Land Science

THE STUDIO, NEP TOWN ROAD, HENFIELD, BN5 9DY

PHASE II CONTAMINATION ASSESSMENT

SUSIE WARNER

28TH OCTOBER 2025

LS8889

Site:	**THE STUDIO, NEP TOWN ROAD, HENFIELD, BN5 9DY**
Title:	**PHASE II CONTAMINATION ASSESSMENT**
Project:	**CONVERSION OF HISTORIC CHAPEL/CARPENTRY BUSINESS INTO A ONE BEDROOM RESIDENTIAL UNIT WITH GARDEN**
Client:	**SUSIE WARNER**
Date:	**28TH OCTOBER 2025**
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1.0 EXECUTIVE SUMMARY

This summary is a brief precis of the main findings and conclusions of the investigation. For detailed information, the reader is referred to the main report.

The existing site is an historic chapel and more recently a carpentry business within a two-storey structure. The proposed redevelopment is a conversion into a one-bedroom residential unit with garden. The intrusive investigation included two window sampler boreholes, a trial pit and two foundation exposures.

Strata	Base Depth range	Summary
Hardstanding	0.07m	Concrete (WS02 only)
Made Ground	0.25-0.40m	Brown to orange-brown / dark brown silty gravelly Sand with brick, concrete, ash, charcoal, clinker, ceramic tile, slate, hardcore, flint, chalk and glass. TP01 also included 0.05m of pea shingle over geotextile.
Reworked Ground	0.50-0.90m	Yellow-orange to brown / orange-brown gravelly silty Sand with brick, ash, charcoal, metal, flint sandstone and ironstone.
Folkestone Formation	1.00-4.00m+	Yellow-orange/brown to brown Sand. WS02 was terminated on sandstone and ironstone at 1.50mbgl.

Groundwater was not encountered within 4.00m depth during the site works. However, during the second monitoring visit ground water was recorded at 3.85mbgl in WS01.

Buried structural concrete may be designed to DS-1 and AC-1 in accordance with BS8500. Water supply pipe work will require protection from aggressive soil contaminants.

Radon Protection Measures (RPM) are required for new dwellings and extensions at this location.

Soil testing has identified elevated levels of contamination. Requirements for remediation have been identified in section 11.

Chemical results on Made Ground corresponded to inert and hazardous waste classification, whilst Reworked Ground corresponded to inert and non-hazardous waste classification. Natural soils are anticipated to generally be Inert Waste.

Ground gas monitoring is still underway, and a Ground Gas Assessment addendum will be provided upon completion.

No immediate requirements for further ground investigation have been identified as it may be preferential to move straight to remediation. A Remediation Method Statement should be prepared. This report should be submitted to relevant authorities etc. in good time for consideration and approval.

2.0 INTRODUCTION

2.1 General

Land Science was instructed to undertake a Phase II Contamination Assessment in relation to the proposed redevelopment at The Studio, Nep Town Road, Henfield BN5 9DY. The location is shown on Figure 1, which is centred at grid reference TQ 21110 15707.

2.2 Client

The Client for this appointment was Susie Warner. This report may only be used by this named client and their project team for the purposes set out and subject to the report conditions. It was understood that the Client already owned the property, and that this investigation was not a pre-purchase appraisal.

2.3 Area Under Investigation

The area under investigation comprised a small timber framed, corrugated metal panelled former chapel, with a hardstanding path around the eastern and southern boundaries. It also comprised a section of the adjacent property known as 'Byways' including the land east of the existing garage. The layout is indicated on Figure 2. The area was approximately 0.015 hectares.

2.4 Proposed Development

The proposed development was understood to comprise the conversion and extension of a vacant light industrial building to a one-bedroom dwelling with associated external alterations. The proposed development was covered under planning application number DC/23/1734. Figure 3 illustrates the layout of the proposed redevelopment. The findings of this report may not be valid if the proposed development is altered.

2.5 Previous Investigations

The following previous investigations relevant to the site were made available:

- Phase I Geo-Environmental Assessment (report), by Land Science, LS1425, dated November 2014
- Updated Phase I Geo-Environmental Assessment (letter), by Land Science, LS7490, dated February 2024

The previous reports are summarised in section 3.0. The phase II ground investigation has been carried out in accordance with the recommendations of the report/ letter, and all reports must be read in conjunction with each other.

2.6 Scope of Work

The work carried out is described in detail in the following sections but in summary included:

- An intrusive investigation comprising dynamic sampler boreholes, a trial pit, and foundation exposures.

- Preliminary chemical testing of selected soil samples in the field and laboratory.
- Installation of gas monitoring wells and return visits.

The fieldwork was conducted on 7th October 2025, under the supervision of Land Science. At the time the site was in a similar state to that described in the walkover survey in February 2024. Out of the six monitoring visits two visits have been carried out to date.

2.7 Geo-Environmental Objectives

A phase II intrusive investigation was required, to provide a generic quantitative risk assessment (GQRA).

The report required to assess risks associated with end users, the proposed redevelopment, adjacent land uses, and the wider environment, in the context of the planning regime.

2.8 Standards

Where practicable, the investigation was undertaken in accordance with the following primary standards and guidance:

- Land Contamination Risk Management (LCRM) Environment Agency June 2025.
- BS10175:2011+A2:2017, Investigation of Potentially Contaminated Sites.
- National Planning Policy Framework, December 2024.
- Building Regulations Approved Document C: Site preparation and resistance to contaminants and moisture, HM Government, September 2013.
- NHBC Standards Chapter 4.1: Land Quality - Managing Ground Conditions, 2024.

Other technical sources have been cited in respect of specific aspects of the investigation, as referenced throughout the text.

3.0 SUMMARIES FROM PREVIOUS INVESTIGATIONS

3.1 LS1425 (dated November 2014)

Summary of the Phase I Geo-Environmental Investigation:
The site was located at approximate National Grid Reference 521110 115700. The site area was approximately 0.02 hectares. The site comprised a timber-framed, metal clad former chapel (approximately 1.5 storey in height) and a strip of a neighbouring garden. The proposed development (planning application no. DC/14/1238) was understood to comprise the demolition of the existing building and the construction of two one-bed dwellings, a communal soft landscaping area and associated infrastructure.

The geology was anticipated to comprise the Folkestone Formation over the Lower Greensand Group. Historic borehole records identified groundwater standing at depths in the range of 14.3mbgl, therefore shallow groundwater was not anticipated. The Folkestone Formation was classified as a principal aquifer, however no source protection zones were within 250m of the site. A groundwater abstraction was recorded 814m east of the site for agricultural spray irrigation at Mill Field, The Common, Henfield.

No watercourses were identified within 250m of the site. The Environment Agency identifies land potentially susceptible to flooding from seas and rivers. Current mapping indicates that the site does not lie within an area classified as being susceptible to significant flooding.

Discharge consents within 500m of the site were recorded between 302m west and 480m southwest, including surface water and sewage discharge. No recorded pollution incidents to groundwater were identified within a radius of 250m of the site boundary. Industrial land uses within 250m of the site were recorded within 5m south and 56m west with both active and inactive statuses.

The nearest waste management facility was a historical landfill at Hollands Lane, Henfield 497m west, with Inert, Industrial, Commercial and Household Waste dating back to 1965. A refuse tip was detailed 150m to the north of the site, however no details pertaining to the site were detailed within the Envirocheck report. A number of former sand pits were located within the vicinity of the site, however, infilling may have been undertaken prior to the introduction of waste management legislation and as such no records are available. The site was not at risk from radon gas and therefore protection measures were not required (guidance has since been updated).

The historic maps showed the site as an open field in 1780. By 1876 the site may have formed the north-western corner of the sand pit to the southeast. By 1897 the site had been developed into a Mission Hall – similar to the existing building outline. Offsite, the surrounding area was fields with a few residential properties. By 1876 The sand pit extended to the south and east with further sand pits noted within the vicinity of the site (75m to the southeast, 200m to the northwest and 150m to the west). The sand pit to the southwest had expanded in size by 1897 and further by 1911. Various redevelopment occurred up until 1938 and a large sand pit had been excavated 50m to the south. The sand pit to the southwest was no longer in use; a pond was located within this area (100m to the southwest of the site). By 1956 redevelopment included a builder's yard, allotment gardens and disused sand pits with residential development. The pond was no longer shown by 1970/78, and a refuse tip was located 150m northwest, which was no longer shown by 1994/96 and developed into housing.

Additional historical research of the site confirmed:
The timber framed, corrugated iron panelled building was constructed in 1897 and used as a Mission Hall (See Photo 1 dated circa 1910). The building was constructed straddling the edge of a sand pit which extended to the south and east. The Mission Hall was in use until 1940 when the congregation of the mission hall join up with the Congregational Church, High Street. The building was then occasionally used by Canadians service personnel who were stationed in Henfield during WW2. The building was last used as a chapel in 1946. The building was occupied by a carpenter from the early 1950's until the 1990's. During the 1950's, many structural improvements were made to the building including building brick and block piers to replace timber post foundations, on the front / western end and the total replacement of the north wall with two large doors and the construction of a lean-to at the eastern end. Over time most of the windows and doors were replaced and the western end totally rebuilt, a small rear room was extended with new timber and brick supports, and two concrete machine bases were constructed within the building. The site lay vacant for around 5 years until it was purchased by the client approximately 10 years ago. The building has been used as a small office since until recently when it was used by a carpenter.

The council confirmed that the site has been used historically as a joinery works which may have had storage of fuels and solvents. In addition, no sites in Henfield have been detailed as being contaminated land under Part IIa of the Environmental Protection Act 1990. The council also confirmed that there were two former sand pits were located close to the site (Vinall's Business Park immediately to the south-east and Nep Close 75m to the south-east). Infilling of the former pits may have been undertaken, however, this would have been prior to the introduction of waste management legislation and as such no records are available.

A small-scale joinery works was identified at the site between the 1950's and 1990's. The potential contaminants and sources detailed DoE Industrial Profiles for timber product manufacture and expected locations.

Conceptual Site Model (the previous report should be referred to for further detail)
Sources of soil contamination included the industrial land use on site. Sources of ground gas contamination included Made Ground, industrial land uses and the offsite Vinall's Business Park. Receptors included end users, soft landscaping, building materials, adjacent land users and controlled waters.

Qualitative risk ratings were assigned to the identified source-pathway-receptor linkages:

- End users may be exposed to contaminants in soils. End users are considered to be high sensitivity and the likelihood was considered moderate. The level of risk was considered to be High.
- End users at the site and adjacent land users may be exposed to gases / vapours. Both end users and adjacent land users are considered to be high sensitivity and the likelihood was considered moderate. The level of risk was considered to be High.
- Building materials may be susceptible to attack and degradation from soil contaminants. The risk is considered to be Low to Moderate.
- Soft landscaping is considered to be moderate sensitivity. The level of risk was considered to be Low to Moderate.
- Controlled waters to be high sensitivity. The level of risk was considered to be Moderate.

Overall, a Moderate risk has been assigned to the site in respect of the proposed development.

Conclusions
An intrusive ground investigation was recommended to evaluate:

- Exposure by end users to contaminants soil within areas of soft landscaping.
- Inhalation by end users of gases/vapours potentially occurring from both on and off-site commercial land uses including the possible joinery works (on-site), historic builder's yard and commercial estate (Off site to south-east).
- Uptake of contaminants leading to phytotoxicity of plants within soft landscaping areas.
- Chemical attack on building materials including buried pipework and concrete.
- Inhalation by adjacent land users of gases/vapours potentially occurring from on-site commercial land uses including the possible joinery works.
- The possibility of downward migration of any potential contaminants into the groundwater.

The scope of investigation proposed:

- Drilling of shallow boreholes, to assess the presence / composition and depth of any Made Ground and any field evidence of contamination into the underlying soils.
- Installation of shallow boreholes to be monitored for gases on six occasions over a two month period to determine whether the level of gas may pose a significant risk.
- The positions should be targeted to specific areas of concern as identified, including adjacent to the existing commercial estate / historic building yard to the south-east, possible infill material below the car park to the east and areas of proposed soft landscaping.

Samples of any Made Ground should initially be screened for vapours using a PID with samples sent for laboratory analysis (including materials bearing field evidence of contamination). The analytical suite, based on the known site history, should include:

- General parameters: Acidity (pH), fraction of organic carbon.
- Metals; Arsenic, Cadmium, Chromium (total), Lead, Mercury, Selenium, Boron, Copper, Nickel and Zinc.
- Non-metals; water soluble Sulphate, Sulphide.
- Organic compounds; Monohydric Phenols, Speciated PAH (EPA16), Speciated TPH, VOCs and SVOCs.
- Visual asbestos screening of all Made Ground samples. Where possible asbestos fibres or ACMs are identified, these should be examined under a microscope to determine type.
- Where encountered, water samples should be collected from the monitoring standpipes for laboratory analysis including a similar suite of contaminants.

Areas of possible concern but outside the report's risk assessment included asbestos and confined spaces.

3.2 LS7490 (dated November 2024)

The review of the LS1425 report provided an updated site walkover and risk assessment:

Updated Site Walkover
The reinspection of the site was undertaken on 28th February 2024. Updated photographs are attached to this letter.

In summary, the site comprised a small timber framed corrugated metal panelled former chapel, with a hardstanding path around the eastern and southern boundaries.

The floor level of the existing building was noted to be approximately one metre above the pavement adjacent to the northern site boundary. There was a lower ground floor storage area accessed via doors on the northern and southern elevations. The upper ground floor was vacant (previously noted to contain a small-scale carpentry business). No evidence of spillages or storage of paints or varnishes were noted during the inspection.

