	0.00027 %		✓	
		205-883-8	191-24-2								
23	benzo[k]fluoranthene				2.5 mg/kg		2.498 mg/kg	0.00025 %		✓	
	601-036-00-5	205-916-6	207-08-9								
24	chrysene				4.4 mg/kg		4.396 mg/kg	0.00044 %		✓	
	601-048-00-0	205-923-4	218-01-9								
25	dibenz[a,h]anthracene				0.6 mg/kg		0.599 mg/kg	0.0000599 %		✓	
	601-041-00-2	200-181-8	53-70-3								
26	fluoranthene				8 mg/kg		7.992 mg/kg	0.000799 %		✓	
		205-912-4	206-44-0								
27	fluorene				0.53 mg/kg		0.529 mg/kg	0.0000529 %		✓	
		201-695-5	86-73-7								
28	indeno[123-cd]pyrene				2.3 mg/kg		2.298 mg/kg	0.00023 %		✓	
		205-893-2	193-39-5								
29	naphthalene				0.52 mg/kg		0.519 mg/kg	0.0000519 %		✓	
	601-052-00-2	202-049-5	91-20-3								
30	phenanthrene				6.3 mg/kg		6.294 mg/kg	0.000629 %		✓	
		201-581-5	85-01-8								
31	pyrene				8 mg/kg		7.992 mg/kg	0.000799 %		✓	
		204-927-3	129-00-0								
32	confirm TPH has NOT arisen from diesel or petrol				☑						
33	TPH (C6 to C40) petroleum group				67 mg/kg		66.933 mg/kg	0.00669 %		✓	
			TPH								
Total:									0.242 %		

Key

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

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 TPH composition and concentration under site conditions make hazard unlikely

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00669%)

Classification of sample: TT4[2]

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

Sample details

Sample Name:	LoW Code:
TT4[2]	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.20-0.50 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
16%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 16% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	pH				8.3 pH		8.3 pH	8.3 pH		
2	arsenic { arsenic trioxide }				13 mg/kg	1.32	14.797 mg/kg	0.00148 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	beryllium { beryllium oxide }				1.4 mg/kg	2.775	3.35 mg/kg	0.000335 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { boron tribromide/trichloride/trifluoride (combined) }				0.6 mg/kg	13.43	6.947 mg/kg	0.000695 %	✓	
			10294-33-4, 10294-34-5, 7637-07-2							
5	cadmium { cadmium sulfide }			1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
	048-010-00-4	215-147-8	1306-23-6							
6	chromium { chromium(III) oxide }				40 mg/kg	1.462	50.398 mg/kg	0.00504 %	✓	
		215-160-9	1308-38-9							
7	copper { dicopper oxide; copper (I) oxide }				46 mg/kg	1.126	44.647 mg/kg	0.00446 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	130 mg/kg		112.069 mg/kg	0.0112 %	✓	
	082-001-00-6									
9	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel dihydroxide }				78 mg/kg	1.579	106.208 mg/kg	0.0106 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	vanadium { divanadium pentaoxide; vanadium pentoxide }				36 mg/kg	1.785	55.402 mg/kg	0.00554 %	✓	
	023-001-00-8	215-239-8	1314-62-1							

#	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	zinc { zinc sulphate }				100	mg/kg	2.469	212.87	mg/kg	0.0213 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
	006-007-00-5											
15	phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
16	acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9									
17	acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8									
18	anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		204-371-1	120-12-7									
19	benzo[a]anthracene				0.53	mg/kg		0.457	mg/kg	0.0000457 %	✓	
	601-033-00-9	200-280-6	56-55-3									
20	benzo[a]pyrene; benzo[def]chrysene				0.49	mg/kg		0.422	mg/kg	0.0000422 %	✓	
	601-032-00-3	200-028-5	50-32-8									
21	benzo[b]fluoranthene				0.53	mg/kg		0.457	mg/kg	0.0000457 %	✓	
	601-034-00-4	205-911-9	205-99-2									
22	benzo[ghi]perylene				0.44	mg/kg		0.379	mg/kg	0.0000379 %	✓	
		205-883-8	191-24-2									
23	benzo[k]fluoranthene				0.28	mg/kg		0.241	mg/kg	0.0000241 %	✓	
	601-036-00-5	205-916-6	207-08-9									
24	chrysene				0.26	mg/kg		0.224	mg/kg	0.0000224 %	✓	
	601-048-00-0	205-923-4	218-01-9									
25	dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
26	fluoranthene				0.54	mg/kg		0.466	mg/kg	0.0000466 %	✓	
		205-912-4	206-44-0									
27	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7									
28	indeno[123-cd]pyrene				0.32	mg/kg		0.276	mg/kg	0.0000276 %	✓	
		205-893-2	193-39-5									
29	naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
30	phenanthrene				0.31	mg/kg		0.267	mg/kg	0.0000267 %	✓	
		201-581-5	85-01-8									
31	pyrene				0.51	mg/kg		0.44	mg/kg	0.000044 %	✓	
		204-927-3	129-00-0									
32	confirm TPH has NOT arisen from diesel or petrol				☑							
33	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									
Total:										0.0627 %		

Key

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

Classification of sample: TT5

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

Sample details

Sample Name:	LoW Code:	
TT5	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.00-0.40 m		
Moisture content:		
7.4%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 7.4% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	pH				8.4 pH		8.4 pH	8.4 pH		
2	arsenic { arsenic trioxide }				9.3 mg/kg	1.32	11.433 mg/kg	0.00114 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	beryllium { beryllium oxide }				0.59 mg/kg	2.775	1.525 mg/kg	0.000152 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { boron tribromide/trichloride/trifluoride (combined) }				0.5 mg/kg	13.43	6.252 mg/kg	0.000625 %	✓	
			10294-33-4, 10294-34-5, 7637-07-2							
5	cadmium { cadmium sulfide }			1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
	048-010-00-4	215-147-8	1306-23-6							
6	chromium { chromium(III) oxide }				18 mg/kg	1.462	24.495 mg/kg	0.00245 %	✓	
		215-160-9	1308-38-9							
7	copper { dicopper oxide; copper (I) oxide }				66 mg/kg	1.126	69.189 mg/kg	0.00692 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	89 mg/kg		82.868 mg/kg	0.00829 %	✓	
	082-001-00-6									
9	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel dihydroxide }				21 mg/kg	1.579	30.884 mg/kg	0.00309 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	vanadium { divanadium pentaoxide; vanadium pentoxide }				35 mg/kg	1.785	58.176 mg/kg	0.00582 %	✓	
	023-001-00-8	215-239-8	1314-62-1							

#	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	zinc { zinc sulphate }				150	mg/kg	2.469	344.874	mg/kg	0.0345 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
	006-007-00-5											
15	phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
16	acenaphthene				2.1	mg/kg		1.955	mg/kg	0.000196 %	✓	
		201-469-6	83-32-9									
17	acenaphthylene				0.63	mg/kg		0.587	mg/kg	0.0000587 %	✓	
		205-917-1	208-96-8									
18	anthracene				3.8	mg/kg		3.538	mg/kg	0.000354 %	✓	
		204-371-1	120-12-7									
19	benzo[a]anthracene				14	mg/kg		13.035	mg/kg	0.0013 %	✓	
	601-033-00-9	200-280-6	56-55-3									
20	benzo[a]pyrene; benzo[def]chrysene				19	mg/kg		17.691	mg/kg	0.00177 %	✓	
	601-032-00-3	200-028-5	50-32-8									
21	benzo[b]fluoranthene				19	mg/kg		17.691	mg/kg	0.00177 %	✓	
	601-034-00-4	205-911-9	205-99-2									
22	benzo[ghi]perylene				14	mg/kg		13.035	mg/kg	0.0013 %	✓	
		205-883-8	191-24-2									
23	benzo[k]fluoranthene				9.5	mg/kg		8.845	mg/kg	0.000885 %	✓	
	601-036-00-5	205-916-6	207-08-9									
24	chrysene				12	mg/kg		11.173	mg/kg	0.00112 %	✓	
	601-048-00-0	205-923-4	218-01-9									
25	dibenz[a,h]anthracene				3.1	mg/kg		2.886	mg/kg	0.000289 %	✓	
	601-041-00-2	200-181-8	53-70-3									
26	fluoranthene				23	mg/kg		21.415	mg/kg	0.00214 %	✓	
		205-912-4	206-44-0									
27	fluorene				1.5	mg/kg		1.397	mg/kg	0.00014 %	✓	
		201-695-5	86-73-7									
28	indeno[123-cd]pyrene				12	mg/kg		11.173	mg/kg	0.00112 %	✓	
		205-893-2	193-39-5									
29	naphthalene				0.81	mg/kg		0.754	mg/kg	0.0000754 %	✓	
	601-052-00-2	202-049-5	91-20-3									
30	phenanthrene				11	mg/kg		10.242	mg/kg	0.00102 %	✓	
		201-581-5	85-01-8									
31	pyrene				24	mg/kg		22.346	mg/kg	0.00223 %	✓	
		204-927-3	129-00-0									
32	TPH (C6 to C40) petroleum group				920	mg/kg		856.611	mg/kg	0.0857 %	✓	
			TPH									
Total:										0.165 %		

Key

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

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 TPH composition and concentration under site conditions make hazard unlikely

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0857%)

Classification of sample: TT5[2]



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

Sample details

Sample Name:	LoW Code:
TT5[2]	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.50-1.00 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
10%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 10% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	pH				9.1 pH		9.1	pH	9.1 pH		
2	asbestos				1 mg/kg		0.909	mg/kg	0.0000909 %	✓	
3	arsenic { arsenic trioxide }				13 mg/kg	1.32	15.604	mg/kg	0.00156 %	✓	
4	beryllium { beryllium oxide }				0.95 mg/kg	2.775	2.397	mg/kg	0.00024 %	✓	
5	boron { boron tribromide/trichloride/trifluoride (combined) }				0.5 mg/kg	13.43	6.105	mg/kg	0.00061 %	✓	
6	cadmium { cadmium sulfide }			1	2.6 mg/kg	1.285	3.038	mg/kg	0.000236 %	✓	
7	chromium { chromium(III) oxide }				17 mg/kg	1.462	22.588	mg/kg	0.00226 %	✓	
8	copper { dicopper oxide; copper (I) oxide }				67 mg/kg	1.126	68.577	mg/kg	0.00686 %	✓	
9	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	230 mg/kg		209.091	mg/kg	0.0209 %	✓	
10	mercury { mercury dichloride }				0.5 mg/kg	1.353	0.615	mg/kg	0.0000615 %	✓	
11	nickel { nickel dihydroxide }				22 mg/kg	1.579	31.59	mg/kg	0.00316 %	✓	

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
12	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	034-002-00-8											
13	vanadium { divanadium pentaoxide; vanadium pentoxide }				33	mg/kg	1.785	53.556	mg/kg	0.00536 %	✓	
	023-001-00-8	215-239-8	1314-62-1									
14	zinc { zinc sulphate }				150	mg/kg	2.469	336.722	mg/kg	0.0337 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
15	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											
16	phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
17	acenaphthene				0.77	mg/kg		0.7	mg/kg	0.00007 %	✓	
		201-469-6	83-32-9									
18	acenaphthylene				0.44	mg/kg		0.4	mg/kg	0.00004 %	✓	
		205-917-1	208-96-8									
19	anthracene				1.7	mg/kg		1.545	mg/kg	0.000155 %	✓	
		204-371-1	120-12-7									
20	benzo[a]anthracene				5	mg/kg		4.545	mg/kg	0.000455 %	✓	
	601-033-00-9	200-280-6	56-55-3									
21	benzo[a]pyrene; benzo[def]chrysene				13	mg/kg		11.818	mg/kg	0.00118 %	✓	
	601-032-00-3	200-028-5	50-32-8									
22	benzo[b]fluoranthene				12	mg/kg		10.909	mg/kg	0.00109 %	✓	
	601-034-00-4	205-911-9	205-99-2									
23	benzo[ghi]perylene				11	mg/kg		10	mg/kg	0.001 %	✓	
		205-883-8	191-24-2									
24	benzo[k]fluoranthene				4.1	mg/kg		3.727	mg/kg	0.000373 %	✓	
	601-036-00-5	205-916-6	207-08-9									
25	chrysene				4.9	mg/kg		4.455	mg/kg	0.000445 %	✓	
	601-048-00-0	205-923-4	218-01-9									
26	dibenz[a,h]anthracene				1.9	mg/kg		1.727	mg/kg	0.000173 %	✓	
	601-041-00-2	200-181-8	53-70-3									
27	fluoranthene				9.3	mg/kg		8.455	mg/kg	0.000845 %	✓	
		205-912-4	206-44-0									
28	fluorene				0.5	mg/kg		0.455	mg/kg	0.0000455 %	✓	
		201-695-5	86-73-7									
29	indeno[123-cd]pyrene				9	mg/kg		8.182	mg/kg	0.000818 %	✓	
		205-893-2	193-39-5									
30	naphthalene				0.68	mg/kg		0.618	mg/kg	0.0000618 %	✓	
	601-052-00-2	202-049-5	91-20-3									
31	phenanthrene				4.2	mg/kg		3.818	mg/kg	0.000382 %	✓	
		201-581-5	85-01-8									
32	pyrene				10	mg/kg		9.091	mg/kg	0.000909 %	✓	
		204-927-3	129-00-0									
33	confirm TPH has NOT arisen from diesel or petrol				☒							
34	TPH (C6 to C40) petroleum group				780	mg/kg		709.091	mg/kg	0.0709 %	✓	
			TPH									
Total:										0.155 %		

Key

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

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 TPH composition and concentration under site conditions make hazard unlikely

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0709%)

Classification of sample: TT5[3]

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

Sample details

Sample Name:	LoW Code:
TT5[3]	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
1.00-1.20 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
17%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 17% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	pH				7.7 pH		7.7 pH	7.7 pH		
2	arsenic { arsenic trioxide }				7.4 mg/kg	1.32	8.351 mg/kg	0.000835 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	beryllium { beryllium oxide }				0.75 mg/kg	2.775	1.779 mg/kg	0.000178 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { boron tribromide/trichloride/trifluoride (combined) }				1.1 mg/kg	13.43	12.626 mg/kg	0.00126 %	✓	
			10294-33-4, 10294-34-5, 7637-07-2							
5	cadmium { cadmium sulfide }			1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
	048-010-00-4	215-147-8	1306-23-6							
6	chromium { chromium(III) oxide }				17 mg/kg	1.462	21.236 mg/kg	0.00212 %	✓	
		215-160-9	1308-38-9							
7	copper { dicopper oxide; copper (I) oxide }				36 mg/kg	1.126	34.643 mg/kg	0.00346 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	52 mg/kg		44.444 mg/kg	0.00444 %	✓	
	082-001-00-6									
9	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel dihydroxide }				17 mg/kg	1.579	22.95 mg/kg	0.00229 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	vanadium { divanadium pentaoxide; vanadium pentoxide }				23 mg/kg	1.785	35.093 mg/kg	0.00351 %	✓	
	023-001-00-8	215-239-8	1314-62-1							

#	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	zinc { zinc sulphate }				53	mg/kg	2.469	111.857	mg/kg	0.0112 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
	006-007-00-5											
15	phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
16	acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9									
17	acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8									
18	anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		204-371-1	120-12-7									
19	benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-033-00-9	200-280-6	56-55-3									
20	benzo[a]pyrene; benzo[def]chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-032-00-3	200-028-5	50-32-8									
21	benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-034-00-4	205-911-9	205-99-2									
22	benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-883-8	191-24-2									
23	benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-036-00-5	205-916-6	207-08-9									
24	chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-048-00-0	205-923-4	218-01-9									
25	dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
26	fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0									
27	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7									
28	indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5									
29	naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
30	phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8									
31	pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0									
32	confirm TPH has NOT arisen from diesel or petrol				☑							
33	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									
Total:										0.031 %		

Key

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

Classification of sample: TT2

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

Sample details

Sample Name:	LoW Code:	
TT2	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.00-0.30 m		
Moisture content:		
9.6%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 9.6% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	pH				8.8 pH		8.8 pH	8.8 pH		
2	arsenic { arsenic trioxide }				18 mg/kg	1.32	21.684 mg/kg	0.00217 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	beryllium { beryllium oxide }				1.6 mg/kg	2.775	4.052 mg/kg	0.000405 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { boron tribromide/trichloride/trifluoride (combined) }				0.4 mg/kg	13.43	4.901 mg/kg	0.00049 %	✓	
			10294-33-4, 10294-34-5, 7637-07-2							
5	cadmium { cadmium sulfide }			1	1.5 mg/kg	1.285	1.759 mg/kg	0.000137 %	✓	
	048-010-00-4	215-147-8	1306-23-6							
6	chromium { chromium(III) oxide }				19 mg/kg	1.462	25.337 mg/kg	0.00253 %	✓	
		215-160-9	1308-38-9							
7	copper { dicopper oxide; copper (I) oxide }				73 mg/kg	1.126	74.991 mg/kg	0.0075 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	250 mg/kg		228.102 mg/kg	0.0228 %	✓	
	082-001-00-6									
9	mercury { mercury dichloride }				0.5 mg/kg	1.353	0.617 mg/kg	0.0000617 %	✓	
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel dihydroxide }				37 mg/kg	1.579	53.323 mg/kg	0.00533 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
11	selenium { selenium compounds with the exception of cadmium selenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	vanadium { divanadium pentaoxide; vanadium pentoxide }				34 mg/kg	1.785	55.38 mg/kg	0.00554 %	✓	
	023-001-00-8	215-239-8	1314-62-1							

#	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	zinc { zinc sulphate }				250	mg/kg	2.469	563.252	mg/kg	0.0563 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				2	mg/kg	1.884	3.438	mg/kg	0.000344 %	✓	
	006-007-00-5											
15	phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
16	acenaphthene				3.3	mg/kg		3.011	mg/kg	0.000301 %	✓	
		201-469-6	83-32-9									
17	acenaphthylene				0.37	mg/kg		0.338	mg/kg	0.0000338 %	✓	
		205-917-1	208-96-8									
18	anthracene				4.5	mg/kg		4.106	mg/kg	0.000411 %	✓	
		204-371-1	120-12-7									
19	benzo[a]anthracene				13	mg/kg		11.861	mg/kg	0.00119 %	✓	
	601-033-00-9	200-280-6	56-55-3									
20	benzo[a]pyrene; benzo[def]chrysene				13	mg/kg		11.861	mg/kg	0.00119 %	✓	
	601-032-00-3	200-028-5	50-32-8									
21	benzo[b]fluoranthene				15	mg/kg		13.686	mg/kg	0.00137 %	✓	
	601-034-00-4	205-911-9	205-99-2									
22	benzo[ghi]perylene				7	mg/kg		6.387	mg/kg	0.000639 %	✓	
		205-883-8	191-24-2									
23	benzo[k]fluoranthene				3.9	mg/kg		3.558	mg/kg	0.000356 %	✓	
	601-036-00-5	205-916-6	207-08-9									
24	chrysene				8	mg/kg		7.299	mg/kg	0.00073 %	✓	
	601-048-00-0	205-923-4	218-01-9									
25	dibenz[a,h]anthracene				1.7	mg/kg		1.551	mg/kg	0.000155 %	✓	
	601-041-00-2	200-181-8	53-70-3									
26	fluoranthene				24	mg/kg		21.898	mg/kg	0.00219 %	✓	
		205-912-4	206-44-0									
27	fluorene				2.6	mg/kg		2.372	mg/kg	0.000237 %	✓	
		201-695-5	86-73-7									
28	indeno[123-cd]pyrene				6	mg/kg		5.474	mg/kg	0.000547 %	✓	
		205-893-2	193-39-5									
29	naphthalene				1.5	mg/kg		1.369	mg/kg	0.000137 %	✓	
	601-052-00-2	202-049-5	91-20-3									
30	phenanthrene				18	mg/kg		16.423	mg/kg	0.00164 %	✓	
		201-581-5	85-01-8									
31	pyrene				21	mg/kg		19.161	mg/kg	0.00192 %	✓	
		204-927-3	129-00-0									
32	confirm TPH has NOT arisen from diesel or petrol				☑							
33	TPH (C6 to C40) petroleum group				980	mg/kg		894.161	mg/kg	0.0894 %	✓	
			TPH									
Total:										0.206 %		

Key

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

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 TPH composition and concentration under site conditions make hazard unlikely

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0894%)

Classification of sample: TT2[2]

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

Sample details

Sample Name:	LoW Code:
TT2[2]	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.40-0.80 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
25%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 25% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	pH				8.3	pH		8.3	pH	8.3 pH		
2	arsenic { arsenic trioxide }				4.3	mg/kg	1.32	4.542	mg/kg	0.000454 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
3	beryllium { beryllium oxide }				0.5	mg/kg	2.775	1.11	mg/kg	0.000111 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
4	boron { boron tribromide/trichloride/trifluoride (combined) }				0.7	mg/kg	13.43	7.521	mg/kg	0.000752 %	✓	
			10294-33-4, 10294-34-5, 7637-07-2									
5	cadmium { cadmium sulfide }			1	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
	048-010-00-4	215-147-8	1306-23-6									
6	chromium { chromium(III) oxide }				15	mg/kg	1.462	17.539	mg/kg	0.00175 %	✓	
		215-160-9	1308-38-9									
7	copper { dicopper oxide; copper (I) oxide }				18	mg/kg	1.126	16.213	mg/kg	0.00162 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
8	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	27	mg/kg		21.6	mg/kg	0.00216 %	✓	
	082-001-00-6											
9	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
10	nickel { nickel dihydroxide }				13	mg/kg	1.579	16.427	mg/kg	0.00164 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	034-002-00-8											
12	vanadium { divanadium pentaoxide; vanadium pentoxide }				19	mg/kg	1.785	27.135	mg/kg	0.00271 %	✓	
	023-001-00-8	215-239-8	1314-62-1									

#	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	zinc { zinc sulphate }				40 mg/kg	2.469	79.017 mg/kg	0.0079 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
15	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
16	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
17	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8							
18	anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-371-1	120-12-7							
19	benzo[a]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
20	benzo[a]pyrene; benzo[def]chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
21	benzo[b]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
22	benzo[ghi]perylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-883-8	191-24-2							
23	benzo[k]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
24	chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
25	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
26	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
27	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
28	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
29	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
30	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
31	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
32	confirm TPH has NOT arisen from diesel or petrol				☑					
33	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
Total:								0.0208 %		

Key

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

Classification of sample: TT2[3]



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

Sample details

Sample Name:	LoW Code:
TT2[3]	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.80-1.00 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
12%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 12% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	pH				7.9	pH		7.9	pH	7.9 pH		
2	arsenic { arsenic trioxide }				3.8	mg/kg	1.32	4.48	mg/kg	0.000448 %	✓	
3	beryllium { beryllium oxide }				0.23	mg/kg	2.775	0.57	mg/kg	0.000057 %	✓	
4	boron { boron tribromide/trichloride/trifluoride (combined) }				0.2	mg/kg	13.43	2.398	mg/kg	0.00024 %	✓	
5	cadmium { cadmium sulfide }			1	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
6	chromium { chromium(III) oxide }				9.1	mg/kg	1.462	11.875	mg/kg	0.00119 %	✓	
7	copper { dicopper oxide; copper (I) oxide }				7.5	mg/kg	1.126	7.539	mg/kg	0.000754 %	✓	
8	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	8.5	mg/kg		7.589	mg/kg	0.000759 %	✓	
9	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
10	nickel { nickel dihydroxide }				6.8	mg/kg	1.579	9.59	mg/kg	0.000959 %	✓	
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
12	vanadium { divanadium pentaoxide; vanadium pentoxide }				14	mg/kg	1.785	22.315	mg/kg	0.00223 %	✓	