The proposed development also included a small strip of garden to the southwest, which belonged to the adjacent residential property. The garden area was raised around 1.0m above the level of Nep Town Road and would be approximately level with the internal floor of the former chapel. This area was noted to contain a former vegetable patch and an area for storing logs.

The site was located on a slightly elevated ridge with levels falling down both to the east and west along Nep Town Road. The neighbouring business park was located within a depression (confirmed to be a former sand pit) with ground levels initially 1.0m below the level of Nep Town Road with levels falling to around 2.0m below road level at the southern extent.

A further ridge was noted approximately 30m to the south of the site, which separated land to the north from a further sand pit to the south.

The western end of the building was located on to an outcrop of sandstone (previously confirmed as being the edge of a former 19th Century sand pit. The floor of the rest of the lower ground floor was noted to comprise loose orange brown sand.

No surface water features were identified on site or in the immediate vicinity. No evidence of shallow groundwater, such as boggy waterlogged soils or water loving plants etc. were noted.

The majority of the site was covered by the existing building or laid to concrete. No trees were noted to be present at the site or within close proximity. A detailed arboricultural survey was outside the scope of this report. A survey may be required for tree root protection purposes or for assessing the depth of foundations in the vicinity of trees.

Numerous timber props (both recent and historic) were noted within and adjacent to the lower ground storage area. No other immediate evidence of significant structural movement was observed, although the inspection was cursory and a full inspection was outside the scope of this report.

In terms of potentially contaminative industrial land uses locally, the site was located adjacent to a small business estate which was confirmed by the agent to have been used previously as a storage yard for a local builder. The estate was noted to contain a vacant unit (adjacent to the site), a precision engineers, a plastic toy manufacturer with a training facility above, and various offices.

Associated with the estate was a concrete surfaced car parking area located adjacent to the eastern end of the site. This formed part of the historic sand pit and had been raised up to be level with Nep Town Road. A motor engineers was noted around 50m to the south-east of the site.

Risk Assessment

The updated site walkover has not revealed any significant changes to the site. There is a slight change to the proposed development with the reduction of proposed residential units from two to one.

Taking the updated visit and slight change to the proposed development into consideration, the source-pathway-receptor linkages within the Preliminary Risk Assessment / Conceptual Site Model remain unchanged, including:

- Exposure by end users to contaminated soil within areas of soft landscaping.
- Inhalation by end users of gases/vapours potentially occurring from both on and off-site commercial land uses including the possible joinery works (on-site), historic builder's yard and commercial estate (off site to south-east).
- Uptake of contaminants leading to phytotoxicity of plants within soft landscaping areas.
- Chemical attack on building materials including buried pipework and concrete.
- Inhalation by adjacent land users of gases/vapours potentially occurring from on-site commercial land uses including the possible joinery works.
- The possibility of downward migration of any potential contaminants into the groundwater.

Conclusion

As per the previous phase I assessment, a phase II geo-environmental investigation is required and the following scope is proposed:

- Drilling of shallow boreholes, to assess the presence / composition and depth of any made ground and any field evidence of contamination into the underlying soils.
- Installation of shallow standpipes to be monitored for gases on six occasions over a two-month period to determine whether the level of gas may pose a significant risk.
- The positions should be targeted to specific areas of concern as identified, including adjacent to the existing commercial estate / historic building yard to the south-east, possible infill material below the car park to the east and areas of proposed soft landscaping.

Samples of any made ground should initially be screened for vapours using a PID with samples sent for laboratory analysis (including materials bearing field evidence of contamination).
The analytical suite, based on the known site history, should include;

- General parameters: acidity (pH), fraction of organic carbon.
- Metals; arsenic, cadmium, chromium (total), lead, mercury, selenium, boron, copper, nickel and zinc.
- Non-metals; water soluble sulphate, sulphide.
- Organic compounds; monohydric phenols, speciated PAH (EPA16), speciated TPH, VOCs and SVOCs.
- Visual asbestos screening of all made ground samples. Where possible asbestos fibres or ACMs are identified, these should be examined under a microscope to determine type.

Where encountered, water samples should be collected from the monitoring standpipes for laboratory analysis including a similar suite of contaminants.

Further boreholes may be required, additional samples analysed or additional determinands added to the analysis, as appropriate, based on any field evidence of possible contamination encountered.

If not already carried out, an appropriate asbestos survey should be undertaken to assess the presence of asbestos within the building fabric. In addition, the BRE radon guidance has been updated since the previous phase I assessment and a new radon report may be required.

4.0 INTRUSIVE INVESTIGATION

4.1 Investigation Rationale

Based on the findings of the conceptual site model, the intrusive investigation was based on the following strategy:

- Dynamic sampler boreholes (WS01 and WS02) were used to minimise disruption to the site and to enable monitoring wells to be installed.
- Foundation exposures (FE01 and FE02) were carried out to confirm existing building structure details.
- Additionally, a trial pit (TP01) was located specifically to investigate the proposed garden area.
- The positions were located to give broad coverage across the site.
- Monitoring wells were installed in WS01 and WS02. The installations were sealed through Made Ground / Reworked Ground, with the response zone in the Folkestone Formation.

Position	Provisional Depth / Strata	Existing Location	Proposed Location	Testing, Installations etc.
WS01	4.00m (or refusal)	Eastern side access to site	Adjacent to proposed footprint	MW, PID
WS02		Western side of 'Byways' dwelling adjacent to site		
FE01	Foundation underside	Existing foundation	Against proposed footprint	PID
FE02				
TP01	Prove top of natural	Adjacent to garage at 'Byways' dwelling adjacent to site	Proposed garden	

The original WS02 was attempted but due to thin surface concrete causing rig instability the position was relocated, which experienced refusal at 1.50mbgl.

4.2 Contamination Strategy

Geo-environmental aspects were investigated based on the following strategy:

Area of Concern	Investigation	Position(s)
Made Ground	Representative samples of soil were to be screened for a broad industry standard screening contaminants, as well as speciated Total Petroleum Hydrocarbons	WS01, TP01 and FE02
Waste Classification	For preliminary waste classification, representative samples were to be screened for contaminants and full hazardous waste leachate testing performed.	WS01 and TP01

4.3 Enabling Works

WS02 was located within concrete and a breaker was used to proceed through.

4.4 Dynamic (Windowless) Sampling (WS)

Dynamic Sampling entails 1m long hollow tubes with liners driven into the ground and retracted to obtain samples. The liners are split, logged, tested, and subsampled as required.

4.5 Trial Pits (TP)

Hand excavated trial pits provide a low cost and low impact method of sampling shallow soils.

4.6 Foundation Exposures (FE)

Existing foundations are exposed by hand in order to log the construction details and bearing strata.

4.7 Monitoring Wells (MW)

Monitoring wells are installations within boreholes that enable return monitoring to be carried out. The pipework was 50mm diameter HDPE, with the cased section sealed with bentonite, and the slotted response zone packed with a shingle filter pack.

Monitoring installations are summarised below and are shown on the relevant logs in the appendix.

Position	Response zone		Diameter	Strata	Objective
	Top	Bottom			
WS01	1.00m	4.00m	50mm	Folkestone Formation	Gas monitoring
WS02	0.50	1.50	50mm		

Post-fieldwork monitoring of ground gas, organic vapour and groundwater levels was undertaken on six occasions across a period of two-months.

4.8 Soil Sampling

Soil samples were recovered from the exploratory holes during the ground investigation and stored/transported in containers appropriate for the laboratory testing undertaken. Sample types and depths are recorded on the relevant exploratory hole records.

4.9 PID Screening (PID)

Soil samples were screened for VOCs in headspace using a Photo Ionisation Detector (PID) broadly in accordance with the methodology set-out in CIRIA C682. Due to interference from humidity and other factors, Land Science adopts a method detection limit of 1.0ppm to avoid reporting false positive readings.

5.0 GROUND CONDITIONS

5.1 General

The expected ground conditions were anticipated to comprise Made Ground over the Folkestone Formation to depth. The investigation confirmed the anticipated ground conditions. A thin capping of Hardstanding and/or Made Ground / Reworked Ground was encountered at surface.

A summary of the encountered conditions is presented below.

Strata	Base Depth m		
	WS01	WS02	TP01
Hardstanding	-	0.07	-
Made Ground	0.25	0.40	0.35
Reworked Ground	0.90	0.50	0.80
Folkestone Formation	4.00+	1.50+	1.00+

The naming of geological strata is tentative and should be used as a guide. Interpolation between or below investigation points should be treated with caution. The description of soils and rocks was in accordance with BS5930.

5.2 Hardstandings

Positions WS02 was located within concrete which was proven to a depth of 0.07mbgl.

5.3 Made Ground

Made Ground was encountered in all positions, and the full thickness was proved in all with a base depth of 0.25m to 0.40mbgl. In summary, the Made Ground comprised brown to orange-brown / dark brown slightly silty (locally slightly) gravelly Sand with brick, concrete, ash, charcoal, clinker, ceramic tile, slate, hardcore, flint, chalk and glass. TP01 also included 0.05m of pea shingle over geotextile.

5.4 Reworked Ground

Reworked Ground was encountered in all positions, and the full thickness was proved in all with a base depth of between 0.50m and 0.90mbgl. In summary, the Reworked Ground comprised yellow-orange to brown / orange-brown slightly gravelly (locally slightly) silty Sand with brick, ash, charcoal, metal, flint sandstone and ironstone.

5.5 Folkestone Formation

The Folkestone Formation was encountered in all locations with the positions terminated at depths of between 1.00m and 4.00mbgl. In summary, the Folkestone Formation comprised yellow-orange/brown to brown Sand. WS02 was terminated on sandstone and ironstone at 1.50mbgl.

5.6 Roots and Rootlets

No roots or rootlets were identified in the investigatory positions however organic material was noted in both the Made Ground and Reworked Ground at WS01.

5.7 Foundation Exposures

A summary of the foundation exposures is given below:

Position	Base of Foundation	Width of Foundation	Materials	Formation Strata
FE01	0.75m	Vertical to 0.53m, 0.10m width then vertical to 0.75mbgl	Corrugated metal panel clad brick column over concrete	Folkestone Formation
FE02	0.05m	Vertical	Corrugated metal panel	Made Ground

5.8 Field Evidence of Contamination

No evidence of possible soil contamination (such as staining, malodours, or brightly coloured soils) was identified in the field.

Made Ground and Reworked Ground were identified in all positions to depths of between 0.50m and 0.90mbgl, and such materials may be imported from an unknown source or mixed with hazardous materials, and as such may contain a wide range of potential contaminants. All such materials should be treated as suspect unless proven otherwise. Preliminary testing has been carried out, as described in section 7.

5.9 Groundwater

Groundwater was not encountered during excavation of any of the investigative positions.

FE02 material was recovered as damp between 0.20-0.60mbgl, however this location had a downpipe to ground level adjacent to it.

The level of water in a borehole/hand pit can be affected by the drilling/excavation process and speed of infiltration; short-term rest levels should be used with caution.

5.10 Stability and Casing

The boreholes were not cased and remained stable, however slight spalling was noted in the hand pits.

5.11 PID Screening (PID)

None of the samples exhibited VOCs above the detection limit. Overall, the readings were towards the lower end of the unit's detection limit (0.1ppm to 9999ppm).

The purpose of the screening was to identify samples which may be impacted by organic contaminants (such as VOCs, SVOCs, petroleum hydrocarbons, diesel, etc.) and to assist in prioritising samples for laboratory analysis.

6.0 MONITORING DATA

Only two out of the six monitoring rounds have been carried out to date with data provided below, and a Ground Gas Risk Assessment will be provided upon completion.

6.1 Groundwater Monitoring

Groundwater was only recorded in the second return monitoring visit, with groundwater standing at a depth of 3.80mbgl in WS01.

6.2 Ground Gas Monitoring

The results of the ground gas monitoring are summarised below:

15/10/2025

Measurement	WS01	WS02
Carbon Dioxide %	2.2>2.7	0.8>1.1
Methane %	0.0	0.0
Oxygen %	18.9<16.9	19.7<19.2
VOCs ppm *	0.0	0.0
Flow rate l/hr	0.0	0.0

22/10/2025

Measurement	WS01	WS02
Carbon Dioxide %	0.9<0.6	0.9>1.0
Methane %	0.0	0.0
Oxygen %	19.1>19.6	19.7<19.2
VOCs ppm *	0.0	7.8
Flow rate l/hr	0.0	0.0

Below is a summary of the atmospheric pressure conditions during the monitoring visits:

Visit	Pressure (recorded on site)	Published Pressure Trend
15/10/2025	1024mB	Falling/steady high pressure (Gatwick Airport)
22/10/2025	992mB	Fluctuating low pressure (Gatwick Airport)

7.0 CONTAMINATION LABORATORY TESTING

7.1 Scheduled Testing

Samples were selected for geochemical (contamination) analysis, based on the following rationale:

- Made Ground / Reworked Ground were encountered, which may contain a wide range of contaminants. Selected samples from WS01, TP01 and FE02 between depths of 0.10m and 0.80m were tested for a routine screening suite (S1), screened for asbestos and tested for speciated Total petroleum Hydrocarbon (TPH7).
- Waste classification testing on two samples was included in the scope of works, to provide a preliminary assessment for waste handling. Samples from adjacent the proposed footprint and the proposed garden were selected for testing.

The scope and extent of testing was considered appropriate and in accordance with the Conceptual Site Model and preliminary risk assessment.