#	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	zinc { zinc sulphate }				39 mg/kg	2.469	85.984 mg/kg	0.0086 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
15	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
16	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
17	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8							
18	anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-371-1	120-12-7							
19	benzo[a]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
20	benzo[a]pyrene; benzo[def]chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
21	benzo[b]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
22	benzo[ghi]perylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-883-8	191-24-2							
23	benzo[k]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
24	chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
25	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
26	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
27	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
28	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
29	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
30	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
31	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
32	confirm TPH has NOT arisen from diesel or petrol				☑					
33	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
Total:								0.0169 %		

Key

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

Classification of sample: TT2[4]



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

Sample details

Sample Name:	LoW Code:
TT2[4]	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.20-0.40 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
11%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 11% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	pH				8.4	pH		8.4	pH	8.4 pH		
2	arsenic { arsenic trioxide }				15	mg/kg	1.32	17.842	mg/kg	0.00178 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
3	beryllium { beryllium oxide }				0.97	mg/kg	2.775	2.425	mg/kg	0.000243 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
4	boron { boron tribromide/trichloride/trifluoride (combined) }				1.3	mg/kg	13.43	15.729	mg/kg	0.00157 %	✓	
			10294-33-4, 10294-34-5, 7637-07-2									
5	cadmium { cadmium sulfide }			1	1.8	mg/kg	1.285	2.084	mg/kg	0.000162 %	✓	
	048-010-00-4	215-147-8	1306-23-6									
6	chromium { chromium(III) oxide }				18	mg/kg	1.462	23.701	mg/kg	0.00237 %	✓	
		215-160-9	1308-38-9									
7	copper { dicopper oxide; copper (I) oxide }				71	mg/kg	1.126	72.016	mg/kg	0.0072 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
8	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	160	mg/kg		144.144	mg/kg	0.0144 %	✓	
	082-001-00-6											
9	mercury { mercury dichloride }				0.4	mg/kg	1.353	0.488	mg/kg	0.0000488 %	✓	
	080-010-00-X	231-299-8	7487-94-7									
10	nickel { nickel dihydroxide }				38	mg/kg	1.579	54.073	mg/kg	0.00541 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	034-002-00-8											
12	vanadium { divanadium pentaoxide; vanadium pentoxide }				25	mg/kg	1.785	40.207	mg/kg	0.00402 %	✓	
	023-001-00-8	215-239-8	1314-62-1									

#	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	zinc { zinc sulphate }				340 mg/kg	2.469	756.361 mg/kg	0.0756 %	✓		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				4 mg/kg	1.884	6.789 mg/kg	0.000679 %	✓		
	006-007-00-5										
15	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	604-001-00-2	203-632-7	108-95-2								
16	acenaphthene				1.6 mg/kg		1.441 mg/kg	0.000144 %	✓		
		201-469-6	83-32-9								
17	acenaphthylene				0.43 mg/kg		0.387 mg/kg	0.0000387 %	✓		
		205-917-1	208-96-8								
18	anthracene				2.4 mg/kg		2.162 mg/kg	0.000216 %	✓		
		204-371-1	120-12-7								
19	benzo[a]anthracene				9.7 mg/kg		8.739 mg/kg	0.000874 %	✓		
	601-033-00-9	200-280-6	56-55-3								
20	benzo[a]pyrene; benzo[def]chrysene				10 mg/kg		9.009 mg/kg	0.000901 %	✓		
	601-032-00-3	200-028-5	50-32-8								
21	benzo[b]fluoranthene				9.8 mg/kg		8.829 mg/kg	0.000883 %	✓		
	601-034-00-4	205-911-9	205-99-2								
22	benzo[ghi]perylene				5.9 mg/kg		5.315 mg/kg	0.000532 %	✓		
		205-883-8	191-24-2								
23	benzo[k]fluoranthene				4.8 mg/kg		4.324 mg/kg	0.000432 %	✓		
	601-036-00-5	205-916-6	207-08-9								
24	chrysene				6.1 mg/kg		5.495 mg/kg	0.00055 %	✓		
	601-048-00-0	205-923-4	218-01-9								
25	dibenz[a,h]anthracene				1.3 mg/kg		1.171 mg/kg	0.000117 %	✓		
	601-041-00-2	200-181-8	53-70-3								
26	fluoranthene				14 mg/kg		12.613 mg/kg	0.00126 %	✓		
		205-912-4	206-44-0								
27	fluorene				1.4 mg/kg		1.261 mg/kg	0.000126 %	✓		
		201-695-5	86-73-7								
28	indeno[123-cd]pyrene				5.2 mg/kg		4.685 mg/kg	0.000468 %	✓		
		205-893-2	193-39-5								
29	naphthalene				1.4 mg/kg		1.261 mg/kg	0.000126 %	✓		
	601-052-00-2	202-049-5	91-20-3								
30	phenanthrene				9.4 mg/kg		8.468 mg/kg	0.000847 %	✓		
		201-581-5	85-01-8								
31	pyrene				14 mg/kg		12.613 mg/kg	0.00126 %	✓		
		204-927-3	129-00-0								
32	confirm TPH has NOT arisen from diesel or petrol				☑						
33	TPH (C6 to C40) petroleum group				400 mg/kg		360.36 mg/kg	0.036 %	✓		
			TPH								
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 Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD Below limit of detection
- ND Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

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 TPH composition and concentration under site conditions make hazard unlikely

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: TT2[5]

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

Sample details

Sample Name:	LoW Code:
TT2[5]	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
1.00-1.20 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
13%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 13% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	pH				8.2 pH		8.2 pH	8.2 pH		
2	arsenic { arsenic trioxide }				2.8 mg/kg	1.32	3.272 mg/kg	0.000327 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	beryllium { beryllium oxide }				0.21 mg/kg	2.775	0.516 mg/kg	0.0000516 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { boron tribromide/trichloride/trifluoride (combined) }				0.4 mg/kg	13.43	4.754 mg/kg	0.000475 %	✓	
			10294-33-4, 10294-34-5, 7637-07-2							
5	cadmium { cadmium sulfide }			1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
	048-010-00-4	215-147-8	1306-23-6							
6	chromium { chromium(III) oxide }				8.5 mg/kg	1.462	10.994 mg/kg	0.0011 %	✓	
		215-160-9	1308-38-9							
7	copper { dicopper oxide; copper (I) oxide }				2.8 mg/kg	1.126	2.79 mg/kg	0.000279 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	6 mg/kg		5.31 mg/kg	0.000531 %	✓	
	082-001-00-6									
9	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel dihydroxide }				3.6 mg/kg	1.579	5.032 mg/kg	0.000503 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	vanadium { divanadium pentaoxide; vanadium pentoxide }				14 mg/kg	1.785	22.117 mg/kg	0.00221 %	✓	
	023-001-00-8	215-239-8	1314-62-1							

#	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	zinc { zinc sulphate }				18	mg/kg	2.469	39.334	mg/kg	0.00393 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
	006-007-00-5											
15	phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
16	acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9									
17	acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8									
18	anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		204-371-1	120-12-7									
19	benzo[a]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-033-00-9	200-280-6	56-55-3									
20	benzo[a]pyrene; benzo[def]chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-032-00-3	200-028-5	50-32-8									
21	benzo[b]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-034-00-4	205-911-9	205-99-2									
22	benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-883-8	191-24-2									
23	benzo[k]fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-036-00-5	205-916-6	207-08-9									
24	chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-048-00-0	205-923-4	218-01-9									
25	dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
26	fluoranthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0									
27	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7									
28	indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5									
29	naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
30	phenanthrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8									
31	pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0									
32	confirm TPH has NOT arisen from diesel or petrol				☑							
33	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									
Total:										0.0111 %		

Key

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

Classification of sample: TT3

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

Sample details

Sample Name:	LoW Code:	
TT3	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.10-0.40 m		
Moisture content:		
10%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 10% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	pH				8.4 pH		8.4 pH	8.4 pH		
2	arsenic { arsenic trioxide }				11 mg/kg	1.32	13.203 mg/kg	0.00132 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	beryllium { beryllium oxide }				0.92 mg/kg	2.775	2.321 mg/kg	0.000232 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { boron tribromide/trichloride/trifluoride (combined) }				1 mg/kg	13.43	12.209 mg/kg	0.00122 %	✓	
			10294-33-4, 10294-34-5, 7637-07-2							
5	cadmium { cadmium sulfide }			1	<0.2 mg/kg	1.285	<0.257 mg/kg	<0.00002 %		<LOD
	048-010-00-4	215-147-8	1306-23-6							
6	chromium { chromium(III) oxide }				15 mg/kg	1.462	19.93 mg/kg	0.00199 %	✓	
		215-160-9	1308-38-9							
7	copper { dicopper oxide; copper (I) oxide }				34 mg/kg	1.126	34.8 mg/kg	0.00348 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	65 mg/kg		59.091 mg/kg	0.00591 %	✓	
	082-001-00-6									
9	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel dihydroxide }				16 mg/kg	1.579	22.975 mg/kg	0.0023 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	vanadium { divanadium pentaoxide; vanadium pentoxide }				22 mg/kg	1.785	35.704 mg/kg	0.00357 %	✓	
	023-001-00-8	215-239-8	1314-62-1							

#	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	zinc { zinc sulphate }				67	mg/kg	2.469	150.403	mg/kg	0.015 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
	006-007-00-5											
15	phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
16	acenaphthene				0.37	mg/kg		0.336	mg/kg	0.0000336 %	✓	
		201-469-6	83-32-9									
17	acenaphthylene				0.37	mg/kg		0.336	mg/kg	0.0000336 %	✓	
		205-917-1	208-96-8									
18	anthracene				0.87	mg/kg		0.791	mg/kg	0.0000791 %	✓	
		204-371-1	120-12-7									
19	benzo[a]anthracene				3.3	mg/kg		3	mg/kg	0.0003 %	✓	
	601-033-00-9	200-280-6	56-55-3									
20	benzo[a]pyrene; benzo[def]chrysene				3.2	mg/kg		2.909	mg/kg	0.000291 %	✓	
	601-032-00-3	200-028-5	50-32-8									
21	benzo[b]fluoranthene				3.7	mg/kg		3.364	mg/kg	0.000336 %	✓	
	601-034-00-4	205-911-9	205-99-2									
22	benzo[ghi]perylene				2.3	mg/kg		2.091	mg/kg	0.000209 %	✓	
		205-883-8	191-24-2									
23	benzo[k]fluoranthene				1.7	mg/kg		1.545	mg/kg	0.000155 %	✓	
	601-036-00-5	205-916-6	207-08-9									
24	chrysene				2.8	mg/kg		2.545	mg/kg	0.000255 %	✓	
	601-048-00-0	205-923-4	218-01-9									
25	dibenz[a,h]anthracene				0.5	mg/kg		0.455	mg/kg	0.0000455 %	✓	
	601-041-00-2	200-181-8	53-70-3									
26	fluoranthene				5.6	mg/kg		5.091	mg/kg	0.000509 %	✓	
		205-912-4	206-44-0									
27	fluorene				0.48	mg/kg		0.436	mg/kg	0.0000436 %	✓	
		201-695-5	86-73-7									
28	indeno[123-cd]pyrene				1.9	mg/kg		1.727	mg/kg	0.000173 %	✓	
		205-893-2	193-39-5									
29	naphthalene				1.1	mg/kg		1	mg/kg	0.0001 %	✓	
	601-052-00-2	202-049-5	91-20-3									
30	phenanthrene				3.8	mg/kg		3.455	mg/kg	0.000345 %	✓	
		201-581-5	85-01-8									
31	pyrene				5.4	mg/kg		4.909	mg/kg	0.000491 %	✓	
		204-927-3	129-00-0									
32	confirm TPH has NOT arisen from diesel or petrol				☑							
33	TPH (C6 to C40) petroleum group				230	mg/kg		209.091	mg/kg	0.0209 %	✓	
			TPH									
Total:										0.06 %		

Key

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

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 TPH composition and concentration under site conditions make hazard unlikely

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0209%)

Classification of sample: TT3[2]


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

Sample details

Sample Name:	TT3[2]	LoW Code:	
Sample Depth:	0.10-0.20 m	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Moisture content:	12%	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
(dry weight correction)			

Hazard properties

None identified

Determinands

Moisture content: 12% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	pH				8.1	pH		8.1	pH	8.1 pH		
2	arsenic { arsenic trioxide }				18	mg/kg	1.32	21.22	mg/kg	0.00212 %	✓	
3	beryllium { beryllium oxide }				1.9	mg/kg	2.775	4.708	mg/kg	0.000471 %	✓	
4	boron { boron tribromide/trichloride/trifluoride (combined) }				1.3	mg/kg	13.43	15.588	mg/kg	0.00156 %	✓	
5	cadmium { cadmium sulfide }			1	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
6	chromium { chromium(III) oxide }				21	mg/kg	1.462	27.404	mg/kg	0.00274 %	✓	
7	copper { dicopper oxide; copper (I) oxide }				57	mg/kg	1.126	57.3	mg/kg	0.00573 %	✓	
8	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	140	mg/kg		125	mg/kg	0.0125 %	✓	
9	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
10	nickel { nickel dihydroxide }				35	mg/kg	1.579	49.359	mg/kg	0.00494 %	✓	
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
12	vanadium { divanadium pentaoxide; vanadium pentoxide }				40	mg/kg	1.785	63.757	mg/kg	0.00638 %	✓	

#	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	zinc { zinc sulphate }				150 mg/kg	2.469	330.709 mg/kg	0.0331 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				2 mg/kg	1.884	3.364 mg/kg	0.000336 %	✓	
	006-007-00-5									
15	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
16	acenaphthene				1.3 mg/kg		1.161 mg/kg	0.000116 %	✓	
		201-469-6	83-32-9							
17	acenaphthylene				1.1 mg/kg		0.982 mg/kg	0.0000982 %	✓	
		205-917-1	208-96-8							
18	anthracene				3 mg/kg		2.679 mg/kg	0.000268 %	✓	
		204-371-1	120-12-7							
19	benzo[a]anthracene				12 mg/kg		10.714 mg/kg	0.00107 %	✓	
	601-033-00-9	200-280-6	56-55-3							
20	benzo[a]pyrene; benzo[def]chrysene				13 mg/kg		11.607 mg/kg	0.00116 %	✓	
	601-032-00-3	200-028-5	50-32-8							
21	benzo[b]fluoranthene				14 mg/kg		12.5 mg/kg	0.00125 %	✓	
	601-034-00-4	205-911-9	205-99-2							
22	benzo[ghi]perylene				8.5 mg/kg		7.589 mg/kg	0.000759 %	✓	
		205-883-8	191-24-2							
23	benzo[k]fluoranthene				7.9 mg/kg		7.054 mg/kg	0.000705 %	✓	
	601-036-00-5	205-916-6	207-08-9							
24	chrysene				10 mg/kg		8.929 mg/kg	0.000893 %	✓	
	601-048-00-0	205-923-4	218-01-9							
25	dibenz[a,h]anthracene				2.2 mg/kg		1.964 mg/kg	0.000196 %	✓	
	601-041-00-2	200-181-8	53-70-3							
26	fluoranthene				21 mg/kg		18.75 mg/kg	0.00188 %	✓	
		205-912-4	206-44-0							
27	fluorene				1.7 mg/kg		1.518 mg/kg	0.000152 %	✓	
		201-695-5	86-73-7							
28	indeno[123-cd]pyrene				7.6 mg/kg		6.786 mg/kg	0.000679 %	✓	
		205-893-2	193-39-5							
29	naphthalene				7.7 mg/kg		6.875 mg/kg	0.000688 %	✓	
	601-052-00-2	202-049-5	91-20-3							
30	phenanthrene				12 mg/kg		10.714 mg/kg	0.00107 %	✓	
		201-581-5	85-01-8							
31	pyrene				20 mg/kg		17.857 mg/kg	0.00179 %	✓	
		204-927-3	129-00-0							
32	confirm TPH has NOT arisen from diesel or petrol				☑					
33	TPH (C6 to C40) petroleum group				850 mg/kg		758.929 mg/kg	0.0759 %	✓	
			TPH							
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 Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD Below limit of detection
- ND Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

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 TPH composition and concentration under site conditions make hazard unlikely

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.0759%)

Classification of sample: TT3[3]

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

Sample details

Sample Name:	LoW Code:
TT3[3]	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.40-0.70 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
15%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 15% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	pH				7.8 pH		7.8 pH	7.8 pH		
2	arsenic { arsenic trioxide }				7 mg/kg	1.32	8.037 mg/kg	0.000804 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	beryllium { beryllium oxide }				0.58 mg/kg	2.775	1.4 mg/kg	0.00014 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { boron tribromide/trichloride/trifluoride (combined) }				0.9 mg/kg	13.43	10.51 mg/kg	0.00105 %	✓	
			10294-33-4, 10294-34-5, 7637-07-2							
5	cadmium { cadmium sulfide }			1	1.2 mg/kg	1.285	1.341 mg/kg	0.000104 %	✓	
	048-010-00-4	215-147-8	1306-23-6							
6	chromium { chromium(III) oxide }				16 mg/kg	1.462	20.335 mg/kg	0.00203 %	✓	
		215-160-9	1308-38-9							
7	copper { dicopper oxide; copper (I) oxide }				18 mg/kg	1.126	17.623 mg/kg	0.00176 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	56 mg/kg		48.696 mg/kg	0.00487 %	✓	
	082-001-00-6									
9	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel dihydroxide }				31 mg/kg	1.579	42.578 mg/kg	0.00426 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	vanadium { divanadium pentaoxide; vanadium pentoxide }				20 mg/kg	1.785	31.047 mg/kg	0.0031 %	✓	
	023-001-00-8	215-239-8	1314-62-1							

#	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	zinc { zinc sulphate }				680	mg/kg	2.469	1460.106	mg/kg	0.146 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1	mg/kg	1.884	<1.884	mg/kg	<0.000188 %		<LOD
	006-007-00-5											
15	phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
	604-001-00-2	203-632-7	108-95-2									
16	acenaphthene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9									
17	acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8									
18	anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		204-371-1	120-12-7									
19	benzo[a]anthracene				0.21	mg/kg		0.183	mg/kg	0.0000183 %	✓	
	601-033-00-9	200-280-6	56-55-3									
20	benzo[a]pyrene; benzo[def]chrysene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-032-00-3	200-028-5	50-32-8									
21	benzo[b]fluoranthene				0.24	mg/kg		0.209	mg/kg	0.0000209 %	✓	
	601-034-00-4	205-911-9	205-99-2									
22	benzo[ghi]perylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-883-8	191-24-2									
23	benzo[k]fluoranthene				0.08	mg/kg		0.0696	mg/kg	0.00000696 %	✓	
	601-036-00-5	205-916-6	207-08-9									
24	chrysene				0.21	mg/kg		0.183	mg/kg	0.0000183 %	✓	
	601-048-00-0	205-923-4	218-01-9									
25	dibenz[a,h]anthracene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3									
26	fluoranthene				0.42	mg/kg		0.365	mg/kg	0.0000365 %	✓	
		205-912-4	206-44-0									
27	fluorene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7									
28	indeno[123-cd]pyrene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5									
29	naphthalene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3									
30	phenanthrene				0.34	mg/kg		0.296	mg/kg	0.0000296 %	✓	
		201-581-5	85-01-8									
31	pyrene				0.38	mg/kg		0.33	mg/kg	0.000033 %	✓	
		204-927-3	129-00-0									
32	confirm TPH has NOT arisen from diesel or petrol				☑							
33	TPH (C6 to C40) petroleum group				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
			TPH									
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 Determinand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
- <LOD Below limit of detection
- ND Not detected
- CLP: Note 1 Only the metal concentration has been used for classification

Classification of sample: TT3[4]

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

Sample details

Sample Name:	LoW Code:	
TT3[4]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.90-1.00 m		
Moisture content:		
14%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 14% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	pH		PH		7.5 pH		7.5 pH	7.5 pH		
2	arsenic { arsenic trioxide }				6.2 mg/kg	1.32	7.181 mg/kg	0.000718 %	✓	
	033-003-00-0	215-481-4	1327-53-3							
3	beryllium { beryllium oxide }				0.6 mg/kg	2.775	1.461 mg/kg	0.000146 %	✓	
	004-003-00-8	215-133-1	1304-56-9							
4	boron { boron tribromide/trichloride/trifluoride (combined) }				0.4 mg/kg	13.43	4.712 mg/kg	0.000471 %	✓	
			10294-33-4, 10294-34-5, 7637-07-2							
5	cadmium { cadmium sulfide }			1	0.5 mg/kg	1.285	0.564 mg/kg	0.0000439 %	✓	
	048-010-00-4	215-147-8	1306-23-6							
6	chromium { chromium(III) oxide }				18 mg/kg	1.462	23.077 mg/kg	0.00231 %	✓	
		215-160-9	1308-38-9							
7	copper { dicopper oxide; copper (I) oxide }				22 mg/kg	1.126	21.728 mg/kg	0.00217 %	✓	
	029-002-00-X	215-270-7	1317-39-1							
8	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	70 mg/kg		61.404 mg/kg	0.00614 %	✓	
	082-001-00-6									
9	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406 mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7							
10	nickel { nickel dihydroxide }				13 mg/kg	1.579	18.012 mg/kg	0.0018 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]							
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554 mg/kg	<0.000255 %		<LOD
	034-002-00-8									
12	vanadium { divanadium pentaoxide; vanadium pentoxide }				23 mg/kg	1.785	36.017 mg/kg	0.0036 %	✓	
	023-001-00-8	215-239-8	1314-62-1							

#	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	zinc { zinc sulphate }				110	mg/kg	2.469	238.265	mg/kg	0.0238 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				1	mg/kg	1.884	1.653	mg/kg	0.000165 %	✓	
	006-007-00-5											
15	phenol				1.2	mg/kg		1.053	mg/kg	0.000105 %	✓	
	604-001-00-2	203-632-7	108-95-2									
16	acenaphthene				0.31	mg/kg		0.272	mg/kg	0.0000272 %	✓	
		201-469-6	83-32-9									
17	acenaphthylene				<0.05	mg/kg		<0.05	mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8									
18	anthracene				0.56	mg/kg		0.491	mg/kg	0.0000491 %	✓	
		204-371-1	120-12-7									
19	benzo[a]anthracene				2.3	mg/kg		2.018	mg/kg	0.000202 %	✓	
	601-033-00-9	200-280-6	56-55-3									
20	benzo[a]pyrene; benzo[def]chrysene				2.3	mg/kg		2.018	mg/kg	0.000202 %	✓	
	601-032-00-3	200-028-5	50-32-8									
21	benzo[b]fluoranthene				2.8	mg/kg		2.456	mg/kg	0.000246 %	✓	
	601-034-00-4	205-911-9	205-99-2									
22	benzo[ghi]perylene				1.5	mg/kg		1.316	mg/kg	0.000132 %	✓	
		205-883-8	191-24-2									
23	benzo[k]fluoranthene				0.85	mg/kg		0.746	mg/kg	0.0000746 %	✓	
	601-036-00-5	205-916-6	207-08-9									
24	chrysene				1.8	mg/kg		1.579	mg/kg	0.000158 %	✓	
	601-048-00-0	205-923-4	218-01-9									
25	dibenz[a,h]anthracene				0.37	mg/kg		0.325	mg/kg	0.0000325 %	✓	
	601-041-00-2	200-181-8	53-70-3									
26	fluoranthene				4.3	mg/kg		3.772	mg/kg	0.000377 %	✓	
		205-912-4	206-44-0									
27	fluorene				0.29	mg/kg		0.254	mg/kg	0.0000254 %	✓	
		201-695-5	86-73-7									
28	indeno[123-cd]pyrene				1.3	mg/kg		1.14	mg/kg	0.000114 %	✓	
		205-893-2	193-39-5									
29	naphthalene				0.2	mg/kg		0.175	mg/kg	0.0000175 %	✓	
	601-052-00-2	202-049-5	91-20-3									
30	phenanthrene				2.4	mg/kg		2.105	mg/kg	0.000211 %	✓	
		201-581-5	85-01-8									
31	pyrene				4.1	mg/kg		3.596	mg/kg	0.00036 %	✓	
		204-927-3	129-00-0									
32	confirm TPH has NOT arisen from diesel or petrol				☑							
33	TPH (C6 to C40) petroleum group				94	mg/kg		82.456	mg/kg	0.00825 %	✓	
			TPH									
Total:										0.0523 %		

Key

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

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 TPH composition and concentration under site conditions make hazard unlikely

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group: (conc.: 0.00825%)

Classification of sample: TT3[5]



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

Sample details

Sample Name:	LoW Code:
TT3[5]	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.80-1.00 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
14%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 14% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number									
1	pH				7.6	pH		7.6	pH	7.6 pH		
2	arsenic { arsenic trioxide }				9.6	mg/kg	1.32	11.119	mg/kg	0.00111 %	✓	
	033-003-00-0	215-481-4	1327-53-3									
3	beryllium { beryllium oxide }				0.68	mg/kg	2.775	1.655	mg/kg	0.000166 %	✓	
	004-003-00-8	215-133-1	1304-56-9									
4	boron { boron tribromide/trichloride/trifluoride (combined) }				1.3	mg/kg	13.43	15.315	mg/kg	0.00153 %	✓	
			10294-33-4, 10294-34-5, 7637-07-2									
5	cadmium { cadmium sulfide }			1	<0.2	mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
	048-010-00-4	215-147-8	1306-23-6									
6	chromium { chromium(III) oxide }				19	mg/kg	1.462	24.359	mg/kg	0.00244 %	✓	
		215-160-9	1308-38-9									
7	copper { dicopper oxide; copper (I) oxide }				24	mg/kg	1.126	23.703	mg/kg	0.00237 %	✓	
	029-002-00-X	215-270-7	1317-39-1									
8	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	55	mg/kg		48.246	mg/kg	0.00482 %	✓	
	082-001-00-6											
9	mercury { mercury dichloride }				<0.3	mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7									
10	nickel { nickel dihydroxide }				13	mg/kg	1.579	18.012	mg/kg	0.0018 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1	mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	034-002-00-8											
12	vanadium { divanadium pentaoxide; vanadium pentoxide }				26	mg/kg	1.785	40.715	mg/kg	0.00407 %	✓	
	023-001-00-8	215-239-8	1314-62-1									

#	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	zinc { zinc sulphate }				43 mg/kg	2.469	93.14 mg/kg	0.00931 %		✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
	006-007-00-5										
15	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	604-001-00-2	203-632-7	108-95-2								
16	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		201-469-6	83-32-9								
17	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-917-1	208-96-8								
18	anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		204-371-1	120-12-7								
19	benzo[a]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-033-00-9	200-280-6	56-55-3								
20	benzo[a]pyrene; benzo[def]chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-032-00-3	200-028-5	50-32-8								
21	benzo[b]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-034-00-4	205-911-9	205-99-2								
22	benzo[ghi]perylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-883-8	191-24-2								
23	benzo[k]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-036-00-5	205-916-6	207-08-9								
24	chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-048-00-0	205-923-4	218-01-9								
25	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-041-00-2	200-181-8	53-70-3								
26	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-912-4	206-44-0								
27	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		201-695-5	86-73-7								
28	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		205-893-2	193-39-5								
29	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
	601-052-00-2	202-049-5	91-20-3								
30	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		201-581-5	85-01-8								
31	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %			<LOD
		204-927-3	129-00-0								
32	confirm TPH has NOT arisen from diesel or petrol				☑						
33	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %			<LOD
			TPH								
Total:									0.0293 %		

Key

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

Classification of sample: TT3[6]



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

Sample details

Sample Name:	LoW Code:
TT3[6]	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
1.20-1.30 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
10%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 10% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	pH				7 pH		7	pH	7pH		
2	arsenic { arsenic trioxide }				5.9 mg/kg	1.32	7.082	mg/kg	0.000708 %	✓	
	033-003-00-0	215-481-4	1327-53-3								
3	beryllium { beryllium oxide }				0.57 mg/kg	2.775	1.438	mg/kg	0.000144 %	✓	
	004-003-00-8	215-133-1	1304-56-9								
4	boron { boron tribromide/trichloride/trifluoride (combined) }				0.3 mg/kg	13.43	3.663	mg/kg	0.000366 %	✓	
			10294-33-4, 10294-34-5, 7637-07-2								
5	cadmium { cadmium sulfide }			1	<0.2 mg/kg	1.285	<0.257	mg/kg	<0.00002 %		<LOD
	048-010-00-4	215-147-8	1306-23-6								
6	chromium { chromium(III) oxide }				22 mg/kg	1.462	29.231	mg/kg	0.00292 %	✓	
		215-160-9	1308-38-9								
7	copper { dicopper oxide; copper (I) oxide }				8.8 mg/kg	1.126	9.007	mg/kg	0.000901 %	✓	
	029-002-00-X	215-270-7	1317-39-1								
8	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	13 mg/kg		11.818	mg/kg	0.00118 %	✓	
	082-001-00-6										
9	mercury { mercury dichloride }				<0.3 mg/kg	1.353	<0.406	mg/kg	<0.0000406 %		<LOD
	080-010-00-X	231-299-8	7487-94-7								
10	nickel { nickel dihydroxide }				16 mg/kg	1.579	22.975	mg/kg	0.0023 %	✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
11	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				<1 mg/kg	2.554	<2.554	mg/kg	<0.000255 %		<LOD
	034-002-00-8										
12	vanadium { divanadium pentaoxide; vanadium pentoxide }				25 mg/kg	1.785	40.572	mg/kg	0.00406 %	✓	
	023-001-00-8	215-239-8	1314-62-1								

#	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	zinc { zinc sulphate }				38 mg/kg	2.469	85.303 mg/kg	0.00853 %	✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]							
14	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD
	006-007-00-5									
15	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
	604-001-00-2	203-632-7	108-95-2							
16	acenaphthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-469-6	83-32-9							
17	acenaphthylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-917-1	208-96-8							
18	anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-371-1	120-12-7							
19	benzo[a]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-033-00-9	200-280-6	56-55-3							
20	benzo[a]pyrene; benzo[def]chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-032-00-3	200-028-5	50-32-8							
21	benzo[b]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-034-00-4	205-911-9	205-99-2							
22	benzo[ghi]perylene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-883-8	191-24-2							
23	benzo[k]fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-036-00-5	205-916-6	207-08-9							
24	chrysene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-048-00-0	205-923-4	218-01-9							
25	dibenz[a,h]anthracene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-041-00-2	200-181-8	53-70-3							
26	fluoranthene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-912-4	206-44-0							
27	fluorene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-695-5	86-73-7							
28	indeno[123-cd]pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		205-893-2	193-39-5							
29	naphthalene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
	601-052-00-2	202-049-5	91-20-3							
30	phenanthrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		201-581-5	85-01-8							
31	pyrene				<0.05 mg/kg		<0.05 mg/kg	<0.000005 %		<LOD
		204-927-3	129-00-0							
32	confirm TPH has NOT arisen from diesel or petrol				☑					
33	TPH (C6 to C40) petroleum group				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
			TPH							
Total:								0.0228 %		

Key

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

Appendix A: Classifier defined and non CLP determinands

■ pH (CAS Number: PH)

Description/Comments: Appendix C4
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

■ boron tribromide/trichloride/trifluoride (combined) (CAS Number: 10294-33-4, 10294-34-5, 7637-07-2)

Conversion factor: 13.43
Description/Comments: Combines the hazard statements and the average of the conversion factors for boron tribromide, boron trichloride and boron trifluoride
Data source: N/A
Data source date: 06 Aug 2015
Hazard Statements: Skin Corr. 1B H314 , Skin Corr. 1A H314 , Acute Tox. 2 H300 , Acute Tox. 2 H330 , EUH014

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

Conversion factor: 1.462
Description/Comments: Data from C&L Inventory Database
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 17 Jul 2015
Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Repr. 1B H360FD , Skin Sens. 1 H317 , Resp. Sens. 1 H334 , Skin Irrit. 2 H315 , STOT SE 3 H335 , Eye Irrit. 2 H319 , Acute Tox. 4 H302 , Acute Tox. 4 H332

■ lead compounds with the exception of those specified elsewhere in this Annex

CLP index number: 082-001-00-6
Description/Comments: Least-worst case: Lead REACH Consortium considers some lead compounds Carcinogenic category 2B
Data source: Regulation 1272/2008/EC - Classification, labelling and packaging of substances and mixtures. (CLP)
Additional Hazard Statement(s): Carc. 2 H351
Reason for additional Hazards Statement(s):
03 Jun 2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2A (Sup 7, 87) 2006; Lead REACH Consortium
www.reach-lead.eu/substanceinformation.html. Review date 29/09/2015

■ 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):
14 Dec 2015 - EUH032 >= 0.2 % hazard statement sourced from: WM3, Table C12.2

■ 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

■ 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

■ 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

▪ **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

▪ **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

▪ **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

▪ **indeno[123-cd]pyrene** (EC Number: 205-893-2, CAS Number: 193-39-5)

Description/Comments: Data from C&L Inventory Database
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 06 Aug 2015
Hazard Statements: Carc. 2 H351

▪ **phenanthrene** (EC Number: 201-581-5, CAS Number: 85-01-8)

Description/Comments: Data from C&L Inventory Database
Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>
Data source date: 06 Aug 2015
Hazard Statements: 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

▪ **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

▪ **confirm TPH has NOT arisen from diesel or petrol**

Description/Comments: Chapter 3, section 4b requires a positive confirmation for benzo[a]pyrene to be used as a marker in evaluating Carc. 1B; H350 (HP 7) and Muta. 1B; H340 (HP 11)
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
Hazard Statements: None.

▪ **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

Appendix B: Rationale for selection of metal species

arsenic {arsenic trioxide}

Worst case species based on risk phrases

beryllium {beryllium oxide}

Worst case species based on risk phrases

boron {boron tribromide/trichloride/trifluoride (combined)}

Worst case species based on risk phrases

cadmium {cadmium sulfide}

Worst case species based on risk phrases

chromium {chromium(III) oxide}

Worst case species based on risk phrases

copper {dicopper oxide; copper (I) oxide}

Most likely common species

lead {lead compounds with the exception of those specified elsewhere in this Annex}

Worst case species based on risk phrases

mercury {mercury dichloride}

Worst case species based on risk phrases

nickel {nickel dihydroxide}

Worst case species based on risk phrases

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

Worst case species based on risk phrases

vanadium {divanadium pentaoxide; vanadium pentoxide}

worst case

zinc {zinc sulphate}

Worst case species based on risk phrases

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

Worst case species

Appendix C: Version

HazWasteOnline Classification Engine: **WM3 1st Edition v1.1, May 2018**

HazWasteOnline Classification Engine Version: 2020.85.4212.8363 (25 Mar 2020)

HazWasteOnline Database: 2020.85.4212.8363 (25 Mar 2020)

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

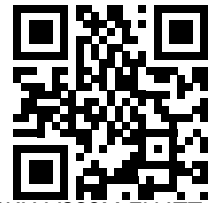
13th ATP - Regulation (EU) 2018/1480 of 4 October 2018

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



6B2KX-V829M-7U4TT

Job name

First Street Plot 6 and 7 Dec17v2

Description/Comments

Project

Site

Waste Stream Template

Ramboll Generic Waste Stream

Classified by

Name:
Hazel Comyn
Date:
16/01/2018 10:35:24 UTC
Telephone:
01132 458812

Company:
Ramboll UK Ltd
3rd Floor, Halsbury House, Chancellor Court
21 The Calls
Leeds
LS2 7EH

Report

Created by: Hazel Comyn
Created date: 16/01/2018 10:35 UTC

Job summary

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
1	HDP108	0.8	Non Hazardous		3
2	HDP110	0.5	Non Hazardous		5
3	HDP114	1	Non Hazardous		8
4	HDP117	0.6	Non Hazardous		10
5	HDP121	0.5	Non Hazardous		13
6	TP101	2.6	Non Hazardous		16
7	TP102	0.25	Non Hazardous		18
8	TP103	1	Non Hazardous		20
9	TP105	0.5	Non Hazardous		23
10	WS102	4	Non Hazardous		25
11	WS103	0.2	Non Hazardous		27
12	WS104	3	Non Hazardous		29
13	WS105	1	Non Hazardous		31
14	WS106B	0.2	Hazardous	HP 14	33
15	WS107	2	Non Hazardous		35
16	WS107[1]	4	Non Hazardous		38

#	Sample Name	Depth [m]	Classification Result	Hazard properties	Page
17	WS108	0.25	Non Hazardous		40
18	WS108[1]	3	Non Hazardous		43
19	WS108[2]	4	Non Hazardous		45
20	WS109	0.25	Non Hazardous		47

Appendices	Page
Appendix A: Classifier defined and non CLP determinands	50
Appendix B: Rationale for selection of metal species	52
Appendix C: Version	52

Classification of sample: HDP108

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

Sample details

Sample Name:	LoW Code:	
HDP108	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.8 m		
Moisture content:		
12%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 12% Dry Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
1		acenaphthene				4.4	mg/kg		3.929	mg/kg	0.000393 %	✓	
			201-469-6	83-32-9									
2		acenaphthylene				1.1	mg/kg		0.982	mg/kg	0.0000982 %	✓	
			205-917-1	208-96-8									
3		anthracene				6.4	mg/kg		5.714	mg/kg	0.000571 %	✓	
			204-371-1	120-12-7									
4		arsenic {  arsenic trioxide }				10	mg/kg	1.32	11.789	mg/kg	0.00118 %	✓	
			033-003-00-0	215-481-4									
5		benzo[a]anthracene				12	mg/kg		10.714	mg/kg	0.00107 %	✓	
			601-033-00-9	200-280-6									
6		benzo[a]pyrene; benzo[def]chrysene				11	mg/kg		9.821	mg/kg	0.000982 %	✓	
			601-032-00-3	200-028-5									
7		benzo[b]fluoranthene				13	mg/kg		11.607	mg/kg	0.00116 %	✓	
			601-034-00-4	205-911-9									
8		benzo[ghi]perylene				7.7	mg/kg		6.875	mg/kg	0.000688 %	✓	
			205-883-8	191-24-2									
9		benzo[k]fluoranthene				5.2	mg/kg		4.643	mg/kg	0.000464 %	✓	
			601-036-00-5	205-916-6									
10		boron {  boron tribromide/trichloride/trifluoride (combined) }				<1	mg/kg	13.43	<13.43	mg/kg	<0.00134 %		<LOD
				10294-33-4, 10294-34-5, 7637-07-2									
11		cadmium {  cadmium sulfide }			1	<1	mg/kg	1.285	<1.285	mg/kg	<0.0001 %		<LOD
			048-010-00-4	215-147-8									
12		chromium {  chromium(III) oxide }				14	mg/kg	1.462	18.269	mg/kg	0.00183 %	✓	
			215-160-9	1308-38-9									
13		chrysene				14	mg/kg		12.5	mg/kg	0.00125 %	✓	
			601-048-00-0	205-923-4									
14		copper {  dicopper oxide; copper (I) oxide }				74	mg/kg	1.126	74.389	mg/kg	0.00744 %	✓	
			029-002-00-X	215-270-7									

#	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	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										
16	dibenz[a,h]anthracene				3.1 mg/kg		2.768 mg/kg	0.000277 %		✓	
	601-041-00-2	200-181-8	53-70-3								
17	fluoranthene				26 mg/kg		23.214 mg/kg	0.00232 %		✓	
		205-912-4	206-44-0								
18	fluorene				4 mg/kg		3.571 mg/kg	0.000357 %		✓	
		201-695-5	86-73-7								
19	indeno[123-cd]pyrene				6.8 mg/kg		6.071 mg/kg	0.000607 %		✓	
		205-893-2	193-39-5								
20	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	150 mg/kg		133.929 mg/kg	0.0134 %		✓	
	082-001-00-6										
21	mercury { mercury dichloride }				<1 mg/kg	1.353	<1.353 mg/kg	<0.000135 %			<LOD
	080-010-00-X	231-299-8	7487-94-7								
22	naphthalene				5.1 mg/kg		4.554 mg/kg	0.000455 %		✓	
	601-052-00-2	202-049-5	91-20-3								
23	nickel { nickel dihydroxide }				20 mg/kg	1.579	28.205 mg/kg	0.00282 %		✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
24	pH				7.8 pH		7.8 pH	7.8 pH			
			PH								
25	phenanthrene				24 mg/kg		21.429 mg/kg	0.00214 %		✓	
		201-581-5	85-01-8								
26	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	604-001-00-2	203-632-7	108-95-2								
27	pyrene				25 mg/kg		22.321 mg/kg	0.00223 %		✓	
		204-927-3	129-00-0								
28	TPH (C6 to C40) petroleum group				560 mg/kg		500 mg/kg	0.05 %		✓	
			TPH								
29	zinc { zinc sulphate }				62 mg/kg	2.469	136.693 mg/kg	0.0137 %		✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [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 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) on Flam. Liq. 1; H224, Flam. Liq. 2; H225, Flam. Liq. 3; H226: Force this Hazardous property to non hazardous because TPH composition and concentration under site conditions make hazard unlikely

Classification of sample: HDP110

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

Sample details

Sample Name:	LoW Code:
HDP110	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.5 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
19%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 19% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		2 mg/kg		1.681 mg/kg	0.000168 %	✓	
2	acenaphthylene	205-917-1	208-96-8		1.3 mg/kg		1.092 mg/kg	0.000109 %	✓	
3	anthracene	204-371-1	120-12-7		3.7 mg/kg		3.109 mg/kg	0.000311 %	✓	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	17 mg/kg	1.32	18.862 mg/kg	0.00189 %	✓	
5	benzene	601-020-00-8	200-753-7	71-43-2	<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
6	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	7.1 mg/kg		5.966 mg/kg	0.000597 %	✓	
7	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	7.2 mg/kg		6.05 mg/kg	0.000605 %	✓	
8	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	7 mg/kg		5.882 mg/kg	0.000588 %	✓	
9	benzo[ghi]perylene	205-883-8	191-24-2		3.9 mg/kg		3.277 mg/kg	0.000328 %	✓	
10	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	3.4 mg/kg		2.857 mg/kg	0.000286 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		<1 mg/kg	13.43	<13.43 mg/kg	<0.00134 %		<LOD
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<1 mg/kg	1.285	<1.285 mg/kg	<0.0001 %		<LOD
13	chromium { chromium(III) oxide }	215-160-9	1308-38-9		17 mg/kg	1.462	20.879 mg/kg	0.00209 %	✓	
14	chrysene	601-048-00-0	205-923-4	218-01-9	6.9 mg/kg		5.798 mg/kg	0.00058 %	✓	

#		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		copper {  dicopper oxide; copper (I) oxide }				59	mg/kg	1.126	55.821	mg/kg	0.00558 %	✓	
		029-002-00-X	215-270-7	1317-39-1									
16		cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				16	mg/kg	1.884	25.331	mg/kg	0.00253 %	✓	
		006-007-00-5											
17		dibenz[a,h]anthracene				1.7	mg/kg		1.429	mg/kg	0.000143 %	✓	
		601-041-00-2	200-181-8	53-70-3									
18		ethylbenzene				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
19		fluoranthene				15	mg/kg		12.605	mg/kg	0.00126 %	✓	
			205-912-4	206-44-0									
20		fluorene				2.1	mg/kg		1.765	mg/kg	0.000176 %	✓	
			201-695-5	86-73-7									
21		indeno[123-cd]pyrene				3.3	mg/kg		2.773	mg/kg	0.000277 %	✓	
			205-893-2	193-39-5									
22		lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	210	mg/kg		176.471	mg/kg	0.0176 %	✓	
		082-001-00-6											
23		mercury { mercury dichloride }				<1	mg/kg	1.353	<1.353	mg/kg	<0.000135 %		<LOD
		080-010-00-X	231-299-8	7487-94-7									
24		naphthalene				5	mg/kg		4.202	mg/kg	0.00042 %	✓	
		601-052-00-2	202-049-5	91-20-3									
25		nickel { nickel dihydroxide }				20	mg/kg	1.579	26.546	mg/kg	0.00265 %	✓	
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
26		pH				8.8	pH		8.8	pH	8.8 pH		
				PH									
27		phenanthrene				12	mg/kg		10.084	mg/kg	0.00101 %	✓	
			201-581-5	85-01-8									
28		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
29		pyrene				15	mg/kg		12.605	mg/kg	0.00126 %	✓	
			204-927-3	129-00-0									
30		toluene				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
31		TPH (C6 to C40) petroleum group				962	mg/kg		808.403	mg/kg	0.0808 %	✓	
				TPH									
32		xylene				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]									
33		zinc { zinc sulphate }				110	mg/kg	2.469	228.254	mg/kg	0.0228 %	✓	
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
Total:											0.15 %		

Key

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

Supplementary Hazardous Property Information

HP 3(i) on Flam. Liq. 1; H224, Flam. Liq. 2; H225, Flam. Liq. 3; H226: Force this Hazardous property to non hazardous because TPH composition and concentration under site conditions make hazard unlikely

Classification of sample: HDP114

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

Sample details

Sample Name:	LoW Code:
HDP114	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
1 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
8.1%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 8.1% Dry Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
1		acenaphthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
			201-469-6	83-32-9							
2		acenaphthylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
			205-917-1	208-96-8							
3		anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
			204-371-1	120-12-7							
4		arsenic { arsenic trioxide }				7 mg/kg	1.32	8.55 mg/kg	0.000855 %	✓	
		033-003-00-0	215-481-4	1327-53-3							
5		benzo[a]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		601-033-00-9	200-280-6	56-55-3							
6		benzo[a]pyrene; benzo[def]chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		601-032-00-3	200-028-5	50-32-8							
7		benzo[b]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		601-034-00-4	205-911-9	205-99-2							
8		benzo[ghi]perylene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
			205-883-8	191-24-2							
9		benzo[k]fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		601-036-00-5	205-916-6	207-08-9							
10		boron {  boron tribromide/trichloride/trifluoride (combined) }				<1 mg/kg	13.43	<13.43 mg/kg	<0.00134 %		<LOD
				10294-33-4, 10294-34-5, 7637-07-2							
11		cadmium { cadmium sulfide }			1	<1 mg/kg	1.285	<1.285 mg/kg	<0.0001 %		<LOD
		048-010-00-4	215-147-8	1306-23-6							
12		chromium {  chromium(III) oxide }				16 mg/kg	1.462	21.633 mg/kg	0.00216 %	✓	
			215-160-9	1308-38-9							
13		chrysene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
		601-048-00-0	205-923-4	218-01-9							
14		copper {  dicopper oxide; copper (I) oxide }				27 mg/kg	1.126	28.121 mg/kg	0.00281 %	✓	
		029-002-00-X	215-270-7	1317-39-1							