Sample	Strata	S1	Asbestos	TPH7	S3
WS01 0.80m	Reworked Ground	X	X	X	X
TP01 0.15m	Made Ground	X	X	X	X
TP01 0.50m	Reworked Ground	X	X	X	
FE02 0.10m	Made Ground	X	X	X	

The relevant screening suites are defined below. Where duplicate analysis exists between suites, each test is performed only once:

Suite	Definition
S1 (soil)	Screening suite: pH, fraction of organic carbon, metals and non-metals, water soluble sulphate, sulphide, total cyanide, total phenols, speciated PAH's.
Asbestos	Asbestos screen: Laboratory screening for fibres and Asbestos Containing Materials (ACM); identification where identified. Using polarising light and dispersion staining as described in HSG 248, HSE Contract Research Report No 83/1996 and in Davies et al, 1996.
TPH7	Speciated TPH: Total petroleum hydrocarbons CWG banding incl. aliphatic and aromatic split plus BTEX and MTBE.
S3	Waste Acceptance Criteria (WAC): Total Organic Carbon (TOC), Loss on Ignition (LoI), BTEX, speciated PCB's, mineral oil (EC10 – EC40), pH, acid neutralisation capacity, speciated PAH's, 10:1 leachable metals and non-metals.

The results are discussed in the relevant sections.

8.0 HUMAN HEALTH SCREENING

8.1 Screening Values

As the basis of a generic tier 1 screening assessment, the results have been compared directly against published standards for human health.

Several different partly overlapping schemes are currently in use in the UK, based on the Environment Agency's CLEA Model but with differing toxicological parameters. For this report, these schemes have and have been applied in the following hierarchy:

- Suitable For Use levels (S4UL) published by LQM in association with the CIEH.
- Category 4 Screening Levels (C4SL) published by the DEFRA and CL:AIRE.

Whilst other standards exist, such as the LQM Generic Assessment Criterion and the Environment Agency's Soil Guideline Values, these are deemed superseded by the above documents.

The soil chemical analysis results have been compared against respective screening values for residential land uses with plant uptake (i.e. residential properties with private gardens, where homegrown produce could form a proportion of dietary intake).

For contaminants where the respective screening value is dependent on Soil Organic Matter (SOM), the corresponding value for 6.00% was used (the arithmetic mean SOM value for the soil was 6.94%).

Where no standard exists, the contaminant is either not considered a priority in terms of human health (at least in the scenario being considered), or no screening value has been published.

8.2 Screening results

None of the results exceeded the screening criteria, with the exception of the following:

Determinand	Screening value	Results Exceeding the Screening Value
Benzo(a)anthracene	13mg/kg	FE02 0.10m (19.9mg/kg)
Benzo(b)fluoranthene	3.7mg/kg	WS01 0.80m (5.6mg/kg) FE02 0.10m (27mg/kg)
Benzo(a)pyrene	3mg/kg	WS01 0.80m (6.18mg/kg), FE02 0.10m (28.1mg/kg)
Di-benzo(a,h)anthracene	0.3mg/kg	WS01 0.80m (1.72mg/kg), TP01 0.15m (0.54mg/kg) TP01 0.50m (0.43mg/kg), FE02 0.10m (6.18mg/kg)
Lead	200mg/kg	TP01 0.15m (602mg/kg), TP01 0.50m (269mg/kg) FE02 0.10m (1230mg/kg)
Zinc	3700mg/kg	FE02 0.10m (4450mg/kg)

8.3 Benzo(a)Pyrene

With respect to Polycyclic Aromatic Hydrocarbons (PAHs) Land Science adopt the surrogate marker approach described in Appendix E of the C4SL suite of documents i.e. using benzo(a)pyrene as a representative compound for all genotoxic PAHs. This approach was used as benzo(a)pyrene was detected in the samples, and the other PAHs identified above the individual screening values were all classed as genotoxic. The table below summarises the revised screening assessment:

Determinand	GAC	Concentration		Results Above GAC Value
		Mean	Max	
Benzo(a)pyrene (as surrogate marker)	5.0	11.76	28.1	WS01 0.80m (6.18mg/kg) FE02 0.10m (28.1mg/kg)

The PAH double ratio tool has been used to determine possible sources for the exceedances. TP01 0.15m and 0.50m exceedances were from combustion soot from an urban background, whilst FE02 0.10m exceedances were from carbonization and coke oven tar.

8.4 Bioaccessible Metals

The screening value for lead and zinc assumes all ingested contaminant will be fully soluble in stomach acid and therefore available to enter the body. However, this seldom the case in practice, and can be measured through Physiological Based Extraction Testing (PBET). The method in current use is known as the Unified BARGE Method (UBM) as devised by Bio-Accessibility Research Group Europe (BARGE) which was led by the UK. This data can then be applied as part of a detailed quantitative risk assessment. Whilst there are costs associated with this testing, the results may prove favourable.

8.5 Speciated TPH

The risks from TPH's are assessed differently from other contaminants. The ratio of an individual group of carbon bands to the respective GAC is calculated (a hazard quotient) and these are totalled to derive a sample specific hazard index. A hazard index exceeding 1.0 suggests a potential significant risk to human health in the exposure scenario considered. The calculated hazard indexes are summarised below.

Sample	Total TPH	Hazard Index	Notes
WS01 0.80m	327.2mg/kg	0.21	No potential significant risk to human health
TP01 0.15m	56.9mg/kg	0.05	
TP01 0.50m	43.3mg/kg	0.04	
FE02 0.10m	1058.0mg/kg	0.49	

8.6 Asbestos

There are no published screening values for asbestos in soil. However, from the four samples tested no asbestos was detected.

9.0 ENVIRONMENTAL SCREENING

9.1 Soft Landscaping

A number of documents include guidance on screening levels of phytotoxic contaminants within soils, including:

- BS3882:2015 "Specification for topsoil and requirements for use" (although stipulated as not to be used in contaminated land risk assessment).
- ICRCL in publication 70/90 1990 'Notes on the Restoration and Aftercare of Metalliferous Mining Sites for Pasture and Grazing' (although indirectly withdrawn) (where marked *).
- Code of Practice for Agricultural Use of Sewage Sludge (England and Wales 1996) for arable use (as opposed to grazing) and relating to priority phytotoxic elements only.

The results of the chemical analysis for determinands known to pose a potential phytotoxic risk to plant growth are summarised on the following table, together with the respective adopted screening values for plant growth. The results of the chemical analysis were evaluated singularly without the use of statistical tools.

Element	Phytotoxicity Value (mg/kg)			Arable (grassland)	Results Exceeding Screening Value
	pH <6.0	pH 6.0-7.0	pH >7.0	pH >5.2	
Zinc	200	200	300	300 (300)	TP01 0.15m (320mg/kg) TP01 0.50m (204mg/kg) FE02 0.10m (4450mg/kg)
Copper	100	135	200	200 (330)	TP01 0.15m (147mg/kg)
Nickel	60	75	110	110 (180)	None
Cadmium	50*			3.0 (3.0)	
Arsenic	1,000*			50 (50)	

9.2 Structural Concrete

The results of the pH and water-soluble sulphate tests are summarised on the following table.

Strata	No. of Tests	Water Soluble Sulphate (SO_4 mg/l)	pH (value)
Made Ground	2	<20.0	6.82-7.13
Reworked Ground	2	<20.0	6.59-7.04

9.3 Potable Water Supplies

The risk of chemical attack on water supply pipework has been assessed following the general principles set out in the joint Water UK/HBF (Home Builders Federation) *Contaminated Land Assessment Guidance* dated January 2014. A summary of the main chemical criteria is reproduced below.

Test Group (in mg/kg)	Poly-ethylene (PE)	Polyvinyl Chloride (PVC)	Metal or Barrier pipe	Results Exceeding
BTEX & MTBE	0.1	0.03	No limit	None

Test Group (in mg/kg)	Poly-ethylene (PE)	Polyvinyl Chloride (PVC)	Metal or Barrier pipe	Results Exceeding
Mineral oil EC11-20	10	No limit	No limit	WS01 0.80m (104.68mg/kg) FE02 0.10m (323.97mg/kg)
Mineral oil EC21-40	500	No limit	No limit	FE02 0.10m (809.3mg/kg)

Redox potential and conductivity should be checked where metal pipework is to be installed. aluminium barrier pipework is acceptable under all conditions. No pipework should be laid where there is evidence of petrol, diesel etc.

10.0 CONTROLLED WATERS SCREENING

The relevant analytical results have been compared directly against the standard set out in the water framework directive for surface waters, and the current UK potable water supply regulations.

10.1 Soil Leachate Screening

In comparison to the adopted surface water standards, the following determinands exceeded the respective thresholds:

Determinand	EQS	Units	WS01 0.80m	TP01 0.15m
Copper	0.001	mg/l	0.0015	0.0015

In comparison to the adopted drinking water standards, none were found to exceed the respective standards.

11.0 TIER 1 CONTAMINATION ASSESSMENT

11.1 End Users

The preliminary conceptual site model identified end users to comprise a residential house with private garden.

The chemical results identified elevated di-benzo(a,h)anthracene and lead at TP01 at both 0.15m and 0.50m within the proposed soft standing, with benzo(a)anthracene, benzo(b)fluoranthene, benzo(a)pyrene and di-benzo(a,h)anthracene and metals lead and zinc at WS01 0.80m and FE02 0.10m within the hardstanding.

Consideration should be given to either conducting further investigation or proceeding considering possible remediation measures.

11.2 Adjacent Land Users

The site has not been identified as a risk of ongoing pollution to neighbouring land. However, measures should always be taken to prevent and control any dust, run-off and mud etc. generated during groundworks, as part of good site management.

11.3 Soft Landscaping

Zinc and copper exceeded the phytotoxicity screening values in the following samples:

Determinand	Results Exceeding Screening Value
Zinc	TP01 0.15m (320mg/kg), TP01 0.50m (204mg/kg) FE02 0.10m (4450mg/kg)
Copper	TP01 0.15m (147mg/kg)

No evidence of potentially phytotoxic effects was noted during the site walkover survey inspection.

The physical composition of the Made Ground and Reworked Ground (brick, concrete, ash, charcoal, clinker, ceramic tile, slate, hardcore, glass and metal, with flint, chalk sandstone and ironstone) was such that it was unlikely to be a suitable medium for landscaping and planting. Clean imported topsoil and subsoil will be required in accordance with appropriate British Standards.

11.4 Concrete Specification

All sub surface concrete should be designed and specified in accordance with BS8500-1:2015+A1:2016. The results of the sulphate and pH analyses fell into Class DS-1 and an ACEC class AC-1 is appropriate.

11.5 Potable Water Supplies

The recorded concentrations of mineral oil exceeded the respective standard for PE pipe in the samples from WS01 and FE02. Suitable types of pipework materials may include PVC, metal or aluminium barrier pipe. No potable water supplies should be laid in contaminated ground.

11.6 Ground Water Protection

The preliminary conceptual site model identified possible source-pathway-receptor linkages with respect to groundwater. The site overlies a principal aquifer, although outside an SPZ. Contamination may be mobilised through the infiltration and percolation of water downwards through the soil column and into the water table.

None of soil-leachate results exceeded the drinking water standards. Overall, the screening does not suggest a significant risk of impact on groundwater quality.

11.7 Surface Water Protection

No surface water bodies were identified in the local area, and therefore no source-pathway-receptor linkages exist in this regard.

11.8 Conclusions

The updated conceptual site model has identified the following potential risks:

- End users; inhalation, ingestion, dermal contact with soils, soil borne dusts, inhalation of vapours, consumption of homegrown produce.
- Soft landscaping; risk of phytotoxicity and poor soil conditions for landscaping and planting.
- Water supply pipes; risk of chemical attack, decay and tainting of water supplies.

In addition, the BRE radon guidance has been updated since the previous phase I assessment and a new radon report has been acquired:

The requirement for Radon Protection Measures (RPM) has been assessed in accordance with BRE 211:2023 Public Health England and the BGS estimate the potential for radon and the requirement for Radon Protection Measures on site as follows:

- Radon probability: Not at risk - less than 1% of homes are estimated by PHE to exceed the threshold for Radon gas in residential dwellings.
- Radon Protection Measures (RPM): No Radon protection is required for new dwellings or extensions constructed at this location.

However, as the probability result is only valid for properties above ground. All basements and cellar areas are considered to be at additional risk from high radon levels. The development contains a sublevel / lower ground floor across the majority of the site and as such would increase the potential risk from radon and radon protection measures should be included within the building design.

Although BARGE testing may result in lower concentrations below the screening criteria, the composition and consistency of soils within the Made Ground and Reworked Ground was such that it would be a poor growing medium and remediation would be required.

Based on a preliminary remediation options appraisal, it was considered that the risks would most cost effectively mitigated by:

- Removal of Made Ground / Reworked Ground from garden / soft standing areas to 600mm bgl, and reinstating with topsoil/subsoil as required by the landscape designer (minimum 150mm topsoil).
- Excavating and disposing of contaminated soils and replacement with a capping system.
- Provision of a geotextile membrane within the footprint of the building to protect from vapours and radon.
- Provision of upgraded or protected water supply pipework to a specification agreed with the local utility.

Ground gas monitoring at site has been carried out on two of six visits to date. An addendum will be supplied upon completion of the monitoring.

A copy of this report should be submitted to the relevant authorities for approval in sufficient time prior to commencement on site.

A suitably qualified Environmental Consultant should prepare a full *Remediation Method Statement*. An appropriate level of supervision and testing will be required, to form part of a formal *Verification Report*.

12.0 GROUND GAS ASSESSMENT

12.1 General

The risks associated with ground gases in respect of end users have been evaluated in general accordance with BS8485:2015+A1:2019 *Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings* and CIRIA C665 (2007) entitled *Assessing Risks Posed by Hazardous Ground Gases to Buildings*.

The conceptual site model identified the following source-pathway-receptor linkages in respect of potential ground gases and vapours:

Source	Pathway	Receptor
Ground gases arising from: possible joinery works (on-site), historic builder's yard and commercial estate (off site to south-east)	Inhalation, explosion	End users

Ground gas monitoring at site has been carried out on two of the proposed six visits to date. The results indicate a Characteristic Situation of CS1, suggesting no ground gas protection is required, however this could be revised following the outstanding monitoring visits.

An addendum will be supplied upon completion of the monitoring.

13.0 PRELIMINARY WASTE ASSESSMENT

13.1 General

Waste may be defined as any substance or object in Annex 1 of the Waste Framework Directive which the holder discards, intends to discard, or is required to discard. Subject to compliance with waste regulations, soils may either be handled as either:

- Non-Waste, and re-used (either on-site or on another site), or
- Waste, and disposed of (to a waste management facility).

Given the confines of the site, it was anticipated that all materials would be disposed of from site as waste.

The waste producer has a legal duty of care to ensure that waste materials are handled properly and sent to the appropriate licenced facility. Substantial tax penalties and fines are being levied by the regulators. Inspection, testing, segregation etc. will be required on site, and the support of a suitably qualified consultant should be sought; therefore, the advice in this section is preliminary only.

13.2 Waste Disposal

Where materials are not re-used they must be handled as waste, and must be sent to a licenced waste management facility. Waste soil is classified for disposal purposes as follows:

Step 1: Does the material contain dangerous substances in various proportions that exceed the thresholds for hazardous waste under the Waste Framework Directive?

- If yes, the material is hazardous
- If not, the material is non-hazardous

Step 2: Does the waste acceptance testing allow the materials to be sub classified as follows:

- If hazardous, does the soil meet the requirements for Stable Non-Reactive Hazardous Waste (SNRHW)?
- If non-hazardous, does the soil meet the requirements for inert waste?

A material is therefore either hazardous or non-hazardous waste; hazardous may only be sub-classified as SNRHW and non- hazardous waste may only be sub-classified as inert.

The results of the soils analysis have been interpreted as follows:

Soil	Step 1: Hazardous Waste	Step 2: Waste Acceptance	Asbestos etc.	Waste Designation
Made Ground FE02 0.10m	Hazardous - due to exceedances in lead, zinc and TPH	WAC test not carried out	Non detected	Hazardous waste[!]
Made Ground TP01 0.15m	Non hazardous	WAC test carried out = inert waste		Inert waste

Soil	Step 1: Hazardous Waste	Step 2: Waste Acceptance	Asbestos etc.	Waste Designation
Reworked Ground – TP01 0.50m		WAC test not carried out		Non hazardous *
Reworked Ground – WS01 0.80m		WAC test carried out = inert waste		Inert waste

The sample marked ! was classified as hazardous waste, WAC testing was not carried out and therefore the materials could not be sub-classified as stable non-reactive hazardous waste. WAC testing will be mandatory before the materials are disposed of.

Whilst the sample marked * was classified as non-hazardous, WAC testing was not carried out and therefore the materials could not be sub-classified as Inert. Based on the WAC testing on another sample of Reworked Ground, it is likely this would in fact also qualify as Inert. Further WAC testing may represent a potential saving on disposal costs.

With reference to the current List of Wastes (formerly European Waste Catalogue), waste soils and stone derived from construction and demolition sites may be disposed of under either of the following codes as appropriate:

Waste	Code	Description
Hazardous	17 05 03*	soil and stones containing dangerous substances
Non-Hazardous	17 05 04	soil and stones other than those mentioned in 17 05 03

(Note, the asterix is a Mirror Entry, as defined in the List of Wastes, conferring the relationship with the non-hazardous code 17-05-04).

REFERENCES

A number of technical references have been referred to in the preparation of this document, including:

- Smith, I. (2014) Smith's Elements of Soil Mechanics. Chichester. Wiley Blackwell. 9th edition.
- BRE Design Guide 365. Soakaway design ("DG365").
- Radon: Guidance on protective measures for new buildings, BRE Report BR 211, 2023 6th edition.
- The Environment Agency's approach to groundwater protection. February 2018 Version 1.2.
- Water UK and the Home Builders Federation; Contaminated Lane Assessment Guidance, dated January 2014.
- Concrete – Complementary British Standard to BS EN 206; Part 1: Method of specifying and guidance for the specifier BS8500-1:2015+A1:2016, dated August 2016.
- Revised EU Waste Framework Directive 2008 2008/98/EC [transposed into English law under The Waste (England and Wales) Regulations 2011].
- European Community (EC) Directive 1999/31/EC [transposed into English law under the Landfill (England and Wales) Regulations 2002].
- Defining Waste Recovery - Permanent Deposit of Waste on Land, EPR13 v1.0, EA 2010.
- The definition of waste: Development Industry Code of Practice, v2, CL:AIRE 2011.
- Guidance on the classification and assessment of waste Technical Guidance WM3 ("WM3") EA publication (1st edition v1.2GB) dated 2021.

REPORT CONDITIONS

The Client

This report may only be used by the client named in section 1 and their appointed project team for the purpose of design, obtaining planning, building regulations approval, and in connection with finance. This report must not be used by any other persons or for other purposes without express written agreement of Land Science.

General

Land Science takes all reasonable professional care in the preparation of this report, using current standards and industry practice. However, the evaluation of ground conditions depends on an interpretation and extrapolation of the conditions revealed by a limited data set. The level of risk is related to the extent of investigation and no site is ever free of risk. The client should understand their risks and liabilities. We accept no liability whatsoever in respect of:

- The scope, extent or design of an investigation.
- Any conditions not directly revealed by the investigation.
- Published standards or methodologies used or adopted in this report.
- The opinion of any other party including any regulator, authority or stakeholder.
- Any dispute, claim or consequential loss arising from any findings of this report.
- Third party information and data.

This report relates solely to ground-related matters as set out in the objectives and makes no representation on other matters such as ecology, arboriculture, invasive plant species, the condition of buildings and structures, hazardous building materials such as insulation or asbestos, the locations of boundaries, unexploded ordnance, and or planning constraints etc. Further reports should be commissioned in this respect as appropriate.

Regulators and Approvals

This (and any other) report should be submitted to relevant authorities for their own assessments and to provide their approval or comments accordingly. This should be in good time before commencing on site in case additional work is to be carried out.

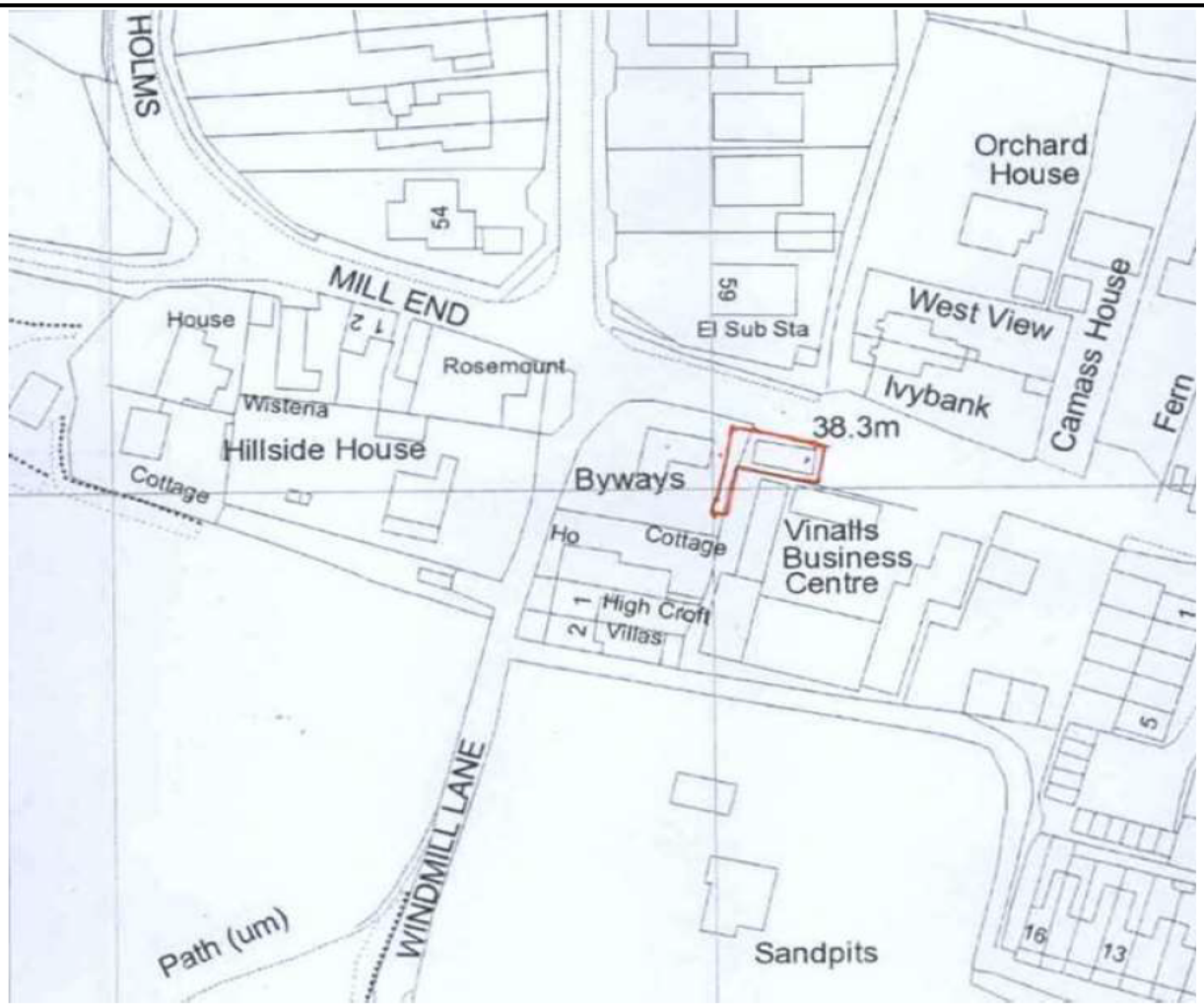
Standards, technical guidance and regulatory positions change over time and may therefore affect the findings and recommendations made in this report; this should be verified by the client prior to any critical project milestones. Where this information is used in design, the designer should verify that the information is appropriate and has been used correctly.

Variations with Time

The report relates to conditions revealed at the time of the investigation and any monitoring visits. Some parameters may vary over time or seasonally; groundwater levels, ground gas compositions, or concentrations of contaminants are particularly variable in this respect. Further monitoring or verification should be considered as appropriate.