#		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		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												
16		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
		601-041-00-2	200-181-8	53-70-3										
17		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
			205-912-4	206-44-0										
18		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
			201-695-5	86-73-7										
19		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
			205-893-2	193-39-5										
20		lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	86	mg/kg		79.556	mg/kg	0.00796 %	✓		
		082-001-00-6												
21		mercury { mercury dichloride }				<1	mg/kg	1.353	<1.353	mg/kg	<0.000135 %		<LOD	
		080-010-00-X	231-299-8	7487-94-7										
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
		601-052-00-2	202-049-5	91-20-3										
23		nickel { nickel dihydroxide }				18	mg/kg	1.579	26.301	mg/kg	0.00263 %	✓		
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]										
24		pH				7.9	pH		7.9	pH	7.9 pH			
				PH										
25		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
			201-581-5	85-01-8										
26		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
		604-001-00-2	203-632-7	108-95-2										
27		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
			204-927-3	129-00-0										
28		zinc { zinc sulphate }				61	mg/kg	2.469	139.341	mg/kg	0.0139 %	✓		
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]										
Total:											0.0324 %			

Key

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

Classification of sample: HDP117

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

Sample details

Sample Name:	LoW Code:
HDP117	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.6 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
15%	
(dry weight correction)	

Hazard properties

None identified

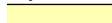
Determinands

Moisture content: 15% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	acenaphthene	201-469-6	83-32-9		1.1 mg/kg		0.957 mg/kg	0.0000957 %		✓	
2	acenaphthylene	205-917-1	208-96-8		1.8 mg/kg		1.565 mg/kg	0.000157 %		✓	
3	anthracene	204-371-1	120-12-7		3.5 mg/kg		3.043 mg/kg	0.000304 %		✓	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	18 mg/kg	1.32	20.666 mg/kg	0.00207 %		✓	
5	benzene	601-020-00-8	200-753-7	71-43-2	<10 mg/kg		<10 mg/kg	<0.001 %			<LOD
6	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	7.5 mg/kg		6.522 mg/kg	0.000652 %		✓	
7	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	6.9 mg/kg		6 mg/kg	0.0006 %		✓	
8	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	5.6 mg/kg		4.87 mg/kg	0.000487 %		✓	
9	benzo[ghi]perylene	205-883-8	191-24-2		3.6 mg/kg		3.13 mg/kg	0.000313 %		✓	
10	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	5.1 mg/kg		4.435 mg/kg	0.000443 %		✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		<1 mg/kg	13.43	<13.43 mg/kg	<0.00134 %			<LOD
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<1 mg/kg	1.285	<1.285 mg/kg	<0.0001 %			<LOD
13	chromium { chromium(III) oxide }	215-160-9	1308-38-9		21 mg/kg	1.462	26.689 mg/kg	0.00267 %		✓	
14	chrysene	601-048-00-0	205-923-4	218-01-9	6.8 mg/kg		5.913 mg/kg	0.000591 %		✓	

#		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		copper {  dicopper oxide; copper (I) oxide }				55 mg/kg	1.126	53.847 mg/kg	0.00538 %	✓		
		029-002-00-X	215-270-7	1317-39-1								
16		cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				6 mg/kg	1.884	9.83 mg/kg	0.000983 %	✓		
		006-007-00-5										
17		dibenz[a,h]anthracene				1.6 mg/kg		1.391 mg/kg	0.000139 %	✓		
		601-041-00-2	200-181-8	53-70-3								
18		ethylbenzene				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD	
		601-023-00-4	202-849-4	100-41-4								
19		fluoranthene				14 mg/kg		12.174 mg/kg	0.00122 %	✓		
			205-912-4	206-44-0								
20		fluorene				1.8 mg/kg		1.565 mg/kg	0.000157 %	✓		
			201-695-5	86-73-7								
21		indeno[123-cd]pyrene				3 mg/kg		2.609 mg/kg	0.000261 %	✓		
			205-893-2	193-39-5								
22		lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	180 mg/kg		156.522 mg/kg	0.0157 %	✓		
		082-001-00-6										
23		mercury { mercury dichloride }				<1 mg/kg	1.353	<1.353 mg/kg	<0.000135 %		<LOD	
		080-010-00-X	231-299-8	7487-94-7								
24		naphthalene				2.7 mg/kg		2.348 mg/kg	0.000235 %	✓		
		601-052-00-2	202-049-5	91-20-3								
25		nickel { nickel dihydroxide }				24 mg/kg	1.579	32.963 mg/kg	0.0033 %	✓		
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
26		pH				9.8 pH		9.8 pH	9.8 pH			
				PH								
27		phenanthrene				11 mg/kg		9.565 mg/kg	0.000957 %	✓		
			201-581-5	85-01-8								
28		phenol				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD	
		604-001-00-2	203-632-7	108-95-2								
29		pyrene				15 mg/kg		13.043 mg/kg	0.0013 %	✓		
			204-927-3	129-00-0								
30		toluene				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD	
		601-021-00-3	203-625-9	108-88-3								
31		TPH (C6 to C40) petroleum group				990 mg/kg		860.87 mg/kg	0.0861 %	✓		
				TPH								
32		xylene				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD	
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]								
33		zinc { zinc sulphate }				170 mg/kg	2.469	365.026 mg/kg	0.0365 %	✓		
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [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 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) on Flam. Liq. 1; H224, Flam. Liq. 2; H225, Flam. Liq. 3; H226: Force this Hazardous property to non hazardous because TPH composition and concentration under site conditions make hazard unlikely

Classification of sample: HDP121

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

Sample details

Sample Name:	LoW Code:
HDP121	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.5 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
15%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 15% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		0.8 mg/kg		0.696 mg/kg	0.0000696 %	✓	
2	acenaphthylene	205-917-1	208-96-8		0.7 mg/kg		0.609 mg/kg	0.0000609 %	✓	
3	anthracene	204-371-1	120-12-7		1.8 mg/kg		1.565 mg/kg	0.000157 %	✓	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	12 mg/kg	1.32	13.777 mg/kg	0.00138 %	✓	
5	benzene	601-020-00-8	200-753-7	71-43-2	<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
6	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	4.3 mg/kg		3.739 mg/kg	0.000374 %	✓	
7	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	4.1 mg/kg		3.565 mg/kg	0.000357 %	✓	
8	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	4 mg/kg		3.478 mg/kg	0.000348 %	✓	
9	benzo[ghi]perylene	205-883-8	191-24-2		2.5 mg/kg		2.174 mg/kg	0.000217 %	✓	
10	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	2.4 mg/kg		2.087 mg/kg	0.000209 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		<1 mg/kg	13.43	<13.43 mg/kg	<0.00134 %		<LOD
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<1 mg/kg	1.285	<1.285 mg/kg	<0.0001 %		<LOD
13	chromium { chromium(III) oxide }	215-160-9	1308-38-9		13 mg/kg	1.462	16.522 mg/kg	0.00165 %	✓	
14	chrysene	601-048-00-0	205-923-4	218-01-9	4 mg/kg		3.478 mg/kg	0.000348 %	✓	

#		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		copper {  dicopper oxide; copper (I) oxide }				35 mg/kg	1.126	34.266 mg/kg	0.00343 %			
		029-002-00-X	215-270-7	1317-39-1								
16		cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				6 mg/kg	1.884	9.83 mg/kg	0.000983 %			
		006-007-00-5										
17		dibenz[a,h]anthracene				1.2 mg/kg		1.043 mg/kg	0.000104 %			
		601-041-00-2	200-181-8	53-70-3								
18		ethylbenzene				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD	
		601-023-00-4	202-849-4	100-41-4								
19		fluoranthene				8.8 mg/kg		7.652 mg/kg	0.000765 %			
			205-912-4	206-44-0								
20		fluorene				0.8 mg/kg		0.696 mg/kg	0.0000696 %			
			201-695-5	86-73-7								
21		indeno[123-cd]pyrene				2.3 mg/kg		2 mg/kg	0.0002 %			
			205-893-2	193-39-5								
22		lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	92 mg/kg		80 mg/kg	0.008 %			
		082-001-00-6										
23		mercury { mercury dichloride }				<1 mg/kg	1.353	<1.353 mg/kg	<0.000135 %		<LOD	
		080-010-00-X	231-299-8	7487-94-7								
24		naphthalene				3 mg/kg		2.609 mg/kg	0.000261 %			
		601-052-00-2	202-049-5	91-20-3								
25		nickel { nickel dihydroxide }				17 mg/kg	1.579	23.349 mg/kg	0.00233 %			
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
26		pH				8.7 pH		8.7 pH	8.7 pH			
				PH								
27		phenanthrene				5.4 mg/kg		4.696 mg/kg	0.00047 %			
			201-581-5	85-01-8								
28		phenol				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD	
		604-001-00-2	203-632-7	108-95-2								
29		pyrene				8.6 mg/kg		7.478 mg/kg	0.000748 %			
			204-927-3	129-00-0								
30		toluene				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD	
		601-021-00-3	203-625-9	108-88-3								
31		TPH (C6 to C40) petroleum group				360 mg/kg		313.043 mg/kg	0.0313 %			
				TPH								
32		xylene				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD	
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]								
33		zinc { zinc sulphate }				87 mg/kg	2.469	186.808 mg/kg	0.0187 %			
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
Total:									0.0782 %			

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) on Flam. Liq. 1; H224, Flam. Liq. 2; H225, Flam. Liq. 3; H226: Force this Hazardous property to non hazardous because TPH composition and concentration under site conditions make hazard unlikely

Classification of sample: TP101

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

Sample details

Sample Name:	LoW Code:
TP101	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
2.6 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
26%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 26% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	acenaphthene	201-469-6	83-32-9		<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	5 mg/kg	1.32	5.239	mg/kg	0.000524 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
8	benzo[ghi]perylene	205-883-8	191-24-2		<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
10	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		<1 mg/kg	13.43	<13.43	mg/kg	<0.00134 %		<LOD
11	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<1 mg/kg	1.285	<1.285	mg/kg	<0.0001 %		<LOD
12	chromium { chromium(III) oxide }	215-160-9	1308-38-9		12 mg/kg	1.462	13.92	mg/kg	0.00139 %	✓	
13	chrysene	601-048-00-0	205-923-4	218-01-9	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
14	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	24 mg/kg	1.126	21.445	mg/kg	0.00214 %	✓	

#		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		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													
16		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
	601-041-00-2	200-181-8	53-70-3											
17		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
		205-912-4	206-44-0											
18		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
		201-695-5	86-73-7											
19		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
		205-893-2	193-39-5											
20		lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	50	mg/kg		39.683	mg/kg	0.00397 %	✓		
		082-001-00-6												
21		mercury { mercury dichloride }				<1	mg/kg	1.353	<1.353	mg/kg	<0.000135 %		<LOD	
		080-010-00-X	231-299-8	7487-94-7										
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
		601-052-00-2	202-049-5	91-20-3										
23		nickel { nickel dihydroxide }				13	mg/kg	1.579	16.296	mg/kg	0.00163 %	✓		
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]										
24		pH				7.9	pH		7.9	pH	7.9 pH			
				PH										
25		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
		201-581-5	85-01-8											
26		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
		604-001-00-2	203-632-7	108-95-2										
27		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
		204-927-3	129-00-0											
28		TPH (C6 to C40) petroleum group				98	mg/kg		77.778	mg/kg	0.00778 %	✓		
				TPH										
29		zinc { zinc sulphate }				34	mg/kg	2.469	66.632	mg/kg	0.00666 %	✓		
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]										
Total:												0.0261 %		

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) on Flam. Liq. 1; H224, Flam. Liq. 2; H225, Flam. Liq. 3; H226: **Force this Hazardous property to non hazardous because TPH composition and concentration under site conditions make hazard unlikely**

Classification of sample: TP102

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

Sample details

Sample Name:	TP102	LoW Code:	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	0.25 m	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)	
Moisture content:	17%			
	(dry weight correction)			

Hazard properties

None identified

Determinands

Moisture content: 17% Dry Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number							
1		acenaphthene				1 mg/kg		0.855 mg/kg	0.0000855 %	✓	
			201-469-6	83-32-9							
2		acenaphthylene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
			205-917-1	208-96-8							
3		anthracene				1.2 mg/kg		1.026 mg/kg	0.000103 %	✓	
			204-371-1	120-12-7							
4		arsenic { arsenic trioxide }				15 mg/kg	1.32	16.927 mg/kg	0.00169 %	✓	
			033-003-00-0	215-481-4							
5		benzo[a]anthracene				2.1 mg/kg		1.795 mg/kg	0.000179 %	✓	
			601-033-00-9	200-280-6							
6		benzo[a]pyrene; benzo[def]chrysene				1.9 mg/kg		1.624 mg/kg	0.000162 %	✓	
			601-032-00-3	200-028-5							
7		benzo[b]fluoranthene				2.1 mg/kg		1.795 mg/kg	0.000179 %	✓	
			601-034-00-4	205-911-9							
8		benzo[ghi]perylene				1.3 mg/kg		1.111 mg/kg	0.000111 %	✓	
			205-883-8	191-24-2							
9		benzo[k]fluoranthene				1.5 mg/kg		1.282 mg/kg	0.000128 %	✓	
			601-036-00-5	205-916-6							
10		boron {  boron tribromide/trichloride/trifluoride (combined) }				<1 mg/kg	13.43	<13.43 mg/kg	<0.00134 %		<LOD
				10294-33-4, 10294-34-5, 7637-07-2							
11		cadmium { cadmium sulfide }			1	<1 mg/kg	1.285	<1.285 mg/kg	<0.0001 %		<LOD
			048-010-00-4	215-147-8							
12		chromium {  chromium(III) oxide }				17 mg/kg	1.462	21.236 mg/kg	0.00212 %	✓	
			215-160-9	1308-38-9							
13		chrysene				2.7 mg/kg		2.308 mg/kg	0.000231 %	✓	
			601-048-00-0	205-923-4							
14		copper {  dicopper oxide; copper (I) oxide }				40 mg/kg	1.126	38.492 mg/kg	0.00385 %	✓	
			029-002-00-X	215-270-7							

#		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		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	3.221 mg/kg	0.000322 %	✓			
		006-007-00-5											
16		dibenz[a,h]anthracene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD		
		601-041-00-2	200-181-8	53-70-3									
17		fluoranthene				6.3 mg/kg		5.385 mg/kg	0.000538 %	✓			
			205-912-4	206-44-0									
18		fluorene				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD		
			201-695-5	86-73-7									
19		indeno[123-cd]pyrene				1.2 mg/kg		1.026 mg/kg	0.000103 %	✓			
			205-893-2	193-39-5									
20		lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	120 mg/kg		102.564 mg/kg	0.0103 %	✓			
		082-001-00-6											
21		mercury { mercury dichloride }				<1 mg/kg	1.353	<1.353 mg/kg	<0.000135 %		<LOD		
		080-010-00-X	231-299-8	7487-94-7									
22		naphthalene				1.2 mg/kg		1.026 mg/kg	0.000103 %	✓			
		601-052-00-2	202-049-5	91-20-3									
23		nickel { nickel dihydroxide }				17 mg/kg	1.579	22.95 mg/kg	0.00229 %	✓			
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
24		pH				8.3 pH		8.3 pH	8.3 pH				
				PH									
25		phenanthrene				5.8 mg/kg		4.957 mg/kg	0.000496 %	✓			
			201-581-5	85-01-8									
26		phenol				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD		
		604-001-00-2	203-632-7	108-95-2									
27		pyrene				6 mg/kg		5.128 mg/kg	0.000513 %	✓			
			204-927-3	129-00-0									
28		TPH (C6 to C40) petroleum group				310 mg/kg		264.957 mg/kg	0.0265 %	✓			
				TPH									
29		zinc { zinc sulphate }				120 mg/kg	2.469	253.261 mg/kg	0.0253 %	✓			
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
Total:												0.0773 %	

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) on Flam. Liq. 1; H224, Flam. Liq. 2; H225, Flam. Liq. 3; H226: **Force this Hazardous property to non hazardous because TPH composition and concentration under site conditions make hazard unlikely**

Classification of sample: TP103

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

Sample details

Sample Name:	TP103	LoW Code:	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	1 m	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)	
Moisture content:	16%			
	(dry weight correction)			

Hazard properties

None identified

Determinands

Moisture content: 16% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	acenaphthene	201-469-6	83-32-9		<0.2 mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.2 mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.2 mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	31 mg/kg	1.32	35.285	mg/kg	0.00353 %	✓	
5	benzene	601-020-00-8	200-753-7	71-43-2	<10 mg/kg		<10	mg/kg	<0.001 %		<LOD
6	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.2 mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
7	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.2 mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
8	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.2 mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
9	benzo[ghi]perylene	205-883-8	191-24-2		<0.2 mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
10	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.2 mg/kg		<0.2	mg/kg	<0.00002 %		<LOD
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		<1 mg/kg	13.43	<13.43	mg/kg	<0.00134 %		<LOD
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	1 mg/kg	1.285	1.108	mg/kg	0.0000862 %	✓	
13	chromium { chromium(III) oxide }	215-160-9	1308-38-9		17 mg/kg	1.462	21.419	mg/kg	0.00214 %	✓	
14	chrysene	601-048-00-0	205-923-4	218-01-9	<0.2 mg/kg		<0.2	mg/kg	<0.00002 %		<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		copper {  dicopper oxide; copper (I) oxide }				110 mg/kg	1.126	106.765 mg/kg	0.0107 %	✓		
		029-002-00-X	215-270-7	1317-39-1								
16		cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %		<LOD	
		006-007-00-5										
17		dibenz[a,h]anthracene				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD	
		601-041-00-2	200-181-8	53-70-3								
18		ethylbenzene				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD	
		601-023-00-4	202-849-4	100-41-4								
19		fluoranthene				1.3 mg/kg		1.121 mg/kg	0.000112 %	✓		
			205-912-4	206-44-0								
20		fluorene				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD	
			201-695-5	86-73-7								
21		indeno[123-cd]pyrene				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD	
			205-893-2	193-39-5								
22		lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	570 mg/kg		491.379 mg/kg	0.0491 %	✓		
		082-001-00-6										
23		mercury { mercury dichloride }				2 mg/kg	1.353	2.334 mg/kg	0.000233 %	✓		
		080-010-00-X	231-299-8	7487-94-7								
24		naphthalene				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD	
		601-052-00-2	202-049-5	91-20-3								
25		nickel { nickel dihydroxide }				32 mg/kg	1.579	43.572 mg/kg	0.00436 %	✓		
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
26		pH				8.2 pH		8.2 pH	8.2 pH			
				PH								
27		phenanthrene				<0.2 mg/kg		<0.2 mg/kg	<0.00002 %		<LOD	
			201-581-5	85-01-8								
28		phenol				<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD	
		604-001-00-2	203-632-7	108-95-2								
29		pyrene				1.2 mg/kg		1.034 mg/kg	0.000103 %	✓		
			204-927-3	129-00-0								
30		toluene				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD	
		601-021-00-3	203-625-9	108-88-3								
31		TPH (C6 to C40) petroleum group				53 mg/kg		45.69 mg/kg	0.00457 %	✓		
				TPH								
32		xylene				<10 mg/kg		<10 mg/kg	<0.001 %		<LOD	
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]								
33		zinc { zinc sulphate }				250 mg/kg	2.469	532.176 mg/kg	0.0532 %	✓		
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
Total:									0.134 %			

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) on Flam. Liq. 1; H224, Flam. Liq. 2; H225, Flam. Liq. 3; H226: Force this Hazardous property to non hazardous because TPH composition and concentration under site conditions make hazard unlikely

Classification of sample: TP105

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

Sample details

Sample Name:	LoW Code:	
TP105	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.5 m		
Moisture content:		
9.6%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 9.6% Dry Weight Moisture Correction applied (MC)

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
1		acenaphthene				6.5	mg/kg		5.931	mg/kg	0.000593 %	✓	
			201-469-6	83-32-9									
2		acenaphthylene				2.4	mg/kg		2.19	mg/kg	0.000219 %	✓	
			205-917-1	208-96-8									
3		anthracene				12	mg/kg		10.949	mg/kg	0.00109 %	✓	
			204-371-1	120-12-7									
4		arsenic {  arsenic trioxide }				14	mg/kg	1.32	16.865	mg/kg	0.00169 %	✓	
			033-003-00-0	215-481-4									
5		benzo[a]anthracene				19	mg/kg		17.336	mg/kg	0.00173 %	✓	
			601-033-00-9	200-280-6									
6		benzo[a]pyrene; benzo[def]chrysene				16	mg/kg		14.599	mg/kg	0.00146 %	✓	
			601-032-00-3	200-028-5									
7		benzo[b]fluoranthene				14	mg/kg		12.774	mg/kg	0.00128 %	✓	
			601-034-00-4	205-911-9									
8		benzo[ghi]perylene				12	mg/kg		10.949	mg/kg	0.00109 %	✓	
			205-883-8	191-24-2									
9		benzo[k]fluoranthene				16	mg/kg		14.599	mg/kg	0.00146 %	✓	
			601-036-00-5	205-916-6									
10		boron {  boron tribromide/trichloride/trifluoride (combined) }				<1	mg/kg	13.43	<13.43	mg/kg	<0.00134 %		<LOD
				10294-33-4, 10294-34-5, 7637-07-2									
11		cadmium {  cadmium sulfide }			1	<1	mg/kg	1.285	<1.285	mg/kg	<0.0001 %		<LOD
			048-010-00-4	215-147-8									
12		chromium {  chromium(III) oxide }				24	mg/kg	1.462	32.005	mg/kg	0.0032 %	✓	
			215-160-9	1308-38-9									
13		chrysene				23	mg/kg		20.985	mg/kg	0.0021 %	✓	
			601-048-00-0	205-923-4									
14		copper {  dicopper oxide; copper (I) oxide }				59	mg/kg	1.126	60.609	mg/kg	0.00606 %	✓	
			029-002-00-X	215-270-7									

#		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		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	1.719	mg/kg	0.000172 %		✓	
		006-007-00-5												
16		dibenz[a,h]anthracene				5	mg/kg		4.562	mg/kg	0.000456 %		✓	
601-041-00-2		200-181-8	53-70-3											
17		fluoranthene				39	mg/kg		35.584	mg/kg	0.00356 %		✓	
			205-912-4	206-44-0										
18		fluorene				7.3	mg/kg		6.661	mg/kg	0.000666 %		✓	
			201-695-5	86-73-7										
19		indeno[123-cd]pyrene				11	mg/kg		10.036	mg/kg	0.001 %		✓	
			205-893-2	193-39-5										
20		lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	340	mg/kg		310.219	mg/kg	0.031 %		✓	
		082-001-00-6												
21		mercury { mercury dichloride }				<1	mg/kg	1.353	<1.353	mg/kg	<0.000135 %		<LOD	
		080-010-00-X	231-299-8	7487-94-7										
22		naphthalene				8.6	mg/kg		7.847	mg/kg	0.000785 %		✓	
		601-052-00-2	202-049-5	91-20-3										
23		nickel { nickel dihydroxide }				23	mg/kg	1.579	33.146	mg/kg	0.00331 %		✓	
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]										
24		pH				8.3	pH		8.3	pH	8.3 pH			
				PH										
25		phenanthrene				42	mg/kg		38.321	mg/kg	0.00383 %		✓	
			201-581-5	85-01-8										
26		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
		604-001-00-2	203-632-7	108-95-2										
27		pyrene				37	mg/kg		33.759	mg/kg	0.00338 %		✓	
			204-927-3	129-00-0										
28		TPH (C6 to C40) petroleum group				410	mg/kg		374.088	mg/kg	0.0374 %		✓	
				TPH										
29		zinc { zinc sulphate }				330	mg/kg	2.469	743.493	mg/kg	0.0743 %		✓	
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]										
Total:												0.184 %		

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) on Flam. Liq. 1; H224, Flam. Liq. 2; H225, Flam. Liq. 3; H226: **Force this Hazardous property to non hazardous because TPH composition and concentration under site conditions make hazard unlikely**

Classification of sample: WS102

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

Sample details

Sample Name:	LoW Code:
WS102	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
4 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
9.5%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 9.5% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	acenaphthene	201-469-6	83-32-9		<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	3 mg/kg	1.32	3.617	mg/kg	0.000362 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
8	benzo[ghi]perylene	205-883-8	191-24-2		<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
10	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		<1 mg/kg	13.43	<13.43	mg/kg	<0.00134 %		<LOD
11	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<1 mg/kg	1.285	<1.285	mg/kg	<0.0001 %		<LOD
12	chromium { chromium(III) oxide }	215-160-9	1308-38-9		12 mg/kg	1.462	16.017	mg/kg	0.0016 %	✓	
13	chrysene	601-048-00-0	205-923-4	218-01-9	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
14	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	10 mg/kg	1.126	10.282	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	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										
16	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
	601-041-00-2	200-181-8	53-70-3								
17	fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
		205-912-4	206-44-0								
18	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
		201-695-5	86-73-7								
19	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
		205-893-2	193-39-5								
20	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	14 mg/kg		12.785 mg/kg	0.00128 %		✓	
	082-001-00-6										
21	mercury { mercury dichloride }				<1 mg/kg	1.353	<1.353 mg/kg	<0.000135 %			<LOD
	080-010-00-X	231-299-8	7487-94-7								
22	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
	601-052-00-2	202-049-5	91-20-3								
23	nickel { nickel dihydroxide }				15 mg/kg	1.579	21.637 mg/kg	0.00216 %		✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
24	pH				8.2 pH		8.2 pH	8.2 pH			
			PH								
25	phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
		201-581-5	85-01-8								
26	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	604-001-00-2	203-632-7	108-95-2								
27	pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
		204-927-3	129-00-0								
28	TPH (C6 to C40) petroleum group				4 mg/kg		3.653 mg/kg	0.000365 %		✓	
			TPH								
29	zinc { zinc sulphate }				30 mg/kg	2.469	67.652 mg/kg	0.00677 %		✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
Total:									0.0156 %		

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) on Flam. Liq. 1; H224, Flam. Liq. 2; H225, Flam. Liq. 3; H226: Force this Hazardous property to non hazardous because TPH composition and concentration under site conditions make hazard unlikely

Classification of sample: WS103

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

Sample details

Sample Name:	LoW Code:
WS103	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.2 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
8.9%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 8.9% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
3	anthracene	204-371-1	120-12-7		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	11 mg/kg	1.32	13.337 mg/kg	0.00133 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
8	benzo[ghi]perylene	205-883-8	191-24-2		<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
10	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		<1 mg/kg	13.43	<13.43 mg/kg	<0.00134 %		<LOD
11	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<1 mg/kg	1.285	<1.285 mg/kg	<0.0001 %		<LOD
12	chromium { chromium(III) oxide }	215-160-9	1308-38-9		20 mg/kg	1.462	26.842 mg/kg	0.00268 %	✓	
13	chrysene	601-048-00-0	205-923-4	218-01-9	<1 mg/kg		<1 mg/kg	<0.0001 %		<LOD
14	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	93 mg/kg	1.126	96.15 mg/kg	0.00962 %	✓	

#	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	 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												
16	dibenz[a,h]anthracene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
	601-041-00-2	200-181-8	53-70-3										
17	 fluoranthene				1.9	mg/kg		1.745	mg/kg	0.000174 %	✓		
		205-912-4	206-44-0										
18	 fluorene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
		201-695-5	86-73-7										
19	 indeno[123-cd]pyrene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
		205-893-2	193-39-5										
20	 lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	320	mg/kg		293.848	mg/kg	0.0294 %	✓		
	082-001-00-6												
21	 mercury { mercury dichloride }				1	mg/kg	1.353	1.243	mg/kg	0.000124 %	✓		
	080-010-00-X	231-299-8	7487-94-7										
22	naphthalene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
	601-052-00-2	202-049-5	91-20-3										
23	 nickel { nickel dihydroxide }				23	mg/kg	1.579	33.359	mg/kg	0.00334 %	✓		
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]										
24	 pH				10	pH		10	pH	10pH			
			PH										
25	 phenanthrene				1	mg/kg		0.918	mg/kg	0.0000918 %	✓		
		201-581-5	85-01-8										
26	phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
	604-001-00-2	203-632-7	108-95-2										
27	 pyrene				1.8	mg/kg		1.653	mg/kg	0.000165 %	✓		
		204-927-3	129-00-0										
28	 TPH (C6 to C40) petroleum group				180	mg/kg		165.289	mg/kg	0.0165 %	✓		
			TPH										
29	 zinc { zinc sulphate }				980	mg/kg	2.469	2222.14	mg/kg	0.222 %	✓		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]										
Total:											0.289 %		

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) on Flam. Liq. 1; H224, Flam. Liq. 2; H225, Flam. Liq. 3; H226: Force this Hazardous property to non hazardous because TPH composition and concentration under site conditions make hazard unlikely

Classification of sample: WS104

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

Sample details

Sample Name:	LoW Code:
WS104	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
3 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
6.9%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 6.9% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	acenaphthene	201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
3	anthracene	204-371-1	120-12-7		0.2 mg/kg		0.187 mg/kg	0.0000187 %		✓	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4		7 mg/kg	1.32	8.646 mg/kg	0.000865 %		✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6		0.5 mg/kg		0.468 mg/kg	0.0000468 %		✓	
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5		0.3 mg/kg		0.281 mg/kg	0.0000281 %		✓	
7	benzo[b]fluoranthene	601-034-00-4	205-911-9		0.4 mg/kg		0.374 mg/kg	0.0000374 %		✓	
8	benzo[ghi]perylene	205-883-8	191-24-2		0.1 mg/kg		0.0935 mg/kg	0.00000935 %		✓	
9	benzo[k]fluoranthene	601-036-00-5	205-916-6		0.2 mg/kg		0.187 mg/kg	0.0000187 %		✓	
10	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		<1 mg/kg	13.43	<13.43 mg/kg	<0.00134 %			<LOD
11	cadmium { cadmium sulfide }	048-010-00-4	215-147-8		<1 mg/kg	1.285	<1.285 mg/kg	<0.0001 %			<LOD
12	chromium { chromium(III) oxide }	215-160-9	1308-38-9		11 mg/kg	1.462	15.039 mg/kg	0.0015 %		✓	
13	chrysene	601-048-00-0	205-923-4		0.6 mg/kg		0.561 mg/kg	0.0000561 %		✓	
14	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7		12 mg/kg	1.126	12.639 mg/kg	0.00126 %		✓	

#	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	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										
16	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
	601-041-00-2	200-181-8	53-70-3								
17	fluoranthene				0.7 mg/kg		0.655 mg/kg	0.0000655 %		✓	
		205-912-4	206-44-0								
18	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
		201-695-5	86-73-7								
19	indeno[123-cd]pyrene				0.1 mg/kg		0.0935 mg/kg	0.00000935 %		✓	
		205-893-2	193-39-5								
20	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	950 mg/kg		888.681 mg/kg	0.0889 %		✓	
	082-001-00-6										
21	mercury { mercury dichloride }				<1 mg/kg	1.353	<1.353 mg/kg	<0.000135 %			<LOD
	080-010-00-X	231-299-8	7487-94-7								
22	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
	601-052-00-2	202-049-5	91-20-3								
23	nickel { nickel dihydroxide }				3 mg/kg	1.579	4.433 mg/kg	0.000443 %		✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
24	pH				8.6 pH		8.6 pH	8.6 pH			
			PH								
25	phenanthrene				0.7 mg/kg		0.655 mg/kg	0.0000655 %		✓	
		201-581-5	85-01-8								
26	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	604-001-00-2	203-632-7	108-95-2								
27	pyrene				0.8 mg/kg		0.748 mg/kg	0.0000748 %		✓	
		204-927-3	129-00-0								
28	TPH (C6 to C40) petroleum group				9 mg/kg		8.419 mg/kg	0.000842 %		✓	
			TPH								
29	zinc { zinc sulphate }				18 mg/kg	2.469	41.578 mg/kg	0.00416 %		✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
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 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) on Flam. Liq. 1; H224, Flam. Liq. 2; H225, Flam. Liq. 3; H226: **Force this Hazardous property to non hazardous because TPH composition and concentration under site conditions make hazard unlikely**

Classification of sample: WS105

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

Sample details

Sample Name:	LoW Code:
WS105	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
1 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
17%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 17% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		0.4 mg/kg		0.342 mg/kg	0.0000342 %	✓	
2	acenaphthylene	205-917-1	208-96-8		0.1 mg/kg		0.0855 mg/kg	0.00000855 %	✓	
3	anthracene	204-371-1	120-12-7		0.9 mg/kg		0.769 mg/kg	0.0000769 %	✓	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	220 mg/kg	1.32	248.266 mg/kg	0.0248 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	3.2 mg/kg		2.735 mg/kg	0.000274 %	✓	
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	3.6 mg/kg		3.077 mg/kg	0.000308 %	✓	
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	4.3 mg/kg		3.675 mg/kg	0.000368 %	✓	
8	benzo[ghi]perylene	205-883-8	191-24-2		2.3 mg/kg		1.966 mg/kg	0.000197 %	✓	
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	3.8 mg/kg		3.248 mg/kg	0.000325 %	✓	
10	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		<1 mg/kg	13.43	<13.43 mg/kg	<0.00134 %		<LOD
11	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	4 mg/kg	1.285	4.394 mg/kg	0.000342 %	✓	
12	chromium { chromium(III) oxide }	215-160-9	1308-38-9		59 mg/kg	1.462	73.702 mg/kg	0.00737 %	✓	
13	chrysene	601-048-00-0	205-923-4	218-01-9	3.8 mg/kg		3.248 mg/kg	0.000325 %	✓	
14	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	330 mg/kg	1.126	317.558 mg/kg	0.0318 %	✓	

#		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		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													
16		dibenz[a,h]anthracene				1.1	mg/kg		0.94	mg/kg	0.000094 %	✓		
	601-041-00-2	200-181-8	53-70-3											
17		fluoranthene				5.1	mg/kg		4.359	mg/kg	0.000436 %	✓		
		205-912-4	206-44-0											
18		fluorene				0.3	mg/kg		0.256	mg/kg	0.0000256 %	✓		
		201-695-5	86-73-7											
19		indeno[123-cd]pyrene				2.3	mg/kg		1.966	mg/kg	0.000197 %	✓		
		205-893-2	193-39-5											
20		lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	600	mg/kg		512.821	mg/kg	0.0513 %	✓		
	082-001-00-6													
21		mercury { mercury dichloride }				1	mg/kg	1.353	1.157	mg/kg	0.000116 %	✓		
	080-010-00-X	231-299-8	7487-94-7											
22		naphthalene				0.4	mg/kg		0.342	mg/kg	0.0000342 %	✓		
	601-052-00-2	202-049-5	91-20-3											
23		nickel { nickel dihydroxide }				160	mg/kg	1.579	216	mg/kg	0.0216 %	✓		
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]											
24		pH				7.8	pH		7.8	pH	7.8 pH			
			PH											
25		phenanthrene				3.3	mg/kg		2.821	mg/kg	0.000282 %	✓		
		201-581-5	85-01-8											
26		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
	604-001-00-2	203-632-7	108-95-2											
27		pyrene				4.9	mg/kg		4.188	mg/kg	0.000419 %	✓		
		204-927-3	129-00-0											
28		TPH (C6 to C40) petroleum group				95	mg/kg		81.197	mg/kg	0.00812 %	✓		
			TPH											
29		zinc { zinc sulphate }				580	mg/kg	2.469	1224.096	mg/kg	0.122 %	✓		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]											
Total:												0.273 %		

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) on Flam. Liq. 1; H224, Flam. Liq. 2; H225, Flam. Liq. 3; H226: Force this Hazardous property to non hazardous because TPH composition and concentration under site conditions make hazard unlikely

Classification of sample: WS106B

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

Sample details

Sample Name:	LoW Code:
WS106B	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.2 m	Entry:
Moisture content:	17 05 03 * (Soil and stones containing hazardous substances)
13%	
(dry weight correction)	

Hazard properties

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

Risk phrases hit:

R50/53 "Very toxic to aquatic organisms, may cause long-term adverse effects in the aquatic environment"

Because of determinands:

lead compounds with the exception of those specified elsewhere in this Annex: (Note 1 conc.: 0.142%)

zinc sulphate: (compound conc.: 0.192%)

Determinands

Moisture content: 13% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	acenaphthene	201-469-6	83-32-9		<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
2	acenaphthylene	205-917-1	208-96-8		<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
3	anthracene	204-371-1	120-12-7		<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4		16 mg/kg	1.32	18.695 mg/kg	0.00187 %	✓		
5	benzo[a]anthracene	601-033-00-9	200-280-6		<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5		<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9		<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
8	benzo[ghi]perylene	205-883-8	191-24-2		<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6		<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
10	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		<1 mg/kg	13.43	<13.43 mg/kg	<0.00134 %			<LOD
11	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1	2 mg/kg	1.285	2.275 mg/kg	0.000177 %	✓		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		CLP index number	EC Number	CAS Number									
12		chromium {  chromium(III) oxide }				24	mg/kg	1.462	31.042	mg/kg	0.0031 %	✓	
		215-160-9		1308-38-9									
13		chrysene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-048-00-0	205-923-4	218-01-9									
14		copper {  dicopper oxide; copper (I) oxide }				70	mg/kg	1.126	69.745	mg/kg	0.00697 %	✓	
		029-002-00-X	215-270-7	1317-39-1									
15		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											
16		dibenz[a,h]anthracene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-041-00-2	200-181-8	53-70-3									
17		fluoranthene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
			205-912-4	206-44-0									
18		fluorene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
			201-695-5	86-73-7									
19		indeno[123-cd]pyrene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
			205-893-2	193-39-5									
20		lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	1600	mg/kg		1415.929	mg/kg	0.142 %	✓	
		082-001-00-6											
21		mercury { mercury dichloride }				10	mg/kg	1.353	11.978	mg/kg	0.0012 %	✓	
		080-010-00-X	231-299-8	7487-94-7									
22		naphthalene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		601-052-00-2	202-049-5	91-20-3									
23		nickel { nickel dihydroxide }				22	mg/kg	1.579	30.751	mg/kg	0.00308 %	✓	
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]									
24		pH				9	pH		9	pH	9pH		
				PH									
25		phenanthrene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
			201-581-5	85-01-8									
26		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
		604-001-00-2	203-632-7	108-95-2									
27		pyrene				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD
			204-927-3	129-00-0									
28		TPH (C6 to C40) petroleum group				110	mg/kg		97.345	mg/kg	0.00973 %	✓	
				TPH									
29		zinc { zinc sulphate }				880	mg/kg	2.469	1922.992	mg/kg	0.192 %	✓	
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]									
Total:												0.363 %	

Key

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

Supplementary Hazardous Property Information

HP 3(i) on Flam. Liq. 1; H224, Flam. Liq. 2; H225, Flam. Liq. 3; H226: Force this Hazardous property to non hazardous because TPH composition and concentration under site conditions make hazard unlikely

Classification of sample: WS107

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

Sample details

Sample Name:	LoW Code:
WS107	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
2 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
9.9%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 9.9% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	acenaphthene	201-469-6	83-32-9		<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	4 mg/kg	1.32	4.806	mg/kg	0.000481 %	✓	
5	benzene	601-020-00-8	200-753-7	71-43-2	<10 mg/kg		<10	mg/kg	<0.001 %		<LOD
6	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
7	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
8	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
9	benzo[ghi]perylene	205-883-8	191-24-2		<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
10	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		<1 mg/kg	13.43	<13.43	mg/kg	<0.00134 %		<LOD
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<1 mg/kg	1.285	<1.285	mg/kg	<0.0001 %		<LOD
13	chromium { chromium(III) oxide }	215-160-9	1308-38-9		11 mg/kg	1.462	14.629	mg/kg	0.00146 %	✓	
14	chrysene	601-048-00-0	205-923-4	218-01-9	<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		copper {  dicopper oxide; copper (I) oxide }				7 mg/kg	1.126	7.171 mg/kg	0.000717 %		✓	
		029-002-00-X	215-270-7	1317-39-1								
16		cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
		006-007-00-5										
17		dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
		601-041-00-2	200-181-8	53-70-3								
18		ethylbenzene				<10 mg/kg		<10 mg/kg	<0.001 %			<LOD
		601-023-00-4	202-849-4	100-41-4								
19		fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
			205-912-4	206-44-0								
20		fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
			201-695-5	86-73-7								
21		indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
			205-893-2	193-39-5								
22		lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	14 mg/kg		12.739 mg/kg	0.00127 %		✓	
		082-001-00-6										
23		mercury { mercury dichloride }				<1 mg/kg	1.353	<1.353 mg/kg	<0.000135 %			<LOD
		080-010-00-X	231-299-8	7487-94-7								
24		naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
		601-052-00-2	202-049-5	91-20-3								
25		nickel { nickel dihydroxide }				10 mg/kg	1.579	14.372 mg/kg	0.00144 %		✓	
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
26		pH				7.7 pH		7.7 pH	7.7 pH			
				PH								
27		phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
			201-581-5	85-01-8								
28		phenol				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
		604-001-00-2	203-632-7	108-95-2								
29		pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
			204-927-3	129-00-0								
30		toluene				<10 mg/kg		<10 mg/kg	<0.001 %			<LOD
		601-021-00-3	203-625-9	108-88-3								
31		TPH (C6 to C40) petroleum group				4 mg/kg		3.64 mg/kg	0.000364 %		✓	
				TPH								
32		xylene				<10 mg/kg		<10 mg/kg	<0.001 %			<LOD
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]								
33		zinc { zinc sulphate }				28 mg/kg	2.469	62.912 mg/kg	0.00629 %		✓	
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
Total:										0.0181 %		

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) on Flam. Liq. 1; H224, Flam. Liq. 2; H225, Flam. Liq. 3; H226: Force this Hazardous property to non hazardous because TPH composition and concentration under site conditions make hazard unlikely

Classification of sample: WS107[1]

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

Sample details

Sample Name:	LoW Code:
WS107[1]	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
4 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
12%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 12% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	acenaphthene	201-469-6	83-32-9		<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	7 mg/kg	1.32	8.252	mg/kg	0.000825 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
8	benzo[ghi]perylene	205-883-8	191-24-2		<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
10	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		<1 mg/kg	13.43	<13.43	mg/kg	<0.00134 %		<LOD
11	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<1 mg/kg	1.285	<1.285	mg/kg	<0.0001 %		<LOD
12	chromium { chromium(III) oxide }	215-160-9	1308-38-9		22 mg/kg	1.462	28.709	mg/kg	0.00287 %	✓	
13	chrysene	601-048-00-0	205-923-4	218-01-9	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
14	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	23 mg/kg	1.126	23.121	mg/kg	0.00231 %	✓	

#	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	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										
16	dibenz[a,h]anthracene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
	601-041-00-2	200-181-8	53-70-3								
17	fluoranthene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
		205-912-4	206-44-0								
18	fluorene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
		201-695-5	86-73-7								
19	indeno[123-cd]pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
		205-893-2	193-39-5								
20	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	14 mg/kg		12.5 mg/kg	0.00125 %	✓		
	082-001-00-6										
21	mercury { mercury dichloride }				<1 mg/kg	1.353	<1.353 mg/kg	<0.000135 %			<LOD
	080-010-00-X	231-299-8	7487-94-7								
22	naphthalene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
	601-052-00-2	202-049-5	91-20-3								
23	nickel { nickel dihydroxide }				31 mg/kg	1.579	43.718 mg/kg	0.00437 %	✓		
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
24	pH				8.1 pH		8.1 pH	8.1 pH			
			PH								
25	phenanthrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
		201-581-5	85-01-8								
26	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	604-001-00-2	203-632-7	108-95-2								
27	pyrene				<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
		204-927-3	129-00-0								
28	zinc { zinc sulphate }				63 mg/kg	2.469	138.898 mg/kg	0.0139 %	✓		
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
Total:									0.0275 %		

Key

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

Classification of sample: WS108

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

Sample details

Sample Name:	LoW Code:
WS108	Chapter:
Sample Depth:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
0.25 m	Entry:
Moisture content:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
13%	
(dry weight correction)	