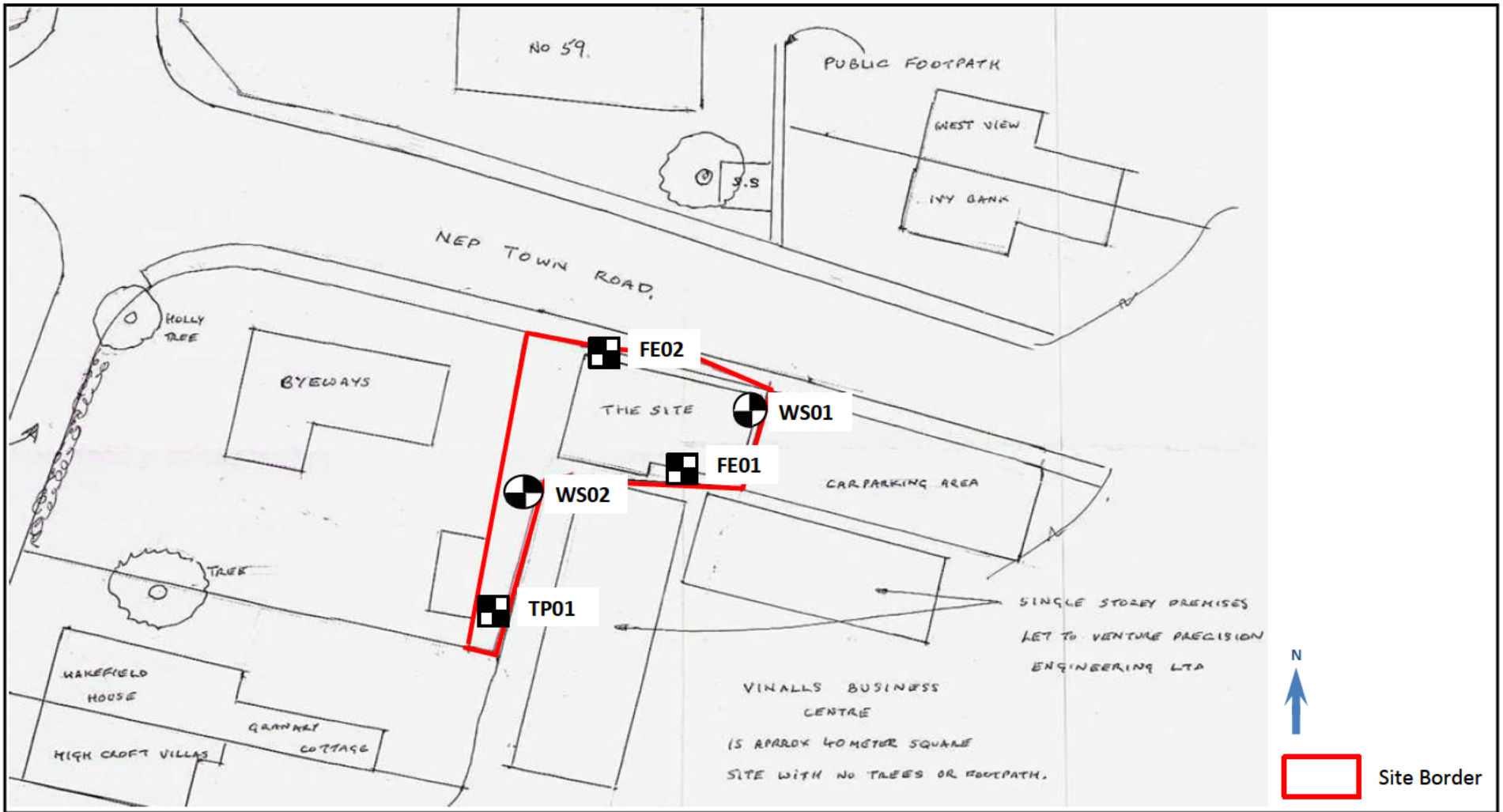
GLOSSARY OF TERMS

ACM	Asbestos Containing Material
BGS	British Geological Survey
BRE	Building Research Establishment
BS	British Standard
C4SL	Category 4 Screening Level
CBR	California Bearing Ratio
CDM	Construction Design and Management regulations
CIRIA	Construction Industry Research and Information Association
CL:AIRE	Contaminated Land: Applications in Real Environments
CLEA	Contaminated Land Exposure Assessment model
CSM	Conceptual Site Model
EA	Environment Agency
EQS	Environmental Quality Standards
FOC	Fraction of Organic Carbon
GAC	Generic Assessment Criterion
GQRA	Generic Quantitative Risk Assessment
mbgl	Meters Below Ground Level
NHBC	National House Building Council
mOD	Metres above Ordnance Datum
PAH's	Polycyclic Aromatic Hydrocarbons
PHE	Public Health England
PID	Photo-Ionisation Detector
PQRA	Preliminary Quantitative Risk Assessment
PSD	Particle Size Distribution Test
RMS	Remediation Method Statement
S4UL	Suitable for Use Level
SOM	Soil Organic Matter
SPZ	Source Protection Zone
SPT	Standard Penetration Test
SSSI	Sites of Special Scientific Interest
ST-WEL	Short Term Workplace Exposure Limit
SVOC's	Semi-Volatile Organic Compounds
TPH	Total Petroleum Hydrocarbons
TRRL / TRL	Transport Road Research Laboratory
TWA-WEL	Time Weighted Average Workplace Exposure Limit
UK HBF	United Kingdom House Building Federation
VOC's	Volatile Organic Compounds
WAC	Waste Acceptance Criteria



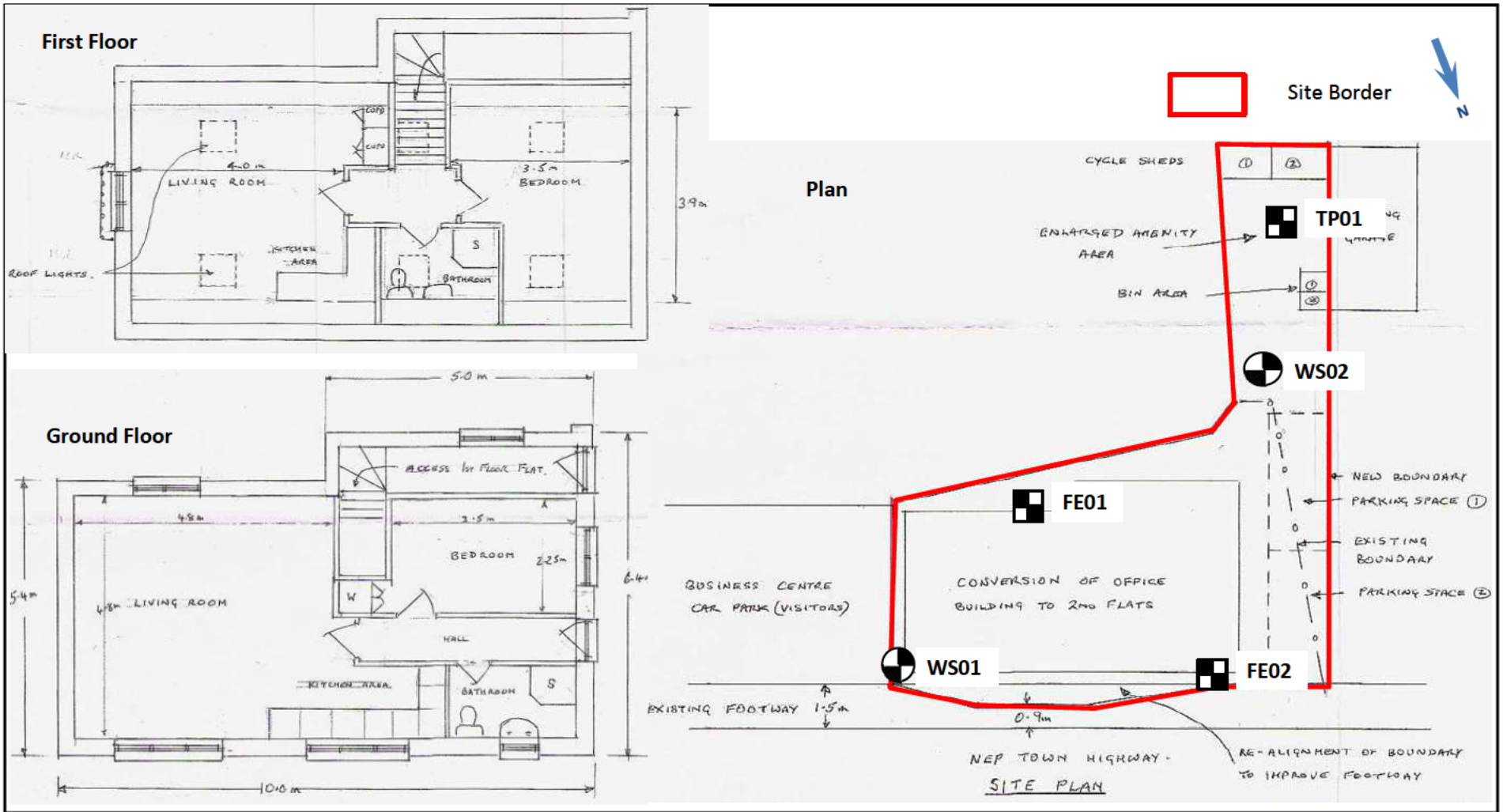
Land Science	**TITLE:**	Site Location Plan	**REF:** LS8889	**PREPARED:**	JM
	PROJECT:	The Studio, Nep Town Road, Henfield BN5 9DY	**FIGURE:** 1	**CHECKED:**	MR
	CLIENT:	Susie Warner	**DATE:** 03/10/2025	**VERSION**	V1

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Land Science	**TITLE:**	Existing Site Plan	**REF:** LS8889	**PREPARED:**	JM
	PROJECT:	The Studio, Nep Town Road, Henfield BN5 9DY	**FIGURE:** 2	**CHECKED:**	MR
	CLIENT:	Susie Warner	**DATE:** 08/10/2025	**VERSION**	V1

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Land Science	**TITLE:**	Proposed Site Plan	**REF:** LS8889	**PREPARED:**	JM
	PROJECT:	The Studio, Nep Town Road, Henfield BN5 9DY	**FIGURE:** 3	**CHECKED:**	MR
	CLIENT:	Susie Warner	**DATE:** 03/10/2025	**VERSION**	V1

APPENDIX A













Land Science	**TITLE:**	Site Photographs		**REF:**	LS8889
	PROJECT:	The Studio, Nep Town Road, Henfield BN5 9DY		**SHEET:**	1
	CLIENT:	Susie Warner		**DATE:**	23/10/2025
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UNIT 10, 19 ALBERT DRIVE BURGESS HILL, **WEST SUSSEX**, RH15 9TN
2ND FLOOR, 25-28 FIELD STREET, **LONDON**, WC1X 9DA













Land Science	**TITLE:**	Site Photographs		**REF:**	LS8889
	PROJECT:	The Studio, Nep Town Road, Henfield BN5 9DY		**SHEET:**	2
	CLIENT:	Susie Warner		**DATE:**	23/10/2025
	PRREPAREI	JM	**CHECK:** JM	**VERSION**	V1













Land Science	**TITLE:**	Site Photographs		**REF:**	LS8889
	PROJECT:	The Studio, Nep Town Road, Henfield BN5 9DY		**SHEET:**	3
	CLIENT:	Susie Warner		**DATE:**	23/10/2025
	PRREPAREI	JM	**CHECK:** JM	**VERSION** V1	

APPENDIX B

Land Science	Brighton | London | Bristol 0845 604 6494 www.landscience.co.uk	**Site** The Studio, Nep Town Road, Henfield, BN5 9DY	**Number** **WS01**

Excavation Method	**Dimensions**	**Ground Level (mOD)**	**Client**	**Job Number**
Drive-in Windowless Sampler			Susie Warner	LS8889
	Location	**Dates** 07/10/2025	**Engineer** Landscience	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
0.15	D		PID = 0.1ppm		(0.25)	Dark brown gravelly silty SAND. Sand is fine to coarse. Gravel is fine to coarse flint and hardcore, rare chalk, ash, coal/clinker, brick and organic material. (MADE GROUND)			
					0.25				
0.50	D		PID = 0.0ppm		(0.65)	Reworked brown to orange-brown slightly gravelly silty SAND. Sand is fine to coarse. Gravel is fine to medium flint, with rare metal, ash, charcoal, sandstone and ironstone cobbles with organic material. (REWORKED GROUND)			
0.80	D		PID = 0.1ppm		0.90				
1.20	D		PID = 0.0ppm			Loose orange to yellow-brown SAND. Sand is fine to medium. (FOLKESTONE FORMATION)			
1.80	D		PID = 0.3ppm						
2.50	D		PID = 0.2ppm		(3.10)	2.50-4.00m: locally red-brown with occasional bands of sandstone.			
3.50-3.70	D		PID = 0.2ppm						
					4.00	Complete at 4.00m			

Remarks
NOTES: Borehole completed at target depth of 4.00mbgl.
STABILITY: Stable.
GROUNDWATER:None encountered.
INSTALLATION: HDPE standpipe to 4.00mbgl; plain to 1.00m and slotted 1.00 to 4.00mbgl, with bentonite/shingle surround.
CASING: None used.

Scale (approx)	**Logged By**
1:25	TM

Figure No.
LS8889.WS01

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Land Science	Brighton | London | Bristol 0845 604 6494 www.landscience.co.uk	Site The Studio, Nep Town Road, Henfield, BN5 9DY	Number WS02

Excavation Method	Dimensions	Ground Level (mOD)	Client	Job Number
Drive-in Windowless Sampler			Susie Warner	LS8889
	Location	**Dates** 07/10/2025	**Engineer** Landscience	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water	Instr
					(0.07) 0.07	(CONCRETE)			
0.20	D		PID = 0.1ppm		(0.33)	Brown to orange-brown slightly gravelly slightly silty SAND. Sand is fine to coarse. Gravel is fine to coarse brick, ceramic tile, ash/charcoal and concrete fragments from above. (MADE GROUND)			
					0.40 (0.10) 0.50	Brown to orange-brown slightly silty SAND. Sand is fine to coarse. (REWORKED GROUND)			
0.50	D		PID = 0.1ppm			Loose yellow-orange to brown SAND. Sand is fine to medium. (FOLKESTONE FORMATION)			
0.90	D		PID = 0.0ppm		(1.00)				
1.30	D		PID = 0.0ppm						
					1.50	1.50m: Sandstone and ironstone.			
						Complete at 1.50m			

Remarks
NOTES: Borehole terminated at 1.50m with refusal in sandstone/ironstone.
STABILITY: Stable.
GROUNDWATER: None encountered.
INSTALLATION: HDPE Standpipe to 1.50mbgl: plain to 0.50m and slotted 0.50m to 1.50mbgl with bentonite/shingle surround.
CASING: None used.

Scale (approx)	Logged By
1:25	TM

Figure No.
LS8889.WS02

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Site	Trial Pit Number
The Studio, Nep Town Road, Henfield, BN5 9DY	FE01

Excavation Method	Dimensions	Ground Level (mOD)	Client	Job Number
Trial Pit			Susie Warner	LS8889
	Location	**Dates** 07/10/2025	**Engineer** Landscience	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					(0.20)	(CONCRETE)		
					0.20			
					(0.20)	Brown slightly gravelly slightly silty SAND. Sand is fine to coarse. Gravel is brick, ash and charcoal and glass with concrete fragments from above. (MADE GROUND)		
0.30	D		PID = 0.0ppm		0.40			
					(0.35)	Loose brown to orange-brown slightly gravelly SAND. Sand is fine to medium. Gravel is fine to coarse sandstone. (REWORKED GROUND)		
0.60	D		PID = 0.0ppm		0.75			
						Complete at 0.75m		

Plan

Remarks

BACKFILL: Backfilled with arisings and bentonite sealing pellets.
GROUNDWATER: None encountered.
STABILITY: Slight spalling.