Hazard properties

None identified

Determinands

Moisture content: 13% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	acenaphthene	201-469-6	83-32-9		<1 mg/kg		<1	mg/kg	<0.0001 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<1 mg/kg		<1	mg/kg	<0.0001 %		<LOD
3	anthracene	204-371-1	120-12-7		<1 mg/kg		<1	mg/kg	<0.0001 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	16 mg/kg	1.32	18.695	mg/kg	0.00187 %	✓	
5	benzene	601-020-00-8	200-753-7	71-43-2	<10 mg/kg		<10	mg/kg	<0.001 %		<LOD
6	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<1 mg/kg		<1	mg/kg	<0.0001 %		<LOD
7	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<1 mg/kg		<1	mg/kg	<0.0001 %		<LOD
8	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<1 mg/kg		<1	mg/kg	<0.0001 %		<LOD
9	benzo[ghi]perylene	205-883-8	191-24-2		<1 mg/kg		<1	mg/kg	<0.0001 %		<LOD
10	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<1 mg/kg		<1	mg/kg	<0.0001 %		<LOD
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		<1 mg/kg	13.43	<13.43	mg/kg	<0.00134 %		<LOD
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	2 mg/kg	1.285	2.275	mg/kg	0.000177 %	✓	
13	chromium { chromium(III) oxide }	215-160-9	1308-38-9		24 mg/kg	1.462	31.042	mg/kg	0.0031 %	✓	
14	chrysene	601-048-00-0	205-923-4	218-01-9	<1 mg/kg		<1	mg/kg	<0.0001 %		<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	copper { dicopper oxide; copper (I) oxide }				90 mg/kg	1.126	89.673 mg/kg	0.00897 %		✓	
	029-002-00-X	215-270-7	1317-39-1								
16	cyanides { salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				<1 mg/kg	1.884	<1.884 mg/kg	<0.000188 %			<LOD
	006-007-00-5										
17	dibenz[a,h]anthracene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	601-041-00-2	200-181-8	53-70-3								
18	ethylbenzene				<10 mg/kg		<10 mg/kg	<0.001 %			<LOD
	601-023-00-4	202-849-4	100-41-4								
19	fluoranthene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
		205-912-4	206-44-0								
20	fluorene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
		201-695-5	86-73-7								
21	indeno[123-cd]pyrene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
		205-893-2	193-39-5								
22	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	850 mg/kg		752.212 mg/kg	0.0752 %		✓	
	082-001-00-6										
23	mercury { mercury dichloride }				<1 mg/kg	1.353	<1.353 mg/kg	<0.000135 %			<LOD
	080-010-00-X	231-299-8	7487-94-7								
24	naphthalene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	601-052-00-2	202-049-5	91-20-3								
25	nickel { nickel dihydroxide }				19 mg/kg	1.579	26.558 mg/kg	0.00266 %		✓	
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]								
26	pH				8.8 pH		8.8 pH	8.8 pH			
			PH								
27	phenanthrene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
		201-581-5	85-01-8								
28	phenol				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
	604-001-00-2	203-632-7	108-95-2								
29	pyrene				<1 mg/kg		<1 mg/kg	<0.0001 %			<LOD
		204-927-3	129-00-0								
30	toluene				<10 mg/kg		<10 mg/kg	<0.001 %			<LOD
	601-021-00-3	203-625-9	108-88-3								
31	TPH (C6 to C40) petroleum group				54 mg/kg		47.788 mg/kg	0.00478 %		✓	
			TPH								
32	xylene				<10 mg/kg		<10 mg/kg	<0.001 %			<LOD
	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]								
33	zinc { zinc sulphate }				800 mg/kg	2.469	1748.174 mg/kg	0.175 %		✓	
	030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]								
Total:									0.279 %		

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) on Flam. Liq. 1; H224, Flam. Liq. 2; H225, Flam. Liq. 3; H226: Force this Hazardous property to non hazardous because TPH composition and concentration under site conditions make hazard unlikely

Classification of sample: WS108[1]

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

Sample details

Sample Name:	LoW Code:	
WS108[1]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
3 m		
Moisture content:		
12%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 12% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	acenaphthene	201-469-6	83-32-9		<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
3	anthracene	204-371-1	120-12-7		<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	11 mg/kg	1.32	12.967	mg/kg	0.0013 %	✓	
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
8	benzo[ghi]perylene	205-883-8	191-24-2		<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
10	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		<1 mg/kg	13.43	<13.43	mg/kg	<0.00134 %		<LOD
11	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	<1 mg/kg	1.285	<1.285	mg/kg	<0.0001 %		<LOD
12	chromium { chromium(III) oxide }	215-160-9	1308-38-9		8 mg/kg	1.462	10.44	mg/kg	0.00104 %	✓	
13	chrysene	601-048-00-0	205-923-4	218-01-9	<0.1 mg/kg		<0.1	mg/kg	<0.00001 %		<LOD
14	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	10 mg/kg	1.126	10.053	mg/kg	0.00101 %	✓	

#		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		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												
16		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
	601-041-00-2	200-181-8	53-70-3											
17		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
			205-912-4	206-44-0										
18		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
			201-695-5	86-73-7										
19		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
			205-893-2	193-39-5										
20		lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	18	mg/kg		16.071	mg/kg	0.00161 %	✓		
		082-001-00-6												
21		mercury { mercury dichloride }				<1	mg/kg	1.353	<1.353	mg/kg	<0.000135 %		<LOD	
	080-010-00-X	231-299-8	7487-94-7											
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
	601-052-00-2	202-049-5	91-20-3											
23		nickel { nickel dihydroxide }				9	mg/kg	1.579	12.692	mg/kg	0.00127 %	✓		
	028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]											
24		pH				8.3	pH		8.3	pH	8.3 pH			
			PH											
25		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
		201-581-5	85-01-8											
26		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
	604-001-00-2	203-632-7	108-95-2											
27		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
			204-927-3	129-00-0										
28		TPH (C6 to C40) petroleum group				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %		<LOD	
				TPH										
29		zinc { zinc sulphate }				20	mg/kg	2.469	44.095	mg/kg	0.00441 %	✓		
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]										
Total:									0.0127 %					

Key

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

Classification of sample: WS108[2]

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

Sample details

Sample Name:	LoW Code:	
WS108[2]	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
4 m		
Moisture content:		
38%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 38% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number								
1	acenaphthene	201-469-6	83-32-9		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
2	acenaphthylene	205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
3	anthracene	204-371-1	120-12-7		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3	7 mg/kg	1.32	6.697 mg/kg	0.00067 %	✓		
5	benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
6	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
7	benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
8	benzo[ghi]perylene	205-883-8	191-24-2		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
9	benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
10	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		<1 mg/kg	13.43	<13.43 mg/kg	<0.00134 %			<LOD
11	cadmium { cadmium sulfide }	048-010-00-4	215-147-8	1306-23-6	2 mg/kg	1.285	1.863 mg/kg	0.000145 %	✓		
12	chromium { chromium(III) oxide }	215-160-9	1308-38-9		3 mg/kg	1.462	3.177 mg/kg	0.000318 %	✓		
13	chrysene	601-048-00-0	205-923-4	218-01-9	<0.1 mg/kg		<0.1 mg/kg	<0.00001 %			<LOD
14	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1	20 mg/kg	1.126	16.317 mg/kg	0.00163 %	✓		

#		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		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												
16		dibenz[a,h]anthracene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %			<LOD
		601-041-00-2	200-181-8	53-70-3										
17		fluoranthene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %			<LOD
			205-912-4	206-44-0										
18		fluorene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %			<LOD
			201-695-5	86-73-7										
19		indeno[123-cd]pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %			<LOD
			205-893-2	193-39-5										
20		lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	10	mg/kg		7.246	mg/kg	0.000725 %		✓	
		082-001-00-6												
21		mercury { mercury dichloride }				<1	mg/kg	1.353	<1.353	mg/kg	<0.000135 %			<LOD
		080-010-00-X	231-299-8	7487-94-7										
22		naphthalene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %			<LOD
		601-052-00-2	202-049-5	91-20-3										
23		nickel { nickel dihydroxide }				20	mg/kg	1.579	22.891	mg/kg	0.00229 %		✓	
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]										
24		pH				7.9	pH		7.9	pH	7.9 pH			
				PH										
25		phenanthrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %			<LOD
			201-581-5	85-01-8										
26		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %			<LOD
		604-001-00-2	203-632-7	108-95-2										
27		pyrene				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %			<LOD
			204-927-3	129-00-0										
28		TPH (C6 to C40) petroleum group				<0.1	mg/kg		<0.1	mg/kg	<0.00001 %			<LOD
				TPH										
29		zinc { zinc sulphate }				48	mg/kg	2.469	85.889	mg/kg	0.00859 %		✓	
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]										
Total:												0.0163 %		

Key

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

Classification of sample: WS109

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

Sample details

Sample Name:	LoW Code:	
WS109	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:	Entry:	17 05 04 (Soil and stones other than those mentioned in 17 05 03)
0.25 m		
Moisture content:		
17%		
(dry weight correction)		

Hazard properties

None identified

Determinands

Moisture content: 17% Dry Weight Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
	CLP index number	EC Number	CAS Number							
1	acenaphthene	201-469-6	83-32-9		0.4 mg/kg		0.342 mg/kg	0.0000342 %	✓	
2	acenaphthylene	205-917-1	208-96-8		<0.1 mg/kg		<0.1 mg/kg	<0.00001 %		<LOD
3	anthracene	204-371-1	120-12-7		0.5 mg/kg		0.427 mg/kg	0.0000427 %	✓	
4	arsenic { arsenic trioxide }	033-003-00-0	215-481-4		23 mg/kg	1.32	25.955 mg/kg	0.0026 %	✓	
5	benzene	601-020-00-8	200-753-7		<10 mg/kg		<10 mg/kg	<0.001 %		<LOD
6	benzo[a]anthracene	601-033-00-9	200-280-6		1.3 mg/kg		1.111 mg/kg	0.000111 %	✓	
7	benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5		1.1 mg/kg		0.94 mg/kg	0.000094 %	✓	
8	benzo[b]fluoranthene	601-034-00-4	205-911-9		1.2 mg/kg		1.026 mg/kg	0.000103 %	✓	
9	benzo[ghi]perylene	205-883-8	191-24-2		0.7 mg/kg		0.598 mg/kg	0.0000598 %	✓	
10	benzo[k]fluoranthene	601-036-00-5	205-916-6		0.6 mg/kg		0.513 mg/kg	0.0000513 %	✓	
11	boron { boron tribromide/trichloride/trifluoride (combined) }		10294-33-4, 10294-34-5, 7637-07-2		<1 mg/kg	13.43	<13.43 mg/kg	<0.00134 %		<LOD
12	cadmium { cadmium sulfide }	048-010-00-4	215-147-8		1 mg/kg	1.285	1.099 mg/kg	0.0000855 %	✓	
13	chromium { chromium(III) oxide }	215-160-9	1308-38-9		17 mg/kg	1.462	21.236 mg/kg	0.00212 %	✓	
14	chrysene	601-048-00-0	205-923-4		1.3 mg/kg		1.111 mg/kg	0.000111 %	✓	

#		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		copper {  dicopper oxide; copper (I) oxide }				69	mg/kg	1.126	66.399	mg/kg	0.00664 %		✓	
		029-002-00-X	215-270-7	1317-39-1										
16		cyanides {  salts of hydrogen cyanide with the exception of complex cyanides such as ferrocyanides, ferricyanides and mercuric oxycyanide and those specified elsewhere in this Annex }				11	mg/kg	1.884	17.713	mg/kg	0.00177 %		✓	
		006-007-00-5												
17		dibenz[a,h]anthracene				0.2	mg/kg		0.171	mg/kg	0.0000171 %		✓	
		601-041-00-2	200-181-8	53-70-3										
18		ethylbenzene				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD	
		601-023-00-4	202-849-4	100-41-4										
19		fluoranthene				3.2	mg/kg		2.735	mg/kg	0.000274 %		✓	
			205-912-4	206-44-0										
20		fluorene				0.2	mg/kg		0.171	mg/kg	0.0000171 %		✓	
			201-695-5	86-73-7										
21		indeno[123-cd]pyrene				0.6	mg/kg		0.513	mg/kg	0.0000513 %		✓	
			205-893-2	193-39-5										
22		lead {  lead compounds with the exception of those specified elsewhere in this Annex }			1	880	mg/kg		752.137	mg/kg	0.0752 %		✓	
		082-001-00-6												
23		mercury { mercury dichloride }				5	mg/kg	1.353	5.784	mg/kg	0.000578 %		✓	
		080-010-00-X	231-299-8	7487-94-7										
24		naphthalene				0.1	mg/kg		0.0855	mg/kg	0.00000855 %		✓	
		601-052-00-2	202-049-5	91-20-3										
25		nickel { nickel dihydroxide }				23	mg/kg	1.579	31.05	mg/kg	0.0031 %		✓	
		028-008-00-X	235-008-5 [1] 234-348-1 [2]	12054-48-7 [1] 11113-74-9 [2]										
26		pH				9.4	pH		9.4	pH	9.4 pH			
				PH										
27		phenanthrene				2	mg/kg		1.709	mg/kg	0.000171 %		✓	
			201-581-5	85-01-8										
28		phenol				<1	mg/kg		<1	mg/kg	<0.0001 %		<LOD	
		604-001-00-2	203-632-7	108-95-2										
29		pyrene				2.8	mg/kg		2.393	mg/kg	0.000239 %		✓	
			204-927-3	129-00-0										
30		toluene				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD	
		601-021-00-3	203-625-9	108-88-3										
31		TPH (C6 to C40) petroleum group				388	mg/kg		331.624	mg/kg	0.0332 %		✓	
				TPH										
32		xylene				<10	mg/kg		<10	mg/kg	<0.001 %		<LOD	
		601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]										
33		zinc { zinc sulphate }				1100	mg/kg	2.469	2321.561	mg/kg	0.232 %		✓	
		030-006-00-9	231-793-3 [1] 231-793-3 [2]	7446-19-7 [1] 7733-02-0 [2]										
Total:											0.364 %			

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) on Flam. Liq. 1; H224, Flam. Liq. 2; H225, Flam. Liq. 3; H226: Force this Hazardous property to non hazardous because TPH composition and concentration under site conditions make hazard unlikely

Appendix A: Classifier defined and non CLP determinands

■ **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: 17/07/2015

Risk Phrases: N R51/53 , N R50/53 , R38 , R37 , R36

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

■ **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: 17/07/2015

Risk Phrases: R38 , R37 , R36 , R27 , R26 , R22

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

■ **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: 17/07/2015

Risk Phrases: N R50/53 , R43 , R38 , R37 , R36

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

■ **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: 23/07/2015

Risk Phrases: N R50/53

Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400

■ **boron tribromide/trichloride/trifluoride (combined)** (CAS Number: 10294-33-4, 10294-34-5, 7637-07-2)

Conversion factor: 13.43

Description/Comments: Combines the hazard statements and the average of the conversion factors for boron tribromide, boron trichloride and boron trifluoride

Data source: N/A

Data source date: 06/08/2015

Risk Phrases: C R35 , C R34 , T+ R26/28 , R14

Hazard Statements: Skin Corr. 1B H314 , Skin Corr. 1A H314 , Acute Tox. 2 H300 , Acute Tox. 2 H330 , EUH014

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

Conversion factor: 1.462

Description/Comments: Data from C&L Inventory Database

Data source: <http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database>

Data source date: 17/07/2015

Risk Phrases: R61 , R60 , R50/53 , R43 , R42 , R38 , R37 , R36 , R22 , R20

Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , Repr. 1B H360FD , Skin Sens. 1 H317 , Resp. Sens. 1 H334 , Skin Irrit. 2 H315 , STOT SE 3 H335 , Eye Irrit. 2 H319 , Acute Tox. 4 H302 , Acute Tox. 4 H332

■ **dicopper oxide; copper (I) oxide** (EC Number: 215-270-7, CAS Number: 1317-39-1)

CLP index number: 029-002-00-X

Description/Comments: M-factor for long-term aquatic hazard not included as per paragraph (5), ATP9

Data source: Regulation (EU) 2016/1179 of 19 July 2016 (ATP9)

Additional Risk Phrases: N R50/53 >= 0.25 % , N R50/53

Additional Hazard Statement(s): None.

Reason for additional Hazards Statement(s)/Risk Phrase(s):

10/10/2016 - N R50/53 >= 0.25 % risk phrase sourced from: WM3 v1 still uses ecotoxic risk phrases

10/10/2016 - N R50/53 risk phrase sourced from: WM3 v1 still uses ecotoxic risk phrases

▪ **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 Risk Phrases: None.

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

Reason for additional Hazards Statement(s)/Risk Phrase(s):

14/12/2015 - 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 Risk Phrases: None.

Additional Hazard Statement(s): Carc. 2 H351

Reason for additional Hazards Statement(s)/Risk Phrase(s):

03/06/2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2B (77) 2000

▪ **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: 21/08/2015

Risk Phrases: N R50/53 , Xn R22

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

▪ **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: 06/08/2015

Risk Phrases: N R50/53

Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400

▪ **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: 06/08/2015

Risk Phrases: R40

Hazard Statements: Carc. 2 H351

▪ **lead compounds with the exception of those specified elsewhere in this Annex**

CLP index number: 082-001-00-6

Description/Comments: Least-worst case: Lead REACH Consortium considers some lead compounds Carcinogenic category 2B

Data source: Regulation 1272/2008/EC - Classification, labelling and packaging of substances and mixtures. (CLP)

Additional Risk Phrases: None.

Additional Hazard Statement(s): Carc. 2 H351

Reason for additional Hazards Statement(s)/Risk Phrase(s):

03/06/2015 - Carc. 2 H351 hazard statement sourced from: IARC Group 2A (Sup 7, 87) 2006; Lead REACH Consortium www.reach-lead.eu/substanceinformation.html. Review date 29/09/2015

▪ **pH** (CAS Number: PH)

Description/Comments: Appendix C4

Data source: WM3 1st Edition 2015

Data source date: 25/05/2015

Risk Phrases: None.

Hazard Statements: None.

▪ **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: 06/08/2015

Risk Phrases: N R50/53 , R43 , R40 , R38 , R37 , R36 , R22

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

■ **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: 21/08/2015
Risk Phrases: N R50/53 , Xi R36/37/38
Hazard Statements: Aquatic Chronic 1 H410 , Aquatic Acute 1 H400 , STOT SE 3 H335 , Eye Irrit. 2 H319 , Skin Irrit. 2 H315

■ **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: 25/05/2015
Risk Phrases: R65 , R63 , R51/53 , R46 , R45 , R10
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

Appendix B: Rationale for selection of metal species

arsenic {arsenic trioxide}

Worst case species based on risk phrases

boron {boron tribromide/trichloride/trifluoride (combined)}

Worst case species based on risk phrases

cadmium {cadmium sulfide}

Worst case species based on risk phrases

chromium {chromium(III) oxide}

Worst case species based on risk phrases

copper {dicopper oxide; copper (I) oxide}

Most likely common species

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

Worst case species

lead {lead compounds with the exception of those specified elsewhere in this Annex}

Worst case species based on risk phrases

mercury {mercury dichloride}

Worst case species based on risk phrases

nickel {nickel dihydroxide}

Worst case species based on risk phrases

zinc {zinc sulphate}

Worst case species based on risk phrases

Appendix C: Version

HazWasteOnline Classification Engine: **WM3 1st Edition, May 2015**
HazWasteOnline Classification Engine Version: 2018.11.3477.7113 (11 Jan 2018)
HazWasteOnline Database: 2018.11.3477.7113 (11 Jan 2018)

This classification utilises the following guidance and legislation:

WM3 - Waste Classification - May 2015

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

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

RAMBOLL	Generic Assessment Criteria (GAC) for soils - to be protective of human health			REH UK - Soil GAC - v1a Feb 2017
		Commercial / Industrial	Theoretical Saturation Limit	
Pathway	Units			
C4SL Compounds				
Arsenic	mg/kg	640	NR	
Benzene	mg/kg	15	1100	
Benzo(a)pyrene	mg/kg	76	0.91	
Chromium VI	mg/kg	49	NR	
Lead	mg/kg	2300	NR	
Cadmium	mg/kg	410	NR	
Common compounds				
Metals				
Aluminium	mg/kg	370000	NR	
Antimony	mg/kg	7400	NR	
Arsenic	mg/kg	640	NR	
Barium	mg/kg	22000	NR	
Beryllium	mg/kg	12	NR	
Boron	mg/kg	240000	NR	
Cadmium	mg/kg	410	NR	
Chromium (III)	mg/kg	8600	NR	
Chromium VI	mg/kg	49	NR	
Copper	mg/kg	68000	NR	
Lead	mg/kg	2300	NR	
Mercury - Elemental	mg/kg	8.9	26	
Mercury - Inorganic	mg/kg	1100	NR	
Mercury - Methylmercury	mg/kg	290	300	
Molybdenum	mg/kg	18000	NR	
Nickel	mg/kg	980	NR	
Selenium	mg/kg	12000	NR	
Tributyl tin oxide	mg/kg	130	241	
Vanadium	mg/kg	9000	NR	
Zinc	mg/kg	730000	NR	
Miscellaneous				
Cyanide (free)	mg/kg	49 ^[1]	NR	
Phenol	mg/kg	380 ^[2]	20000	
BTEX, MTBE				
Benzene	mg/kg	15	1100	
Ethylbenzene	mg/kg	3200	510	
Toluene	mg/kg	33000	840	
Xylene-m	mg/kg	3400	610	
Xylene-o	mg/kg	3700	470	
Xylene-p	mg/kg	3300	560	
Methyl tert-butyl ether	mg/kg	3800	17000	
Total Petroleum Hydrocarbons (TPH)				
TPH Aliphatic C5-6	mg/kg	2400	370	
TPH Aliphatic C6-8	mg/kg	5300	160	
TPH Aliphatic C8-10	mg/kg	1300	79	
TPH Aliphatic C10-12	mg/kg	6100	48	
TPH Aliphatic C12-16	mg/kg	43000	24	
TPH Aliphatic C16-35	mg/kg	1000000	8.5	
TPH Aliphatic C35-44	mg/kg	1000000	8.5	
TPH Aromatic C8-10	mg/kg	2200	610	
TPH Aromatic C10-12	mg/kg	11000	360	
TPH Aromatic C12-16	mg/kg	35000	170	
TPH Aromatic C16-21	mg/kg	29000	54	
TPH Aromatic C21-35	mg/kg	29000	4.8	
TPH Aromatic C35-44	mg/kg	29000	4.8	
TPH Ali&Aro C44-70	mg/kg	28000	0.29	
Polyaromatic Hydrocarbons (PAHs)				
Acenaphthene	mg/kg	75000	57	
Acenaphthylene	mg/kg	76000	86	
Anthracene	mg/kg	520000	1.2	
Benzo(a)anthracene ^[1]	mg/kg	170	1.7	
Benzo(a)pyrene ^[3]	mg/kg	76	0.91	
Benzo(b)fluoranthene ^[3]	mg/kg	45	1.2	
Benzo(ghi)perylene ^[1]	mg/kg	3900	0.015	
Benzo(k)fluoranthene ^[3]	mg/kg	1200	0.69	
Chrysene ^[1]	mg/kg	350	0.44	
Dibenz(a,h)anthracene ^[3]	mg/kg	3.5	0.0039	
Fluoranthene	mg/kg	23000	19	
Fluorene	mg/kg	60000	31	
Indeno(1,23-cd)pyrene ^[1]	mg/kg	510	0.06	
Naphthalene	mg/kg	110	75	
Phenanthrene	mg/kg	22000	36	
Pyrene	mg/kg	54000	2.2	

Assumptions

C4SL exposure scenario adopted (DEFRA SP1010 2013 - C4SL documents)

Soil: Sand

Soil organic matter (SOM) 1%

Modelling package used: CLEA 2015 (Environment Agency, 2015)

Toxicity data sourced in accordance with Environment Agency defined heirarchy of data sources, based on minimal risk with the exception of the published C4SL compound: which are based on a low risk level.

Notes

^[1] Cyanide (free) capped for all scenarios at value calculated based on acute toxicity.

^[2] Phenols capped based on EA approach to limit phenol to 1% by weight in soil solution (Phenol SGV report)

^[3] Benzo(a)pyrene used as surrogate marker for PAHs in grey. Likely to be applicable to the majority of sites. Only use GAC in grey if bap marker approach not applicable.

Saturation limit - If GAC > theoretical saturation limit, there is a potential for free product on site. This must be assessed seperately through site observations etc

NR - not required.

GAC rounded to 2 significant figures in accordance with EA guidance.

Planning Guidance in Relation to Ground Contamination: Guidance Note for Applicants, Developers, Land Owners and Consultants

**Version 6.00
September 2016**

**Environmental Protection Group
Contaminated Land Section**

A flow chart showing a typical example of the contaminated land planning procedure can be found in Appendix A, together with a checklist in Appendix B outlining the information required in support of a planning application. It is strongly recommended these are consulted prior to submission of information, as reports which fail to consider the issues outlined in this document will be considered unsatisfactory.