Scale (approx)	Logged By	Figure No.
1:25	TM	LS8889.FE01

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Site	Trial Pit Number
The Studio, Nep Town Road, Henfield, BN5 9DY	FE02

Excavation Method	Dimensions	Ground Level (mOD)	Client	Job Number
Trial Pit			Susie Warner	LS8889
	Location	**Dates** 01/10/2025	**Engineer** Landscience	**Sheet** 1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
0.10	D		PID = 0.0ppm		(0.20) 0.20	Sparse vegetation over dark brown slightly gravelly slightly silty SAND. Sand is fine to coarse. Gravel is fine to medium sandstone and flint, rare brick, ash, charcoal/clinker, metal nail, ceramic tile and concrete. (MADE GROUND)		
0.40	D		PID = 0.0ppm		(0.40) 0.60	Loose brown slightly gravelly SAND. Sand is fine to coarse. Gravel is fine to medium flint with coal. (REWORKED GROUND) 0.20-0.60m: damp.		
						Complete at 0.60m		

Plan

Remarks

BACKFILL: Backfilled with arisings and bentonite sealing pellets.
STABILITY: Slight spalling.
GROUNDWATER: None.

Scale (approx)	Logged By	Figure No.
1:50	TM	LS8889.FE02

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Site
The Studio, Nep Town Road, Henfield, BN5 9DY

Trial Pit Number
TP01

Excavation Method
Trial Pit

Dimensions

Ground Level (mOD)

Client
Susie Warner

Job Number
LS8889

Location

Dates
07/10/2025

Engineer
Landscience

Sheet
1/1

Depth (m)	Sample / Tests	Water Depth (m)	Field Records	Level (mOD)	Depth (m) (Thickness)	Description	Legend	Water
					0.05	Pea shingle over Geotextile. (MADE GROUND)		
0.15	D		PID = 0.0ppm		(0.30)	Dark brown slightly silty slightly gravelly SAND. Sand is fine to coarse. Gravel is fine to coarse brick, concrete, ash, charcoal, ceramic tile, slate, chalk and glass. (MADE GROUND)		
					0.35			
0.50	D		PID = 0.1ppm		(0.45)	Loose yellow-orange to brown slightly gravelly silty SAND. Sand is fine to coarse brick, ash, charcoal and sandstone. (REWORKED GROUND)		
					0.80			
0.90	D		PID = 0.0ppm		(0.20)	Loose yellow-orange/brown to brown SAND. Sand is fine to medium. (FOLKESTONE FORMATION)		
					1.00	Complete at 1.00m		

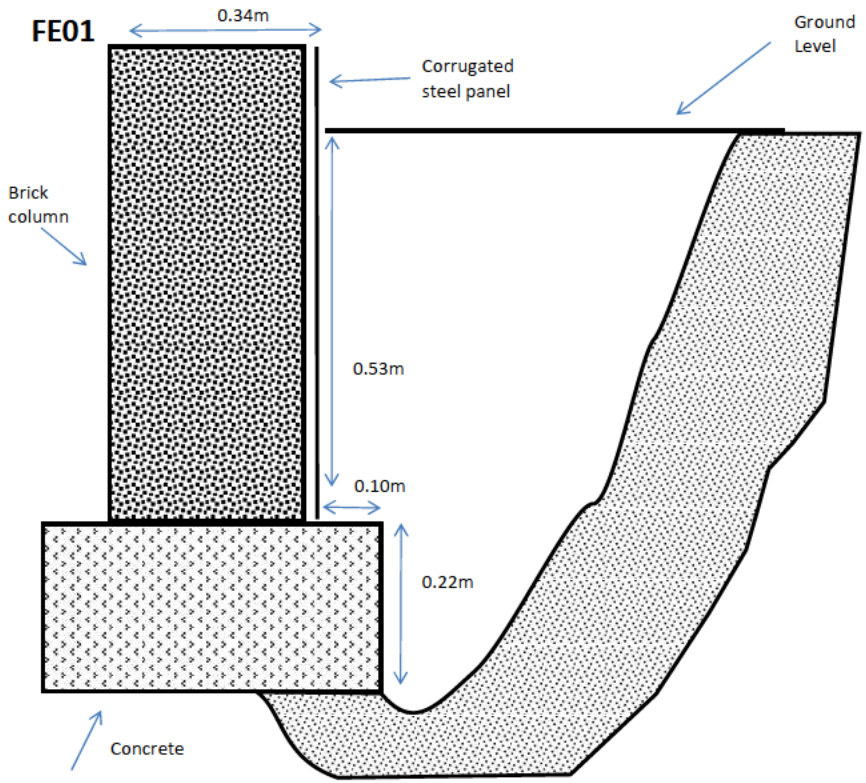
Plan

Remarks

BACKFILL: Backfilled with arisings and bentonite sealing pellets.
STABILITY: Stable.
GROUNDWATER: None encountered.

Scale (approx)	Logged By	Figure No.
1:25	TM	LS8889.TP01

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0 - 0.20m - Concrete

0.20 - 0.40m - Brown slightly gravelly slightly silty SAND. Sand is fine to coarse. Gravel is brick and charcoal and glass, with concrete fragments from above (MADE GROUND)

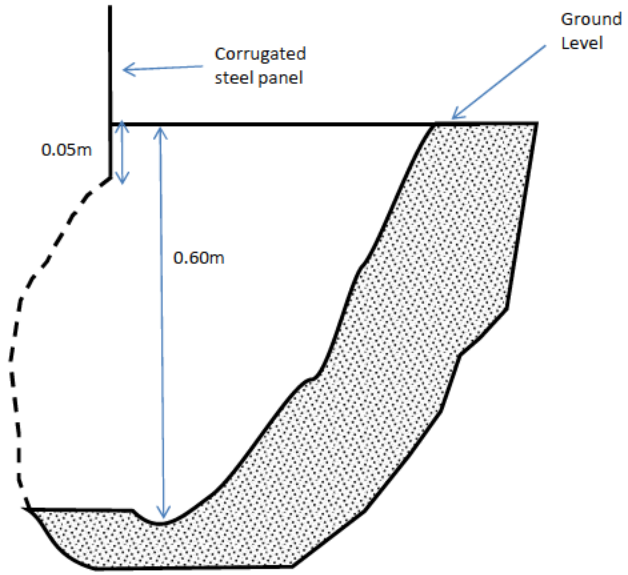
0.40 - 0.75m Loose brown to orange-brown slightly gravelly SAND. Sand is fine to medium. Gravel is

TITLE:	Foundation Exposures	**REF:**	LS8889	**PREPARED:**	JM
PROJECT:	The Studio, Nep Town Road, Henfield BN5 9DY	**VERSION:**	V1	**CHECKED:**	JM
CLIENT:	Susie Warner	**FIGURE:**	1	**DATE:**	23/10/2025

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FE02





0 - 0.20 - Sparse vegetation over dark brown slightly gravelly slightly silty SAND. Sand is fine to coarse. Gravel is fine to medium sandstone and flint, rare brick, ash, charcoal/clinker, metal nail, ceramic tile and concrete (MADE GROUND)

0.20 - 0.60 - Loose brown slightly gravelly SAND. Sand is fine to coarse. Gravel is fine to medium flint with coal. (REWORKED

TITLE:	Foundation Exposures	**REF:**	LS8889	**PREPARED:**	JM
PROJECT:	The Studio, Nep Town Road, Henfield BN5 9DY	**VERSION:**	V1	**CHECKED:**	JM
CLIENT:	Susie Warner	**FIGURE:**	2	**DATE:**	23/10/2025

Land Science

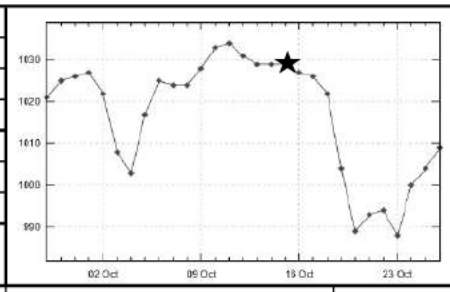
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TEL: 0845 604 6494 **FAX:** 01273 423 216 **EMAIL:** INFO@LANDSCIENCE.CO.UK

APPENDIX C

GROUND GAS AND GROUNDWATER MONITORING

Project:	The Studio	**Ref:**	LS8889
Date:	15/10/2025	**Visit:**	1/6
Engineer:	JM	**Check:**	MR
Weather:	Overcast	**Page:**	1 of 1

Atmospheric Pressure	**before:**	1024 mB	Time	3:15
	after:	1024 mB	Time	3:45
Published pressure trend:	Falling/steady high pressure. (Gatwick Airport)			
Remarks:	Equipment used: GFM 435, PhoCheck Tiger PID, Dipmeter			



Position	Flow (l/hr)		Common Gases (%)				VOC's (ppm)	Groundwater (m)				Remarks
	High	Low	Time	CO2	CH4	O2		LNAPL	Water	DNAPL	Base	
Calibration Check	0.0	0.0	15s	0.0	0.0	21.0	0.0	-	-	-	-	Calibration check passed
			30s	0.0	0.0	21.0						
			60s	0.0	0.0	21.0						
WS01	0.0	0.0	15s	2.2	0.0	18.9	0.0	-	Dry	-	3.84	Completely dry and no silt residue
			30s	2.2	0.0	17.6						
			60s	2.4	0.0	17.3						
			120s	2.5	0.0	17.1						
			180s	2.6	0.0	17.0						
			240s	2.7	0.0	16.9						
			300s	2.5	0.0	17.1						
WS02	0.0	0.0	15s	0.8	0.0	19.7	0.0	-	Dry	-	1.38	Completely dry and no silt residue
			30s	1.1	0.0	19.3						
			60s	1.1	0.0	19.2						
			120s	1.1	0.0	19.2						
			180s	1.1	0.0	19.2						
			240s	1.1	0.0	19.2						
			300s	1.1	0.0	19.2						
Calibration Check	0.0	0.0	15s	0.0	0.0	21.0	0.0	-	-	-	-	Calibration check passed
			30s	0.0	0.0	21.0						
			60s	0.0	0.0	21.0						

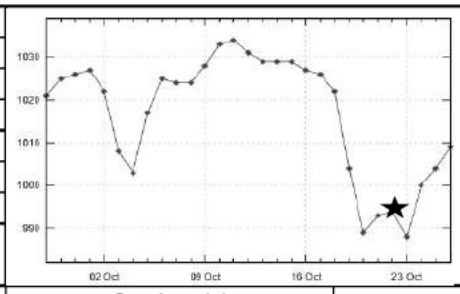
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GROUND GAS AND GROUNDWATER MONITORING

Project:	The Studio	**Ref:**	LS8889
Date:	22/10/2025	**Visit:**	2/6
Engineer:	JM	**Check:**	MR
Weather:	Overcast and damp	**Page:**	1 of 1

Atmospheric Pressure	**before:**	992 mB	Time	3:20
	after:	992 mB	Time	4:00
Published pressure trend:	Fluctuating low pressure. (Gatwick Airport)			
Remarks:	Equipment used: GFM 435, PhoCheck Tiger PID, Dipmeter			



Position	Flow (l/hr)		Common Gases (%)				VOC's (ppm)	Groundwater (m)				Remarks
	High	Low	Time	CO2	CH4	O2		LNAPL	Water	DNAPL	Base	
Calibration Check	0.0	0.0	15s	0.0	0.0	20.0	0.0	-	-	-	-	Calibration check passed
			30s	0.0	0.0	20.0						
			60s	0.0	0.0	20.0						
WS01	0.0	0.0	15s	0.9	0.0	19.1	0.0	-	3.80	-	3.85	Silt residue
			30s	0.8	0.0	19.3						
			60s	0.8	0.0	19.2						
			120s	0.7	0.0	19.4						
			180s	0.7	0.0	19.5						
			240s	0.6	0.0	19.6						
			300s	0.6	0.0	19.6						
WS02	0.0	0.0	15s	0.9	0.0	19.7	0.0	-	Dry	-	1.38	Completely dry and no silt residue
			30s	1.0	0.0	19.3						
			60s	1.0	0.0	19.2						
			120s	1.0	0.0	19.5						
			180s	1.0	0.0	19.2						
			240s	1.0	0.0	19.3						
			300s	0.9	0.0	19.3						
Calibration Check	0.0	0.0	15s	0.0	0.0	19.5	0.0	-	-	-	-	Calibration check passed
			30s	0.0	0.0	20.5						
			60s	0.0	0.0	20.5						

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APPENDIX D

SML Laboratories Ltd
Unit E1, Rosebury Business Park
Brampton Road
Eastbourne BN22 9BN
Tel: 01323 302280
Email: cs@sml-laboratories.co.uk

Analytical Report: 25-000185

Customer:	Land Science
Address:	Unit 10, Albert Drive, Burgess Hill, RH15 9TN
Name:	Jocelyn Middleton
Project:	The Studio, Henfield
Customer ref:	LS8889
Quote ref:	-
Sampling date:	07/10/2025
Samples received:	09/10/2025
Instructions received:	09/10/2025
Report issued:	16/10/2025
Report issue number:	2

Issue 2 – Amendment Note
Sample 2144 location ID corrected from TP02 to TP01.
This report supercedes Issue 1.

Report Approved By

[redacted]

Graham Knight – Laboratory Operations Manger

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Eastbourne BN22 9BN
sml-laboratories.co.uk

Sample Summary

Analytical Report: 25-000185 issue 2

SML No.	Client's Ref	Depth (m)	Date Sampled	Date Scheduled	Description	Deviations
2142	WS01	0.80	07/10/25	09/10/25	Loamy Sand	-
2143	TP01	0.15	07/10/25	09/10/25	Loamy Sand	-
2144	TP01	0.50	07/10/25	09/10/25	Loamy Sand	-
2145	FE02	0.10	07/10/25	09/10/25	Loamy Sand	-

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Analytical Report: 25-000185 issue 2

SML Ref	2142	2143	2144	2145
Customer Ref	-	-	-	-
Sample ID	-	-	-	-
Sample Type	Soil	Soil	Soil	Soil
Sample Location	WS01	TP01	TP01	FE02
Sample Depth (m)	0.80	0.15	0.50	0.10
Sampling Date	07/10/25	07/10/25	07/10/25	07/10/25

Determinant	Codes	Units	LOD				
Soil preparation parameters							
Moisture Content	N	%	0.1	14.2	13.1	11.5	14.5
Material removed	N	%	0.1	2.70	17.2	20.3	37.8
Description of inert material removed	N	N/A	N/A	Stones	Stones, Clinker	Stones, Clinker	Stones, Clinker
Metals							
Beryllium	N	mg/kg	0.5	0.66	1.39	0.83	0.80
Vanadium	N	mg/kg	1	56.3	62.5	54.9	36.2
Chromium	N	mg/kg	1	24.7	26.6	22.6	24.7
Nickel	N	mg/kg	1	9.83	19.4	12.3	13.7
Copper	N	mg/kg	1	13.3	147	54.3	47.2
Zinc	N	mg/kg	1	153	320	204	4450
Arsenic	N	mg/kg	1	13.9	21.3	16.3	13.4
Selenium	N	mg/kg	1	<1.0	1.63	1.10	1.86
Cadmium	N	mg/kg	0.5	<0.5	0.63	<0.5	4.87
Barium	N	mg/kg	1	64.7	205	123	479
Mercury	N	mg/kg	0.5	<0.5	1.11	1.03	<0.5
Lead	N	mg/kg	1	68.3	602	269	1230
Inorganics							
Total Cyanide	N	mg/kg	1	<1.0	<1.0	<1.0	5.42
Hexavalent Chromium	N	mg/kg	5	<5.0	<5.0	<5.0	<5.0
Fraction Organic Carbon	N	%	0.005	0.007	0.12	0.008	0.026
Sulphide	N	mg/kg	2	<2.0	<2.0	<2.0	<2.0
Water Soluble Boron	N	mg/kg	0.02	0.26	0.51	0.40	0.36
Miscellaneous							
pH	N	pH Units	0.01	7.04	6.82	6.59	7.13
Water Soluble Sulphate (2:1)	N	mg/kg	40	<40.0	<40.0	<40.0	<40.0
Water Soluble Sulphate (2:1)	N	g/l	0.02	<0.02	<0.02	<0.02	<0.02
Water Soluble Sulphate (2:1)	N	mg/l	20	<20.0	<20.0	<20.0	<20.0

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Analytical Report: 25-000185 issue 2

SML Ref	2142	2143	2144	2145
Customer Ref	-	-	-	-
Sample ID	-	-	-	-
Sample Type	Soil	Soil	Soil	Soil
Sample Location	WS01	TP01	TP01	FE02
Sample Depth (m)	0.80	0.15	0.50	0.10
Sampling Date	07/10/25	07/10/25	07/10/25	07/10/25

Determinant	Codes	Units	LOD				
Phenols							
Phenol	N	mg/kg	1	<1.0	<1.0	<1.0	<1.0
M,P-Cresol	N	mg/kg	1	<1.0	<1.0	<1.0	<1.0
O-Cresol	N	mg/kg	1	<1.0	<1.0	<1.0	<1.0
3,4-Dimethylphenol	N	mg/kg	1	<1.0	<1.0	<1.0	<1.0
2,3-Dimethyphenol	N	mg/kg	1	<1.0	<1.0	<1.0	<1.0
Napthol	N	mg/kg	1	<1.0	<1.0	<1.0	<1.0
2,3,5-Trimethylphenol	N	mg/kg	1	<1.0	<1.0	<1.0	<1.0
Total Monohydric Phenols	N	mg/kg	7	<7.0	<7.0	<7.0	<7.0
Polyaromatic Hydrocarbons							
Napthalene	N	mg/kg	0.02	<0.02	<0.02	<0.02	<0.02
Acenaphthylene	N	mg/kg	0.02	0.46	0.19	0.11	1.08
Acenaphthene	N	mg/kg	0.02	<0.02	<0.02	<0.02	0.27
Fluorene	N	mg/kg	0.02	<0.02	<0.02	<0.02	0.38
Phenanthrene	N	mg/kg	0.02	3.60	0.69	0.23	7.78
Anthracene	N	mg/kg	0.02	<0.02	<0.02	<0.02	3.14
Fluoranthene	N	mg/kg	0.02	9.47	2.15	0.89	28.5
Pyrene	N	mg/kg	0.02	<0.02	1.87	0.69	26.1
Benzo(a)anthracene	N	mg/kg	0.02	4.62	1.51	0.99	19.9
Chrysene	N	mg/kg	0.02	<0.02	1.71	1.24	17.2
Benzo(b)fluoranthene	N	mg/kg	0.02	5.60	1.92	1.21	27.0
Benzo(k)fluoranthene	N	mg/kg	0.02	2.81	0.98	0.54	14.3
Benzo(a)pyrene	N	mg/kg	0.02	6.18	<0.02	0.99	28.1
Indeno(1,2,3-cd)pyrene	N	mg/kg	0.02	4.90	1.76	1.01	21.4
Dibenzo(a,h)anthracene	N	mg/kg	0.02	1.72	0.54	0.43	6.18
Benzo[g,h,i]perylene	N	mg/kg	0.02	3.58	1.43	0.90	19.4
Coronene	N	mg/kg	0.02	1.21	0.39	<0.02	<0.02
Total PAH(17)	N	mg/kg	0.34	44.2	15.1	9.22	221

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Analytical Report: 25-000185 issue 2

SML Ref	2142	2143	2144	2145
Customer Ref	-	-	-	-
Sample ID	-	-	-	-
Sample Type	Soil	Soil	Soil	Soil
Sample Location	WS01	TP01	TP01	FE02
Sample Depth (m)	0.80	0.15	0.50	0.10
Sampling Date	07/10/25	07/10/25	07/10/25	07/10/25

Determinant	Codes	Units	LOD				
TPH CWG							
TPH CWG - Aliphatic (>C5 - C7)	N	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05
TPH CWG - Aliphatic (C7 - C8)	N	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05
TPH CWG - Aliphatic (C8 - C10)	N	mg/kg	0.05	0.09	0.87	0.12	0.43
TPH CWG - Aliphatic (C10 - C12)	N	mg/kg	2	<2.0	<2.0	<2.0	<2.0
TPH CWG - Aliphatic (C12 - C16)	N	mg/kg	2	0.81	<2.0	<2.0	7.11
TPH CWG - Aliphatic (C16 - C21)	N	mg/kg	10	10.1	<10	<10	45.3
TPH CWG - Aliphatic (C21 – C35)	N	mg.kg	10	19.2	13.7	11.9	158
TPH CWG - Aliphatic (C35 – C40)	N	mg.kg	10	<10	<10	<10	33.8
TPH CWG - Aromatic (>C5 - C7)	N	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05
TPH CWG - Aromatic (C7 - C8)	N	mg/kg	0.05	<0.05	<0.05	<0.05	<0.05
TPH CWG - Aromatic (C8 - C10)	N	mg/kg	0.05	0.91	0.66	1.01	0.32
TPH CWG - Aromatic (C10 - C12)	N	mg/kg	2	<2.0	<2.0	<2.0	<2.0
TPH CWG - Aromatic (C12 - C16)	N	mg/kg	2	3.67	<2.0	<2.0	4.56
TPH CWG - Aromatic (C16 - C21)	N	mg/kg	10	70.9	<10	<10	109
TPH CWG - Aromatic (C21 – C35)	N	mg/kg	10	206	41.6	30.3	606
TPH CWG - Aromatic (C35 – C40)	N	mg/kg	10	15.3	<10	<10	93.0
TPH CWG Total - Aliphatic (>C5-C40)	N	mg/kg	10	30.2	14.6	12.0	245
TPH CWG Total - Aromatic (>C5-C40)	N	mg/kg	10	297	42.3	31.3	813
VOC							
Benzene	N	ug/kg	0.01	<0.01	<0.01	<0.01	<0.01
Toluene	N	ug/kg	0.01	<0.01	<0.01	<0.01	<0.01
Ethylbenzene	N	ug/kg	0.01	<0.01	<0.01	<0.01	<0.01
m&p Xylene	N	ug/kg	0.02	<0.02	<0.02	<0.02	<0.02
o-Xylene	N	ug/kg	0.01	<0.01	<0.01	<0.01	<0.01
MTBE	N	ug/kg	0.01	<0.01	<0.01	<0.01	<0.01
Total BTEX	N	ug/kg	0.07	<0.07	<0.07	<0.07	<0.07

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Analytical Report: 25-000185 issue 2

WAC Analysis

SML Ref:	2142				Landfill WAC Limits*		
Sample Date:	07/10/2025				Inert Waste Landfill	Stable non-Reactive Hazardous Waste in non-Hazardous Landfill	Hazardous Waste Landfill
Sample ID:	WS01						
Depth (m):	0.80						
Site:	The Studio, Henfield						
Determinand	**Code**	**Units**					
Total Organic Carbon	N	%		0.7	3	5	6
Loss on Ignition	N	%		1.86	-	-	10
Total BTEX	N	mg/kg		<0.07	6	-	-
Total PCB (7 congeners)	N	mg/kg		<0.28	1	-	-
TPH Total WAC (EH_CU_1D_Total)	N	mg/kg		<10.0	500	-	-
pH	N	Units		7.04	-	>6	-
Acid Neutralisation Capacity	N	mol/kg		0.05	-	-	-
Eluate Analysis		**10:1**		**10:1**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
		mg/l		**mg/kg**			
Arsenic	N	0.0012		0.012	0.5	2	25
Barium	N	0.0027		0.027	20	100	300
Cadmium	N	<0.0005		<0.005	0.04	1	5
Chromium	N	<0.0005		<0.005	0.5	10	70
Copper	N	0.0015		0.015	2	50	100
Mercury	N	<0.0001		<0.001	0.01	0.2	2
Molybdenum	N	<0.0005		<0.005	0.5	10	30
Nickel	N	<0.0005		<0.005	0.4	10	40
Lead	N	<0.0005		<0.005	0.5	10	50
Antimony	N	<0.001		<0.01	0.06	0.7	5
Selenium	N	<0.001		<0.01	0.1	0.5	7
Zinc	N	0.0056		0.056	4	50	200
Chloride	N	0.42		4.20	800	15000	25000
Fluoride	N	0.72		7.20	10	150	500
Sulphate	N	1.3		13.0	1000	20000	50000
Total Dissolved Solids	N	26.3		263	4000	60000	100000
Phenol Index	N	<0.1		<1	1	-	25
Dissolved Organic Carbon	N	10.5		105	500	800	1000

Results are expressed on a dry weight basis, after correction for moisture content where applicable.

*Stated limits are for guidance only, and not for conformity assessment.

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Analytical Report: 25-000185 issue 2

WAC Analysis

SML Ref:	2143				Landfill WAC Limits*		
Sample Date:	07/10/2025				Inert Waste Landfill	Stable non-Reactive Hazardous Waste in non-Hazardous Landfill	Hazardous Waste Landfill
Sample ID:	TP01						
Depth (m):	0.15						
Site:	The Studio, Henfield						
Determinand	**Code**	**Units**					
Total Organic Carbon	N	%		1.2	3	5	6
Loss on Ignition	N	%		3.39	-	-	10
Total BTEX	N	mg/kg		<0.07	6	-	-
Total PCB (7 congeners)	N	mg/kg		<0.28	1	-	-
TPH Total WAC (EH_CU_1D_Total)	N	mg/kg		<10.0	500	-	-
pH	N	Units		6.82	-	>6	-
Acid Neutralisation Capacity	N	mol/kg		N/A	-	-	-
Eluate Analysis		**10:1**		**10:1**	**Limit values for compliance leaching test using BS EN 12457-2 at L/S 10 l/kg**		
		mg/l		**mg/kg**			
Arsenic	N	0.0016		0.016	0.5	2	25
Barium	N	0.0027		0.027	20	100	300
Cadmium	N	<0.0005		<0.005	0.04	1	5
Chromium	N	<0.0005		<0.005	0.5	10	70
Copper	N	0.0015		0.015	2	50	100
Mercury	N	<0.0001		<0.001	0.01	0.2	2
Molybdenum	N	<0.0005		<0.005	0.5	10	30
Nickel	N	<0.0005		<0.005	0.4	10	40
Lead	N	<0.0005		<0.005	0.5	10	50
Antimony	N	<0.001		<0.001	0.06	0.7	5
Selenium	N	<0.001		<0.01	0.1	0.5	7
Zinc	N	0.0056		0.056	4	50	200
Chloride	N	<0.5		<5.0	800	15000	25000
Fluoride	N	<0.5		<5.0	10	150	500
Sulphate	N	1.22		12.2	1000	20000	50000
Total Dissolved Solids	N	37.0		370	4000	60000	100000
Phenol Index	N	<0.1		<1	1	-	25
Dissolved Organic Carbon	N	9.87		98.7	500	800	1000

Results are expressed on a dry weight basis, after correction for moisture content where applicable.

*Stated limits are for guidance only, and not for conformity assessment.