**MANCHESTER
CITY COUNCIL**

www.manchester.gov.uk

OVERVIEW	3
1.0 WHAT IS CONTAMINATED LAND?	4
1.1 Definition under Part 2A of the Environmental Protection Act 1990	4
1.2 Planning definition	6
1.3 Types of contamination.....	7
2.0 ROLES AND RESPONSIBILITIES	8
2.1 Role of the Owner/Developer	8
2.2 Role of the LPA.....	8
2.3 Role of the Environmental Protection Team.....	9
2.4 Role of other organisations	9
3.0 THE PLANNING PROCEDURE.....	10
4.0 CRITERIA USED FOR ASSESSING THE SUBMITTED INFORMATION	11
4.1 Preliminary Risk Assessment (PRA).....	11
4.2 Phase 2 investigation.....	12
4.3 Remediation strategy	12
4.4 Verification report.....	12
5.0 GENERIC GUIDANCE	14
5.1 Obtaining representative samples	14
5.2 Sample analysis.....	14
5.3 Generic and detailed quantitative risk assessment (GQRA and DQRA).....	14
5.4 Assessment criteria for ground gas	15
5.5 Cover Systems	16
5.5.1 Depth of cover systems and capping layers	17
5.5.2 Depth of growing medium and planting.....	17
5.5.3 Sampling Ratios.....	18
5.5.4 On-site or Off-site Validation	18
5.5.5 Documentary Evidence	18
5.5.6 Obtaining Representative Samples.....	19
5.6 Human Remains and / or Burial Sites.....	19
5.7 Japanese Knotweed	19
5.8 Asbestos.....	20
6.0 REFERENCES.....	21
APPENDIX A - FLOWCHART SHOWING A TYPICAL EXAMPLE OF THE CONTAMINATED LAND PLANNING PROCEDURE	23
APPENDIX B – CHECKLIST OUTLINING THE INFORMATION REQUIRED IN SUPPORT OF A PLANNING APPLICATION	24
APPENDIX C – FREQUENTLY ASKED QUESTIONS.....	26
APPENDIX D – USEFUL CONTACTS	27

OVERVIEW

Many areas of the City have previously been occupied by a variety of industrial activities. Historically, the predominant industries included textile and dye works, heavy engineering works, chemical works, gas works and brickworks. In general, early industrialists had little or no knowledge of the environmental effects of their manufacturing processes or operating practices. Consequently, over a period of time a particular site may have been home to a variety of industries, each of which may have left substances in the ground that may be hazardous to human health and the environment. Additionally, more recent activities may also have had a detrimental impact on the environment. As the Government encourages more redevelopment on brownfield land, developers now have to take into account the possibility of land contamination. The purpose of this guide is to make applicants, developers and their advisors aware of the information that Manchester City Council (MCC) requires in assessing an application for planning consent on land that may be affected by the presence of contamination.

In order to assess submitted information, the Contaminated Land Section (CLS) would expect a developer to demonstrate that due consideration has been given to the guidance contained within this document.

For more detail on the underpinning principles on which this document is based, the reader is directed to CLR11 Model Procedures for the Management of Land Contamination¹ (CLR 11), which can be downloaded free of charge from the Environment Agency website (www.environment-agency.gov.uk) and National Planning Policy Framework (NPPF) which is also available free of charge, from the Office of the Deputy Prime Minister website, (www.odpm.gov.uk).

IMPORTANT

This Guidance Note is written to serve as an informative and helpful source of advice. Readers must note that legislation, guidance and practical methods may be subject to change. This Council has taken all reasonable precautions to ensure the information is correct. However, the Council, its officers, servants, or agents, will not accept any liability for loss or damage caused by any person relying on this information, or for any errors or omissions in the information provided.

1.0 WHAT IS CONTAMINATED LAND?

Local Authorities are responsible for addressing contaminated land issues within two separate regimes: the Contaminated Land Regime (commonly known as Part 2A) and the Planning Regime (Development Control).

1.1 Definition under Part 2A of the Environmental Protection Act 1990

The definition of contaminated land (from Section 78A(2) of the Environmental Protection Act 1990) is:

“ ...any land which appears to the local authority in whose area it is situated to be in such a condition, by reason of substances in, on or under the land, that:

(a) significant harm is being caused or there is the significant possibility of such harm being caused; or

(b) pollution of controlled waters is being, or is likely to be, caused...”

With respect to controlled waters, the Water Act 2003 (Chapter 37, Section 86) has amended the second limb of the definition so that it applies only where:

*“**significant** pollution of controlled waters is being caused, or there is a **significant possibility** of such pollution being caused ”*

Part 2A of the Environmental Protection Act 1990, as inserted by Section 57 of the Environment Act 1995, was brought into force on 01 April 2000. It requires all local authorities to identify contaminated land in its area and secure its remediation to a condition suitable for its current use.

To fall within the Part 2A definition, the land when assessed in the context of its current use must be capable of causing significant harm to human health or other specified receptors and/or pollution of controlled waters. Development of land will have to take into account Part 2A because a change in the use of the land may bring the development inside the statutory definition of contaminated land by creating a pollutant linkage.

A key element of the Part 2A regime is the **Source-Pathway-Receptor pollutant linkage** concept. Each element is defined as follows:

- the **source** is the contamination in, on or under the land
- the **pathway** is the route by which the contamination reaches the receptor;
- and, the **receptor** is defined as living organisms, ecological systems or property which may be harmed.

Without the clear identification of all three elements of the pollutant linkage, land cannot be identified as contaminated land under the regime (Table 1).

Table 1 Examples of Pathways and Effects from Land Contamination

HUMAN HEALTH
1) <i>Uptake of contaminants by food plants grown in contaminated soil</i> – heavy metals (e.g. cadmium, lead) and persistent organic pollutants including certain pesticides and veterinary products may result in an accumulation in food plants to concentrations where they exceed legal limits and/or may pose a hazard to human health. Uptake will depend on concentration in soil, its chemical form, soil pH, plant species and prominence in diet.
2) <i>Ingestion and inhalation</i> – substances may be ingested directly by young children playing on contaminated soil, by eating plants which have absorbed metals or are contaminated with soil or dust. Ingestion may also occur via contaminated water supplies. Metals, some organic materials and radioactive substances may be inhaled from dusts and soils.
3) <i>Skin contact</i> – soils containing tars, oils and corrosive substances may cause irritation to the skin through direct contact. Some substances (e.g. phenols) may be absorbed into the body through the skin or through cuts and abrasions.
4) <i>Irradiation</i> – As well as being inhaled and absorbed through the skin, radioactive materials emitting gamma rays can cause a radiation response at a distance from the material itself.
5) <i>Fire and explosion</i> – materials such as coal, coke particles, oil, tar, pitch, rubber, plastic and domestic waste are all combustible. If heated by contact with buried power cables or careless disposal of hot ashes they may ignite and burn underground. Both underground fires and biodegradation of organic materials may produce toxic or flammable gases. Methane and other gases may explode if allowed to accumulate in confined spaces.
BUILDINGS
1) <i>Fire and explosion</i> – underground fires may cause ground subsidence and cause structural damage to buildings. Accumulations of flammable gases in confined spaces leads to a risk of explosion. Underground fires may damage building services.
2) <i>Chemical attack on building materials and services</i> – sulphates may attack concrete structures. Acids, oils and tarry substances may accelerate corrosion of metals or attack plastics, rubber and other polymeric materials used in pipe work and service conduits or as jointing seals and protective coatings to concrete and metals.
3) <i>Physical</i> – blast-furnace and steel making slag (and some natural materials) may expand if ground conditions are changed by development. Degradation of fills may cause settlement and voids in buried tanks and drums may collapse as corrosion occurs or under loading from construction traffic.
NATURAL ENVIRONMENT
1) <i>Phytotoxicity (prevention/inhibition of plant growth)</i> – some metals essential for plant growth at low levels are phytotoxic at higher concentrations. Methane and other gases may give rise to phytotoxic effects by depleting the oxygen content in the root zone.
2) <i>Contamination of water resources</i> – soil has a limited capacity to absorb, degrade or attenuate the effects of pollutants. When this is exceeded, polluting substances may enter into surface and groundwater.
3) <i>Ecotoxicological effects</i> – contaminants in soil may affect microbial, animal and plant populations. Ecosystems or individual species on the site, in surface waters or areas affected by migration from the site may be affected.

1.2 Planning definition

The planning system uses a slightly different definition for contaminated land, which is not based solely on the legal definition set out in Part 2A. A wider range of contamination and receptors is relevant to planning but the degree of harm or pollution and the approach to remediation are essentially the same.

However, to avoid confusion with the term 'Contaminated Land' the planning regime uses the wider term "*land affected by contamination*". This is intended to cover all cases where:

"the actual or suspected presence of substances in, on or under the land may cause risks to people, human activities or the environment, regardless of whether or not the land meets the statutory definition in Part 2A .

The NPPF states that:

"As a minimum, the land should not be capable of being determined as contaminated land under Part 2A of the Environmental Protection Act 1990"

The principal difference is that under the planning system, risks have to be assessed based upon the new or intended use of the land, rather than the existing use.

However, the principles underlying both regimes are fundamentally the same, namely, the identification and remediation of land that may pose a risk to human health and/or the environment.

Typical causes of land contamination include previous industrial or commercial usage, mining, and the landfilling of wastes. Land can also become contaminated due to its proximity to contaminated areas.

Part 2A was designed and intended to encourage voluntary remediation and should only be used where no appropriate alternative solution exists. The Contaminated Land Strategy published by the Council provides details of the planning system to ensure land is made suitable for use when it is redeveloped and/or encouraging polluters and owners of land to deal with problems without the need for Part 2A to be used directly.

1.3 Types of contamination

Contaminating substances may include,

- Metals e.g. cadmium, arsenic, lead, iron, nickel, chromium
- Inorganic compounds e.g. cyanide, ammonium, chlorides
- Organic substances e.g. oils, petrol, solvents, phenols, PAHs, PCBs
- Gases e.g. methane, carbon dioxide, hydrogen sulphide, volatiles
- High or low pH

Contamination may not occur solely as a result of human activities and land can be contaminated as a result of its natural state. For example, in Greater Manchester, marsh gas can cause a contamination problem, particularly in areas previously occupied by moss land.

2.0 ROLES AND RESPONSIBILITIES

2.1 Role of the Owner/Developer

Where development is proposed, the developer is responsible for ensuring that development is safe and suitable for use for the purpose for which it is intended.

The developer is therefore responsible for determining whether land is suitable for a particular development, or can be made so by remedial action. In order to demonstrate this, the developer should determine:

- i whether the land in question is already affected by contamination through source – pathway – receptor pollutant linkages;
- ii whether the proposed development will create new linkages, e.g. new pathways by which existing contaminants might reach existing or proposed receptors; and
- iii what action is needed to break those linkages and avoid new ones, deal with any unacceptable risks and enable safe development and future occupancy of the site and neighbouring land.

A potential developer will need to satisfy the local authority that unacceptable risk from contamination will be successfully addressed through remediation without undue environmental impact during and following the development.

In doing so, a developer should be aware that actions or omissions on their part could lead to liability being incurred under Part 2A, e.g. where development fails to address an existing unacceptable risk or creates such a risk by introducing a new receptor or pathway.

Where an agreed remediation scheme includes future monitoring and maintenance schemes, arrangements will need to be made to ensure that any subsequent owner is fully aware of these requirements and assumes ongoing responsibilities that remain with the new landowner.

2.2 Role of the LPA

The LPA has a duty to take account of all material planning considerations including land contamination during the preparation of Local Plans and when considering an application for planning permission. Usually where there is reason to believe land may be contaminated, or the proposed development is of particular sensitivity e.g. housing a full assessment may be required in advance of planning approval being issued, a planning condition requiring assessment of possible contamination may be recommended by the LPA and applied to the decision notice.

When considering development on land affected by contamination, the principal objective of the LPA is to ensure that any unacceptable risks to human health, property and/or the wider environment are identified so that appropriate action can be considered and then taken to address those risks. In achieving this objective, the LPA should assist in providing the necessary confidence to owners and occupiers of

the land after development, regarding the condition and the ranking of the land in relation to relevant environmental protection regimes, such as Part 2A.

2.3 Role of the Environmental Protection Team

Neighbourhood Officers within the Environmental Protection team are responsible for addressing contaminated land issues using Part 2A and the planning system. The Environmental Protection Team and also the EA act as consultees to the LPA regarding risks to human health and controlled waters.

2.4 Role of other organisations

The EA are a consultee for any planning applications, where development is proposed on potentially contaminated land. Where the EA are consulted and land contamination is an issue they will seek to implement the objective of the water framework directive to prevent and limit the entry of pollutants into groundwater.

Within the LPA, Building Control will also need to be satisfied that any risks to the development from potential contamination have been adequately addressed. The Building Regulations 2000 require developers to demonstrate that hazards from potential contamination have been properly assessed and appropriate measures put in place to address any risk.

3.0 THE PLANNING PROCEDURE

The actual or possible presence of contamination is a material planning consideration. Planning advises that as a precautionary approach, the possibility of contamination should be assumed when considering planning applications in relation to all land subject to or adjacent to previous industrial use and also where uses are being considered that are particularly sensitive to contamination, e.g. housing, schools, hospitals and children's play areas.

Where development is proposed on land that is or may be affected by contamination, an assessment of risk should be carried out by the applicant for consideration by the Local Planning Authority (LPA) before the application is determined. Any existing or new unacceptable risks should be identified and proposals made to deal with them effectively as part of the development process.

When a planning application is made, the planning officer will consult with the Contaminated Land Section and the application (with supporting information) will be assessed to determine whether there is the potential for contamination to influence the site, whether suitable measures have been proposed to address any risks and whether the proposed development is acceptable.

Other statutory bodies and relevant local authority departments may also be consulted as necessary, including English Nature, Natural England and the departments for building control, conservation and archaeology, and engineering.

If there is the potential for contamination to affect the site, or the end-use is particularly sensitive, recommendations will be made that certain conditions be imposed upon the development. These are intended to ensure that the site is made suitable for its proposed end use and ensure the safety of site workers, future site users and the protection of the environment.

It is essential that the developer and their agents provide as much information to the LPA at every stage of the planning process. Withholding information, however trivial, may cause a delay to the application. The onus is on the applicant to keep the LPA well informed about the development at all times so that decisions can be made swiftly and the application process completed as quickly as possible.

For large developments on sites where serious contamination is known, or is likely to be present, it is strongly recommended that a pre-application consultation with the LPA be undertaken. It may save both time and money if a thorough pre-application consultation takes place prior to submission of a full planning application.

A flowchart showing a typical example of the contaminated land planning procedure can be found in Appendix A.

4.0 CRITERIA USED FOR ASSESSING THE SUBMITTED INFORMATION

Information submitted in support of planning applications must be of an acceptable minimum standard in order to satisfy the LPA. The guidance contained within this section aims to inform developers of the procedural requirements of a risk-based approach to land contamination, as defined in current UK legislation and guidance.

A detailed technical framework for investigating and dealing with land affected by contamination is contained within CLR 11. The process involves identifying, making decisions on, and taking appropriate action to deal with, land contamination in a way that is consistent with government policies and legislation within the UK.

The approach outlined in this Manchester City Council Guidance Note is consistent with the CLR 11 technical framework and is based on a staged or tiered approach to risk assessment, which includes the following three key elements:

- Risk Screening
- Generic Quantitative Risk Assessment (GQRA)
- Detailed Quantitative Risk Assessment (DQRA)

Risk screening generally involves developing a conceptual model (Section 4.1), which identifies whether there could be any potentially unacceptable risks at the site. The conceptual model may then be used to determine if any further assessment is required. If this preliminary assessment clearly demonstrates that contamination at the site poses no unacceptable risks (i.e. no source-pathway-receptor relationships) then quantitative assessments may not be required.

The procedure for investigating a potentially contaminated site would be expected to meet the criteria outlined in British Standard (BS) 10175 (2011) Investigation of Potentially Contaminated Sites – Code of Practice³. Typical components of a report submitted in support of a planning application would generally include the following four components:

- Preliminary Risk Assessment (PRA) (often referred to as a Phase 1 Investigation or Desk Study)
- Phase 2 Investigation (intrusive investigation)
- Remediation Strategy
- Verification Report

A more detailed checklist of LPA requirements in relation to each of these components can be found in Appendix B.

4.1 Preliminary Risk Assessment (PRA)

A PRA (sometimes referred to as a Phase 1 investigation) should provide a preliminary qualitative assessment of risk by interpreting information on a site's history, considering the likelihood of contamination being present and making an initial hazard assessment. The PRA typically consists of a **desk study**, **site reconnaissance**, development of a **conceptual model** and a basic **hazard assessment**.

The **desk study** comprises a search of available information and historical maps, which can be used to identify the likelihood of contamination being present. The two main indicators for the likely presence of contamination at a site are past industrial uses and/or close proximity to a landfill. A detailed appraisal of documentary research can be found in CLR 3 Documentary Research on Industrial Sites⁴. For details of information required for a typical desk study see Appendix B.

A simple **site reconnaissance** survey of the site is conducted to identify if there are any obvious signs of contamination at the surface. Further information regarding site inspection can be found in CLR 2 Guidance on Preliminary Site Inspection of Contaminated Land⁵.

A **conceptual model** is a representation (text and/or graphics) of the relationship(s) between contamination source(s), pathway(s) and receptor(s) developed on the basis of hazard identification. Developing a conceptual model should be viewed as an iterative process that should be refined during subsequent phases of assessment. For details of information required for a conceptual model see Appendix B.

Using the information gathered, the conceptual model of the site is constructed and a basic **hazard assessment** is carried out.

4.2 Phase 2 investigation

A Phase II investigation aims to reduce the uncertainties identified in the initial conceptual model by quantifying potential contamination at the site. The data obtained will be used to inform a decision as to whether the site is potentially harmful. A Phase II report generally consists of an intrusive site investigation and a subsequent risk assessment. The investigation process should seek to clearly identify and characterise plausible source-pathway-receptor linkages at the site and provide information for the refinement of the initial conceptual model.

4.3 Remediation strategy

This is a document detailing what action is to be carried out so that contamination no longer presents a risk to site users, property or ecological systems. It may include measures such as the removal of contamination, encapsulation of the contaminants, treatment of the contaminants or measures to break the pollution linkages. Please note that Government policy encourages sustainable methods of remediation.

A remediation strategy should be submitted where a site investigation identifies levels of contamination that will require remediation prior to the site being suitable for its intended use. This statement should include full details of how the contamination problem at the site will be addressed and demonstrate that the standard of remediation work complies with current best practice and guidance. This must be approved by the LPA before any remedial actions at the site commence.

4.4 Verification report

Where contamination has been found and/or remediated, the developer will be required to submit a verification report. In certain circumstances it may be necessary for the developer to conduct post-completion monitoring. This should be undertaken

to the approval of the LPA and results of the monitoring should be submitted for review. For limited remediation works or protective works a verification statement alone may be acceptable, but prior confirmation of this should be obtained from the LPA.

The verification report should provide confirmation that all measures outlined in the approved remediation statement have been successfully completed, including where appropriate, validation testing.

Recommendations to discharge contaminated land conditions will only be made once the Contaminated Land Section has received and approved a satisfactory verification report.

5.0 GENERIC GUIDANCE

The complexity of contaminated land technical guidance, coupled with individual site variability, makes it difficult to produce comprehensive guidance applicable to every situation.

However, when assessing the adequacy of a site investigation, a number of common problems frequently arise. These generally relate to areas where technical guidance may be complex or incomplete. In an attempt to minimise the occurrence of these problems, the CLS apply consistent criteria for certain technical aspects of a site investigation. This section is intended to highlight recurring problem areas and key points that are of particular importance.

5.1 Obtaining representative samples

All sampling strategies should be designed to provide data that is representative of the site conditions as a whole. Sampling should be undertaken in accordance with recognised sample collection methodology and guidance, with reference made to recommendations within BS 10175. Reference to the historical site information obtained from the desk study is essential in order to target possible sources of contamination and to ensure that an appropriate suite of analysis is performed. Justification for the chosen sampling regime and analysis suite should be clearly set out in the site investigation report.

5.2 Sample analysis

A suitably accredited laboratory should be used to undertake analysis of samples. The site investigation should include a detailed plan showing the location of sampling points and accreditation details of the laboratory used, together with summary tables of results. A full set of results should be included in the report submitted and an electronic (pdf) form from the laboratory that undertook the analysis should also be submitted.

5.3 Generic and detailed quantitative risk assessment (GQRA and DQRA)

The Department for Environment, Food and Rural Affairs (Defra) formally withdrew the 1987 ICRCL trigger and action values in December 2002, following the implementation of the Contaminated Land Exposure Assessment Model (CLEA) and associated publication of the Soil Guideline Values (SGVs).

In 2008, the CLEA UK model and the SGVs were withdrawn by Defra and a revised CLEA model known as CLEA 1.04 was launched. MCC would expect all future site investigations to make no reference to the withdrawn standards.

Generic and detailed QRA should now be carried out using assessment criteria derived using the new CLEA model (1.06). Where site-specific target levels are used they should be calculated based on suitable and reasonable assumptions as well as current best practice and associated briefing notes and guidance. Reference should also be made to statistical analysis of the resulting data from the intrusive

investigation.

More recently the following criteria have been released Category 4 Screening Levels (C4SLs) (replaced SGVs) and Suitable 4 Use Values (S4ULs) (replaced LQM/CIEH GACs). Where these values exist they should be used instead of the SGVs and LQM/CIEH GACs

The CLR7 report '*Assessment of Risks to Human Health from Land Contamination: An Overview of the Development of Soil Guideline Values and Related Research*' was withdrawn in 2008. Consultants when assessing site investigation data should adopt a suitable statistical approach. The CIEH and CL:AIRE set out in the document '*Guidance on Comparing Soil Contamination Data with a Critical Concentration*'⁶ an approach that is a useful starting point for statistically assessing data.

It is usually inappropriate to apply quantitative criteria developed outside the UK, to UK sites, as assumptions underlying the models used to derive these criteria often reflect different behaviour patterns, local soil types or other technical factors.

Where other contaminated land quantitative criteria are used e.g. Dutch or USEPA, the reasoning behind not using current UK guidance should be given and their use must be fully justified and referenced within the report. This would be expected to include a discussion of the conceptual model and assumptions used to derive the generic criteria together with an assessment of the underpinning toxicological data.

5.4 Assessment criteria for ground gas

If the development is situated within 250m of a landfill site, or is suspected of having the potential to generate ground gas, it will be necessary to assess the potential risk and, if required, to incorporate appropriate gas protection measures into the development design.

Guidance for assessment of the risks associated with the presence of methane and carbon dioxide within ground gas can be found in;

- Assessing Risks Posed by Hazardous Gas Ground Gases to Buildings (CIRIA C665)⁷
- BRE Report 414 publication Protective Measures for Housing on Gas Contaminated Land⁸
- Guidance on Evaluation of Development Proposals on Sites where Methane and Carbon Dioxide are present⁹
- Code of Practice for the characterisation and remediation of ground gas in affected developments¹⁰
- Local Authority Guide to Ground Gas¹¹, and
- Development on Land Potentially Affected by Hazardous Ground Gas¹².

The guidance in CIRIA C665 sets out a phased, risk-based approach to ground gas assessment. An assessment should comprise:

- A desk study and development of conceptual site model.
- A site investigation and risk assessment.
- A remediation strategy, if required.
- A validation report to confirm that the remedial measures have been

successfully implemented.

Where the desk study identifies a potential ground gas risk, gas monitoring is required. Measurements should be taken from suitably installed and equipped monitoring boreholes and the details and locations of the boreholes should be supplied. The spacing and number of the monitoring wells required at a site depends on the generating potential of the gas source (identified during the desk study and first phase site investigation) and the sensitivity of the end-use (housing being the most sensitive). The response zone of a borehole should be designed to intersect the suspected sources of gas. Spike testing and data obtained from trial pit installations are not acceptable for gas risk assessment.

The number of monitoring visits required, and the length of time monitoring should be carried out over, depends on the generating potential of the gas source and sensitivity of the end-use. For example, a site which is to be developed for residential properties with gardens, which is situated over a very low gas generating source (i.e. made ground greater than 1 metre thick) may require a minimum of 6 visits over 3 months, while residential with housing over a very high gas generating source (i.e. a modern landfill) may require 24 visits over 24 months. In order to obtain any worthwhile data to use in a risk assessment, at least two readings over the monitoring period should cover the 'worst case' scenario i.e. low and falling atmospheric pressure (below 1000 millibars) and different weather conditions such as rainfall, frost and dry.

Monitoring should be undertaken in accordance with the CIRIA C665 guidance; where deeper made ground (greater than 1 metre deep), organic material or hydrocarbon spills are unexpectedly encountered, additional monitoring should be considered.

Once sufficient gas monitoring data has been obtained, a ground gas risk assessment should be carried out to determine if gas protection measures are required. CIRIA C665 sets out two risk assessment methodologies:

- Modified Wilson and Card methodology (for use on all development types except low rise houses with gardens). The gas regime characteristic situation determines the number and type of protection measures required.
- NHBC Traffic Light System, proposed by Boyle and Witherington (for use on developments with conventional low-rise housing with gardens with block and beam floor and ventilated underfloor void only). Gas results are initially compared to Typical Maximum Concentrations and then to Gas Screening Values if the Typical Maximum Concentrations are exceeded. The worst-case protection measures are adopted.

It should also be noted that when submitting ground gas monitoring data a current calibration certificate for all machines used for the gas monitoring should also be submitted.

5.5 Cover Systems

The main function of an **engineered cover system** should be to provide a safe and permanent barrier between any 'significant' levels of buried contamination and residents/site users.

It is not uncommon for developers to include a **simple cover system** into garden and landscaped areas. This is done in order to provide a reduction in the hazard to human health in situations where ‘marginally’ elevated levels of contaminants have been encountered, as well as to provide a suitable medium for plant growth.

There is currently no definitive guidance available that is able to adequately address the design of either of these cover systems. Therefore the CLS considers that where cover systems are used there should be no distinction between ‘marginal’ and ‘significant’ levels of contamination.

5.5.1 Depth of cover systems and capping layers

Where used as a capping layer of cover system, fill materials should be installed at prescribed depths according to their soil type and the role they play within the cover system. As cover systems are almost always site-specific, the various depth of fill can vary greatly depending on how complex or engineered the cover system is to be, but there are a few minimum standards to be observed, which are described below.

Typical cover system design requires a capillary break layer at its base, which is then overlain by various depths/types of fill material. These individual layers working in unison form the cover system or capping layer.

The minimum acceptable total depth for fill materials (including the break layer) within private garden areas should be 600 mm. This figure is recommended and has been adopted for the following reasons:

1. Root systems for shrubs are typically up to 600 mm;
2. Excavations are unlikely to be deeper than 600 mm in typical gardening activities;
3. Bio-turbation (soil-mixing by biological organisms) is typically limited to the top 600 mm of the soil profile;
4. Excavations by children or pets are unlikely to exceed 600 mm.

The minimum acceptable total depth for fill materials (including the break layer) within areas of soft-landscaping, common areas or public open spaces is 450 mm. This relaxation of cover depth is designed to reflect the reduced risk afforded by diminished exposure of human health receptors to potentially contaminated soils within these public areas via direct contact (dermal, ingestion, inhalation).

5.5.2 Depth of growing medium and planting

In certain circumstances, where it can be demonstrated that future activities will not result in soil mixing, it may be acceptable to use a shallower depth of cover material. A robust case would need to first be presented for prior approval from the LPA. An additional consideration when planting landscaped areas is that BS 3882¹³ recommends the rooting depths in Table 2.

Table 2 Idealised total growth medium rooting depths for various vegetation types

Total Minimum Rooting Depth	Vegetation Type			
	GRASS	PLANTS	SHRUBS	TREES
	450mm	450mm	600mm	900mm

5.5.3 Sampling Ratios

When a cover system is used, a desk study should be provided with details of the source of the cover material. It should be demonstrated that the soil is free from contamination by supplying results of analytical tests. Justification for the analytical suite used should be included. Sampling densities should be justified and based on the findings of a desk study. It would be expected as an absolute minimum sampling would consist of at least three samples for each source used. One sample for every 200m³ from proven 'greenfield' sources and one sample every 50m³ from 'unknown', 'mixed' or 'brownfield' sources. MCC would also expect to see on site sampling and not just sampling at source to confirm that the soil delivered to the site is suitable for use. Table 3 summarises the recommended sampling frequencies depending on the soil source and end use.

Table 3 Sampling frequencies recommended by the Environmental Protection Team for imported or site-won fill materials

Intended End-Use	SOURCE/ORIGIN OF FILL MATERIAL			
	GREENFIELD	REMEDIATED	BROWNFIELD	UNKNOWN
GARDENS	1:200m ³	1:100m ³	1:50m ³	1:50m ³
SOFT-LANDSCAPING	1:200m ³	1:150m ³	1:150m ³	1:150m ³
OTHER	1:200m ³	1:200m ³	1:200m ³	1:200m ³

5.5.4 On-site of Off-site Validation

Fill material imported onto site should be stored in a designated area, which is clearly identified on an appropriate scale plan. Stockpile management protocols consistent with best practice apply.

The Environmental Protection Team does not routinely accept off-site validation of fill material (whether this is top-soil, sub-soil or other substrate), as this often results in chemical testing of different material to that actually imported to site. It is therefore difficult to prove the exact chemical nature of the material eventually imported, as off-site validation tends to involve composite samples taken from a 'typical batch' of the material intended for import. As such, validation testing of imported fill materials should be carried out in-situ, after materials have been imported to site.

5.5.5 Documentary Evidence

- **Chemical analysis:** All raw laboratory data should be submitted with the analytical test certificate;

- **Statistical analysis of datasets:** Calculations in line with CIEH/CL:AIRE guidance should be provided;
- **Photographic evidence:** Photographs of installed remedial measures (of any type) are required. Photographic evidence should be representative and where necessary, include a scale/ruler. This is of particular importance when photographing cover depths to verify the agreed depth of cover has been installed;
- **Plans:** Showing pertinent information relating to remediation, such as stockpile locations, areas subject to remedial measures or areas of further investigation;
- **Import/export data:** Pertinent data relating to fill materials/wastes, including volumetric data (i.e. how much was imported to site), source data (i.e. where the material came from) and waste transfer data (where applicable).

5.5.6 Obtaining Representative Samples

All sampling strategies should be designed to provide data that is representative of the site conditions as a whole. Sampling should be undertaken in accordance with recognised sample collection methodology and guidance, with reference made to recommendations within the British Standard BS10175 guidance document. It is essential to derive a CSM using the information obtained from the PRA to target possible sources of contamination and also to ensure that an appropriate suite of analysis is performed. Justification for the chosen sampling regime and analysis suite should be clearly set out in the site investigation report.

A suitably accredited laboratory should be used to undertake analysis of samples. The site investigation should include a detailed plan showing the location of sampling points and accreditation details of the laboratory used, together with summary tables of results. A full set of results, including exploratory hole logs, should be submitted.

5.6 Human Remains and / or Burial Sites

If you have been made aware through means such as historical records that the site is on or adjacent to an existing or former burial ground that may contain human remains, you must contact Environmental Health at the earliest opportunity.

If at any time during site investigation works, ground-works or excavating on a site within the boundary of Manchester City Council you discover human remains, suspected human remains or bones of an unknown type you must stop all works, secure the area and contact the Police and Environmental Health for advice. Environmental Health can be contacted through the City Councils contact centre on 0161 234 5004.

5.7 Japanese Knotweed

Japanese knotweed is a very invasive species of plant which is not native to the British Isles. Since it was introduced into the UK as an ornamental garden plant in the mid-nineteenth century it has spread across the UK, particularly along watercourses, transport routes and waste areas. Japanese knotweed is not just a problem for our

native wildlife; the vigorous growth can also damage buildings and hard surfaces. Once established underneath or around the built environment, it can be particularly hard to control.

Neither the Environment Agency or the Local Authority are responsible for controlling Japanese Knotweed, other than that growing on their own land. Managing knotweed is the responsibility of the owner/occupier of a site.

Link to Environment Agency **Japanese Knotweed** Guidance:

<http://www.environment-agency.gov.uk/homeandleisure/wildlife/31364.aspx>

Link to Environment Agency **Invasive Species** Guidance:

<http://www.environment-agency.gov.uk/homeandleisure/wildlife/31350.aspx>

Contact Details for the **Environment Agency**

Telephone: 08708 506 506 (Mon-Fri, 8am - 6pm)

E-mail: enquiries@environment-agency.gov.uk

Postal Address: National Customer Contact Centre, PO Box 544 Rotherham S60 1B

5.8 Asbestos

With regard to the MCC CLS there are three issues related to asbestos that we may be contacted in relation to and they are;

1. Dealing with asbestos as part of a contaminated land condition or in relation to the planning process,
2. Concerned members of the public thinking about asbestos in their homes, in/on neighbours property or on current developments close by, and;
3. Members of the public working and being exposed to asbestos in their workplace.

Asbestos and Contaminated Land

If the presence of asbestos within made ground is suspected or within a building due for demolition then contact the Environmental Protection Team on Tel: 0161 234 5004

Asbestos, Neighbours and Current Developments

If the issue is with members of the public having concerns with their house, neighbours or building sites dealing with asbestos sheeting or similar, then please see our guidance document:

<http://www.manchester.gov.uk/downloads/download/4234/asbestos>

Asbestos at Work

If the issue is work related then please review the Health and Safety Executive website at the following link for information and contact details:

<http://www.hse.gov.uk/asbestos/>

6.0 REFERENCES

1. Department of Environment, Food & Rural Affairs/Environment Agency, 2004, CLR Report No 11, **Model Procedures for the Management of Land Contamination.**
2. Department of the Environment, 2004, PPS23, **Planning & Pollution Control.**
3. British Standards Institute, 2011, BS10175, **Investigation of Potentially Contaminated Sites – Code of Practice.**
4. Department of the Environment, 1994, CLR Report No 3, **Documentary Research on Industrial Sites.**
5. Department of the Environment, 1994, CLR Report No 2, **Guidance on Preliminary Site Inspection of Contaminated Land.**
6. Chartered Institute of Environmental Health (CIEH) / Contaminated Land: Applications in Real Environments (CL:AIRE), 2008, **Guidance on Comparing Soil Contamination Data with a Critical Concentration.**
7. CIRIA, C665, 2007, **Assessing risks posed by hazardous ground gases to buildings.**
8. Building Research Establishment 414 (2001) **Protective Measures for Housing on Gas Contaminated Land.**
9. National House Building Council (NHBC), Report Edition No. 4 (March 2007) **Guidance on Evaluation of Development Proposals on Sites where Methane and Carbon Dioxide are present.**
10. British Standards Institute BS 8485 (2007) **Code of practice for the characterisation and remediation of ground gas in affected development,** Draft for Public Comment.
11. Chartered Institute of Environmental Health (2008) **Local Authority Guide to Ground Gas.**
12. Greater Manchester Public Protection Partnership (GMPPP) Briefing Note BN01/2008 (2008) **Development on Land Potentially Affected by Hazardous Ground Gas.**
13. British Standards Institute BS 3882 (2007) **Specification for Topsoil and requirements for use.**

Additional Reference Material

- Chartered Institute of Environmental Health, 2001, **Local Authority Guide to the Application of Part 2A of the Environmental Protection Act 1990.**
- Department of the Environment, 1994, CLR Report No 1, **A Framework for Assessing the Impact of Contaminated Land on Groundwater and Surface Water.**
- Department of Environment, Transport and Regions, Circular 02/2000 **Contaminated Land: Implementation of the Part 2A of the Environmental Protection Act 1990.**

- Department of the Environment, 1994, CLR Report No 4, **Sampling Strategies for Contaminated Land**.
- Department of Environment, Transport and Regions, 1997, CLR Report No 12, **A Quality Approach for Contaminated Land Consultancy** [section 3.4 'Reporting'].
- Department of Environment, Transport and Regions, 2000, **Guidelines for Environmental Risk Assessment & Management**, Revised Departmental Guidance.
- Environment Agency, 1999, R&D Publication 20, **Methodology for the Derivation of Remedial Targets for Soil and Groundwater to Protect Water Resources**.
- Environment Agency, March 2010, GPLC1 – **Guiding Principles for Land Contamination**.
- Environment Agency, March 2010, GPLC2 – **FAQs, Technical Information, Detailed**.

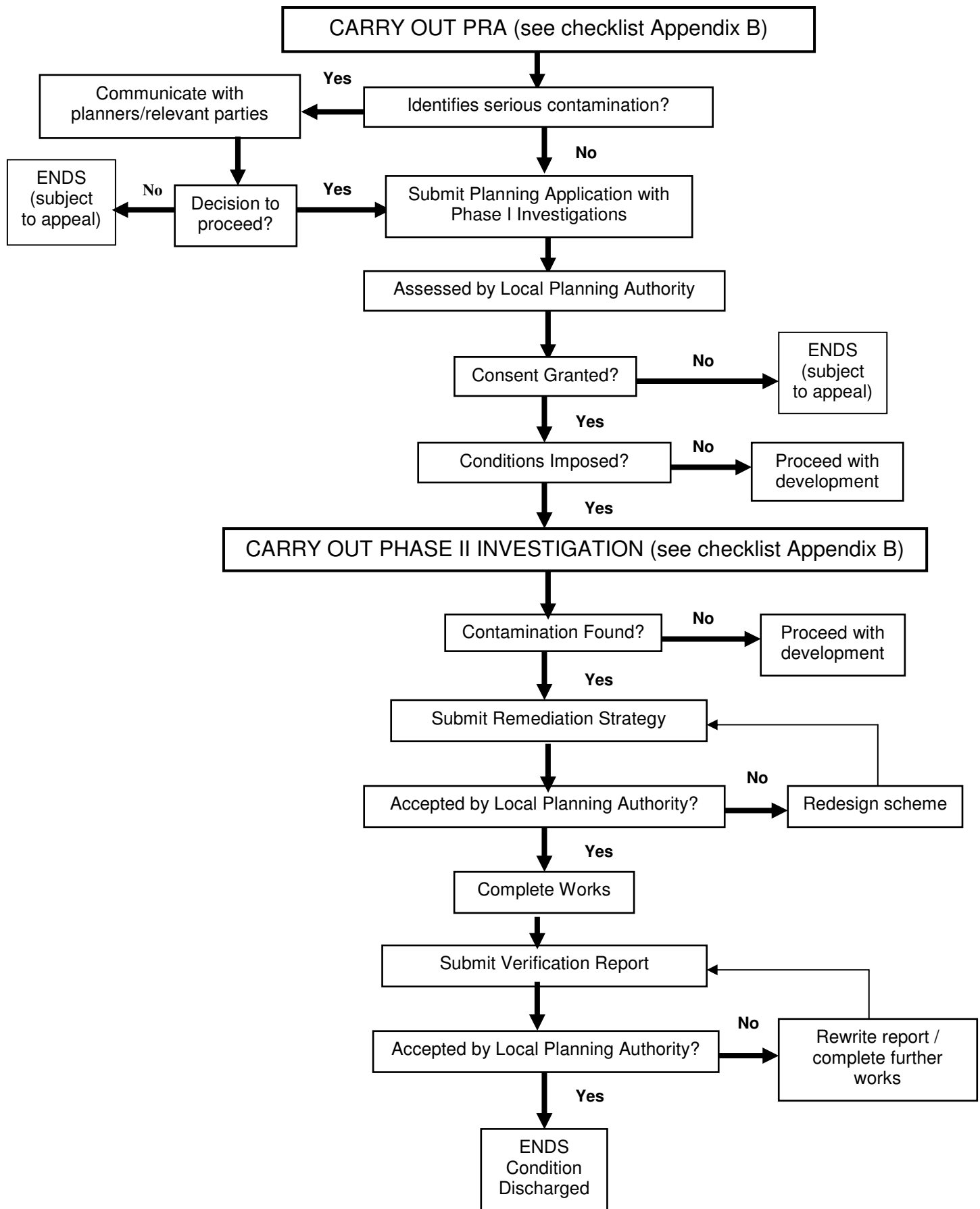
Advice and References

- Environment Agency, March 2010, GPLC3 – **Reporting Checklists**
- Environment Agency, February 2010, SC030114, **Evidence, Verification of Remediation of Land Contamination**
- Harris, M R, Herbert, S M & Smith, M A, 1995-1998, CIRIA Special Publications 101-112, **Remedial Treatment for Contaminated Land, 12 Volumes**
- Health & Safety Executive, 1991, **Protection of Workers & the General Public during the Development of Contaminated Land**
- National House Building Council (NHBC), 1999, NHBC Standards Chapter 4.1, **Land Quality – Managing Ground Conditions**
- The LQM/CIEH **Generic Assessment Criteria for Human Health Risk Assessment**, 2nd Edition, Land Quality Press, 2009.

Acknowledgements

MCC would like to acknowledge the work of the MAPAC planning guidance sub-group.

APPENDIX A - FLOWCHART SHOWING A TYPICAL EXAMPLE OF THE CONTAMINATED LAND PLANNING PROCEDURE



APPENDIX B – CHECKLIST OUTLINING THE INFORMATION REQUIRED IN SUPPORT OF A PLANNING APPLICATION

PRELIMINARY RISK ASSESSMENT
Desk Study • A site description. • A detailed site plan showing the site location, extent and boundary. • A review of historical information including copies of historical maps where available. • Background information on past and present uses of the site and its surrounding area. • Background information on the nature of any hazards and potential sources identified. • An appraisal of the site's environmental setting including: - Geology, hydrology and hydrogeology. - Information on coal workings and other extractive industries. - Waste management issues and landfill sites. - Water abstractions and discharges, pollution incidents, IPPC Part A and B, and radon. - Drainage and services. • A review of previous desk studies or site investigations. • Risk screening by means of an initial conceptual model, which should generally include the following. - Source characterisation. - Migration pathway descriptions. - Environmental receptor identification and discussion. - Identification of potential pollution linkages. - Description of the limitations and uncertainties inherent in the conceptual model. • Recommendations and conclusions.
PHASE II INVESTIGATION

Site Investigation

Site Investigation Methodology including:

- A clear investigation scheme, based on findings of desk study.
- Methods of investigation with justification of the methodology and investigation techniques used.
- Justification of exploration locations and a plan showing their position.
- Sampling and analytical strategy.
- Coverage of investigations (statistical significance - targeted and non-targeted)
- Environmental monitoring including water sampling and gas monitoring/sampling.

Results and findings of investigation including:

- Ground, groundwater and gas conditions encountered.
- Presentation of laboratory analysis, sampling and monitoring results.
- Discussion of any ground contamination (soil/gas/water) encountered.

Refine conceptual model.

Qualitative and quantitative risk assessments (clearly identifying pollutant linkages).

Recommendations for remediation.

Recommendations for further investigation (if required).

REMEDIATION STRATEGY

- Clear remediation strategy.
- Detailed outline of works to be carried out.
 - Description of ground conditions.
 - Type, form and scale of contamination to be remediated.
- Consents, agreements and licenses (waste management issues).
- Implementation and validation of remediation.
 - Use of on-site observations and visual evidence.
 - Chemical analysis/monitoring data.
 - Proposed clean up standard.
 - Construction Quality Assurance.

VERIFICATION REPORT

- Details of works carried out and contamination encountered during investigation.
- Details and justification of any changes from the original remediation strategy.
- Demonstration of compliance and description of validation methods.
 - Laboratory and *in-situ* results.
 - Monitoring results for groundwater and gases.
 - Summary data plots and tables relating to clean up criteria.
 - Plans showing treatment areas and details of any differences from the original remediation strategy.
 - Photographic and other media records.
 - Waste management details and records.

- Ongoing environmental monitoring or works to be carried out.
- Confirmation that remediation objectives have been met.

APPENDIX C – FREQUENTLY ASKED QUESTIONS

How much of the work can I do without employing a consultant?

Simply determining whether land contamination is likely to be an issue is relatively straight-forward. Researching the history and uses of a site at the local studies unit of a library, and making enquiries of the Council and other agencies, can be carried out by competent developers.

Can the Council advise on employing a consultant or contractor?

The Council cannot recommend any consultant or contractor. Lists can be found in telephone and trade directories. There are websites that may help to identify consultants and contractors with suitable experience. Advice may be given as to the type of expertise a consultant or contractor might be expected to demonstrate.

Who should I address correspondence to within the Council?

Once a contaminated land condition has been placed on an application all correspondence relating to the subsequent assessment process should be directed to the Contaminated Land Section.

Contaminated Land Section
Environmental Services
Manchester City Council
Hammerstone Road
Gorton
Manchester
M18 8EQ

Telephone 0161 234 1363

A contaminated land officer assigned to the development whilst it is being built will then deal with the application and keep the appropriate planning officer informed of the progress of the application.

When should I contact the Environment Agency?

Although local authorities are the primary regulators of Part 2A, the Environment Agency assume the role when contamination is found to impact on controlled waters. Therefore, if a development is likely to impact on either surface waters or groundwater the advice of the Agency should be sought.

APPENDIX D – USEFUL CONTACTS

British Standards Institute (BSI)
389 Chiswick High Road
London
W4 4AL
Tel: 020 8996 9001
Fax: 020 8996 7001
www.bsi-global.com

Construction Industry Research & Information Group (CIRIA)
6 Storey's Gate
Westminster
London
SW1 P 3AU
Tel: 020 722 8891
Fax: 020 7222 1708
www.ciria.org.uk

Department of Environment, Food and Rural Affairs (DEFRA)
3/B4 Ashdown House
123 Victoria Street, London
SW1 6DE
Tel: 020 7944 5287
Fax: 020 7944 5279
www.defra.gov.uk

Environment Agency (EA)
Contaminated Land Section

Appleton House,
430 Birchwood Boulevard,
Warrington, Cheshire,
WA3 7WD
Tel: 08708 506506
www.environment-agency.gov.uk

Land Condition Specialists
www.silc.org.uk

Manchester Area Pollution Advisory Committee
www.mapac.org.uk

The National House Building Council
Buildmark House, Chiltern Avenue
Amersham, Bucks
HP6 5AP
Tel: 01494 735363
www.nhbc.org.uk

WRc Plc
Frankland Road, Blagrove
Swindon, Wiltshire
SN5 8YF
Tel: 01793 865000
Fax: 01793 865001
www.wrcplc.co.uk