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Asbestos Screening

SML Sample Reference	Client Reference	Depth (m)	Sample Matrix Description	Asbestos Identification	Gravimetric Analysis Total %	Gravimetric Analysis by ACM Type %	Free fibre Analysis %	Total Asbestos %
2142	WS01	0.8	Soil	NAD	N/T	N/T	N/T	N/T
2143	TP01	0.15	Soil	NAD	N/T	N/T	N/T	N/T
2144	TP01	0.5	Soil	NAD	N/T	N/T	N/T	N/T
2145	FE02	0.1	Soil	NAD	N/T	N/T	N/T	N/T

NAD - No Asbestos Detected
N/T - Not tested

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Analytical Report: 25-000185 issue 2

Method Summary

Soil					
Parameter	Codes	Undertaken On	Date Tested	Method Number	Technique
pH value	N	Air dried sample	16/10/2025	105	Electrometric
Water Soluble Sulphate	N	Air dried sample	16/10/2025	130	Ion Chromatography
Total Cyanide	N	As submitted sample	15/10/2025	137	Colorimetric
Phenols	N	As submitted sample	15/10/2025	111	HPLC
Asbestos ID	SU	Subcontracted	17/10/2025	Subcontracted	Microscopy
Loss On Ignition	N	Air dried sample	16/10/2025	115	Gravimetric
Acid Neutralisation Capacity	N	Air dried sample	16/10/2025	150	Electrometric
Hexavalent Chromium	N	As submitted sample	15/10/2025	103	Discrete Analyser
Total (of 16) PAH	N	As submitted sample	15/10/2025	116	GC-MS
Total BTEX	N	As submitted sample	16/10/2025	134	GC-MS
Sulphide	N	As submitted sample	09/10/2025	117	Discrete Analyser
TOC	N	Air dried sample	16/10/2025	139	Titration
TPH CWG	N	As submitted sample	15/10/2025	128	GC-FID
Water Soluble Boron	N	Air dried sample	16/10/2025	136	Discrete Analyser
Total Metals	N	Air dried sample	16/10/2025	148	ICP-MS
PCB 7 Congeners	N	Air dried sample	16/10/2025	110	GC-MS
Mineral Oil (EH_CU_1D-Total)	N	As submitted sample	15/10/2025	128	GC-FID

Leachate					
Parameter	Codes	Undertaken On	Date Tested	Method Number	Technique
Anions	N	10:1 WAC leachate	16/10/25	152	Ion Chromatography
Dissolved Metals	N	10:1 WAC leachate	16/10/25	149	ICP-MS
Phenols	N	10:1 WAC leachate	16/10/25	111	HPLC
Electrical Conductivity	N	10:1 WAC leachate	16/10/25	118	Probe
DOC	N	10:1 WAC leachate	16/10/25	101	TOC Analyser
TDS	N	10:1 WAC leachate	16/10/25	In-House	Calculation

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Analytical Report: 25-000185 issue 2

Key

Symbol	Description
U	Hold UKAS accreditation
M	Hold MCERTS accreditation
N	Not accredited
NS	Sample matrix not UKAS accredited
NM	Sample matrix not MCERTS accredited
SU	Subcontracted to a UKAS accredited laboratory
SM	Subcontracted to an MCERTS accredited laboratory
IS	Insufficient sample
US	Unsuitable sample
NT	Not tested
NAD	No asbestos detected
<	Less than
>	Greater than

Soil samples are expressed on an air dried <30°C basis and are **not** corrected for inert material removed.

LOD refers to limit of detection, except in the case of pH where it refers to limit of discrimination.

Waste Classification Report

HazWasteOnline™ classifies waste as either **hazardous** or **non-hazardous** based on its chemical composition, related legislation and the rules and data defined in the current UK or EU technical guidance (Appendix C) (note that HP 9 Infectious is not assessed). It is the responsibility of the classifier named below to:

a) understand the origin of the waste
b) select the correct List of Waste code(s)
c) confirm that the list of determinands, results and sampling plan are fit for purpose
d) select and justify the chosen metal species (Appendix B)
e) correctly apply moisture correction and other available corrections
f) add the meta data for their user-defined substances (Appendix A)
g) check that the classification engine is suitable with respect to the national destination of the waste (Appendix C)

To aid the reviewer, the laboratory results, assumptions and justifications managed by the classifier are highlighted in pale yellow.

4P3YI-JYYNG-OBP1C

Report is invalid if pages are removed.

Job name

LS8889

Description/Comments

Project

LS8889

Site

The Studio

Classified by

Name:
Jos Middleton
Date:
23 Oct 2025 07:16 GMT
Telephone:
01444 712 870

Company:
SML Laboratories
Unit 10, 19 Albert Drive
Burgess Hill
RH15 9TN.

HazWasteOnline™ provides a two day, hazardous waste classification course that covers the use of the software and both basic and advanced waste classification techniques. Certification has to be renewed every 3 years.

HazWasteOnline™ Certification: -

Course	Date
Hazardous Waste Classification	-

Purpose of classification

2 - Material Characterisation

Address of the waste

The Studio, Nep Town Road, Henfield **Post Code** BN5 9DY

SIC for the process giving rise to the waste

Description of industry/producer giving rise to the waste

Redevelopment for dwelling with garden

Description of the specific process, sub-process and/or activity that created the waste

Waste from excavations and foundations

Description of the waste

Made Ground: slightly silty (locally slightly) gravelly Sand with brick, concrete, ash, charcoal, clinker, ceramic tile, slate, hardcore, flint, chalk and glass. Reworked Ground: slightly gravelly (locally slightly) silty Sand with brick, ash, charcoal, metal, flint sandstone and ironstone.

Job summary

#	Sample name	Depth [m]	Classification Result	Hazard properties	Page
1	WS01	0.8	Non Hazardous		3
2	TP01	0.15	Non Hazardous		6
3	TP01[2]	0.5	Non Hazardous		9
4	FE02	0.1	Hazardous	HP 3(i), HP 7, HP 11, HP 14	12

Related documents

#	Name	Description
1	Land Science Template WM3 v1.2GB	waste stream template used to create this Job

Report

Created by: Jos Middleton

Created date: 23 Oct 2025 07:16 GMT

Appendices	Page
Appendix A: Classifier defined and non GB MCL determinands	15
Appendix B: Rationale for selection of metal species	17
Appendix C: Version	17

Classification of sample: WS01

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

Sample details

Sample name:
WS01
Sample Depth:
0.8 m
Moisture content:
14.2%
(no correction)

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

Hazard properties

None identified

Determinands

Moisture content: 14.2% No Moisture Correction applied (MC)

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
1	●	pH			PH		7.04	pH		7.04	pH	7.04 pH		
2		phenol	604-001-00-2	203-632-7	108-95-2		<7	mg/kg		<7	mg/kg	<0.0007 %		<LOD
3		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
4	●	acenaphthylene		205-917-1	208-96-8		0.46	mg/kg		0.46	mg/kg	0.000046 %		
5	●	acenaphthene		201-469-6	83-32-9		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
6	●	fluorene		201-695-5	86-73-7		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
7	●	phenanthrene		201-581-5	85-01-8		3.6	mg/kg		3.6	mg/kg	0.00036 %		
8	●	anthracene		204-371-1	120-12-7		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
9	●	fluoranthene		205-912-4	206-44-0		9.47	mg/kg		9.47	mg/kg	0.000947 %		
10	●	pyrene		204-927-3	129-00-0		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
11		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		4.62	mg/kg		4.62	mg/kg	0.000462 %		
12		chrysene	601-048-00-0	205-923-4	218-01-9		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
13		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		5.6	mg/kg		5.6	mg/kg	0.00056 %		
14		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		2.81	mg/kg		2.81	mg/kg	0.000281 %		
15		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		6.18	mg/kg		6.18	mg/kg	0.000618 %		
16	●	indeno[123-cd]pyrene		205-893-2	193-39-5		4.9	mg/kg		4.9	mg/kg	0.00049 %		
17		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		1.72	mg/kg		1.72	mg/kg	0.000172 %		

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
18		benzo[ghi]perylene		205-883-8	191-24-2		3.58	mg/kg		3.58	mg/kg	0.000358 %		
19		coronene		205-881-7	191-07-1		1.21	mg/kg		1.21	mg/kg	0.000121 %		
20		arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		13.9	mg/kg	1.32	18.353	mg/kg	0.00184 %		
21		barium { barium oxide }		215-127-9	1304-28-5		64.7	mg/kg	1.117	72.238	mg/kg	0.00722 %		
22		beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		0.66	mg/kg	2.775	1.832	mg/kg	0.000183 %		
23		boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.26	mg/kg	3.22	0.837	mg/kg	0.0000837 %		
24		cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		<0.5	mg/kg	1.142	<0.571	mg/kg	<0.0000571 %		<LOD
25		chromium in Cr(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<5	mg/kg	1.923	<9.616	mg/kg	<0.000962 %		<LOD
26		copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		13.3	mg/kg	1.126	14.974	mg/kg	0.0015 %		
27		lead { lead compounds with the exception of those specified elsewhere in this Annex }	082-001-00-6			1	68.3	mg/kg		68.3	mg/kg	0.00683 %		
28		mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		<0.5	mg/kg	1.353	<0.677	mg/kg	<0.0000677 %		<LOD
29		nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		9.83	mg/kg	2.976	29.257	mg/kg	0.00293 %		
30		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				<1	mg/kg	1.405	<1.405	mg/kg	<0.000141 %		<LOD
31		vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		56.3	mg/kg	1.785	100.506	mg/kg	0.0101 %		
32		zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		153	mg/kg	1.245	190.441	mg/kg	0.019 %		
33		benzene	601-020-00-8	200-753-7	71-43-2		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
34		toluene	601-021-00-3	203-625-9	108-88-3		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
35		ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
36		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
37		TPH (C6 to C40) petroleum group			TPH		327.2	mg/kg		327.2	mg/kg	0.0327 %		
38		polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.28	mg/kg		<0.28	mg/kg	<0.000028 %		<LOD
											Total:	0.0868 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
<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 for cumulative determinand results below the threshold of: 500 mg/kg (0.05%) because: PID recorded VOC <1ppm

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group (conc.: 0.0327%)

Classification of sample: TP01

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

Sample details

Sample name:
TP01
Sample Depth:
0.15 m
Moisture content:
13.1%
(no correction)

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

Hazard properties

None identified

Determinands

Moisture content: 13.1% No Moisture Correction applied (MC)

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	●	pH			PH		6.82 pH		6.82 pH	6.82 pH		
2		phenol	604-001-00-2	203-632-7	108-95-2		<7 mg/kg		<7 mg/kg	<0.0007 %		<LOD
3		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
4	●	acenaphthylene		205-917-1	208-96-8		0.19 mg/kg		0.19 mg/kg	0.000019 %		
5	●	acenaphthene		201-469-6	83-32-9		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
6	●	fluorene		201-695-5	86-73-7		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
7	●	phenanthrene		201-581-5	85-01-8		0.69 mg/kg		0.69 mg/kg	0.000069 %		
8	●	anthracene		204-371-1	120-12-7		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
9	●	fluoranthene		205-912-4	206-44-0		2.15 mg/kg		2.15 mg/kg	0.000215 %		
10	●	pyrene		204-927-3	129-00-0		1.87 mg/kg		1.87 mg/kg	0.000187 %		
11		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		1.51 mg/kg		1.51 mg/kg	0.000151 %		
12		chrysene	601-048-00-0	205-923-4	218-01-9		1.71 mg/kg		1.71 mg/kg	0.000171 %		
13		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		1.92 mg/kg		1.92 mg/kg	0.000192 %		
14		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		0.98 mg/kg		0.98 mg/kg	0.000098 %		
15		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
16	●	indeno[123-cd]pyrene		205-893-2	193-39-5		1.76 mg/kg		1.76 mg/kg	0.000176 %		
17		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		0.54 mg/kg		0.54 mg/kg	0.000054 %		

#	Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
18	benzo[ghi]perylene		205-883-8	191-24-2		1.43 mg/kg		1.43 mg/kg	0.000143 %		
19	coronene		205-881-7	191-07-1		0.39 mg/kg		0.39 mg/kg	0.000039 %		
20	arsenic { arsenic trioxide }	033-003-00-0	215-481-4	1327-53-3		21.3 mg/kg	1.32	28.123 mg/kg	0.00281 %		
21	barium { barium oxide }		215-127-9	1304-28-5		205 mg/kg	1.117	228.884 mg/kg	0.0229 %		
22	beryllium { beryllium oxide }	004-003-00-8	215-133-1	1304-56-9		1.39 mg/kg	2.775	3.858 mg/kg	0.000386 %		
23	boron { diboron trioxide; boric oxide }	005-008-00-8	215-125-8	1303-86-2		0.51 mg/kg	3.22	1.642 mg/kg	0.000164 %		
24	cadmium { cadmium oxide }	048-002-00-0	215-146-2	1306-19-0		0.63 mg/kg	1.142	0.72 mg/kg	0.000072 %		
25	chromium in Cr(VI) compounds { chromium(VI) oxide }	024-001-00-0	215-607-8	1333-82-0		<5 mg/kg	1.923	<9.616 mg/kg	<0.000962 %		<LOD
26	copper { dicopper oxide; copper (I) oxide }	029-002-00-X	215-270-7	1317-39-1		147 mg/kg	1.126	165.506 mg/kg	0.0166 %		
27	lead { lead compounds with the exception of those specified elsewhere in this Annex }	082-001-00-6			1	602 mg/kg		602 mg/kg	0.0602 %		
28	mercury { mercury dichloride }	080-010-00-X	231-299-8	7487-94-7		1.11 mg/kg	1.353	1.502 mg/kg	0.00015 %		
29	nickel { nickel chromate }	028-035-00-7	238-766-5	14721-18-7		19.4 mg/kg	2.976	57.74 mg/kg	0.00577 %		
30	selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }	034-002-00-8				1.63 mg/kg	1.405	2.29 mg/kg	0.000229 %		
31	vanadium { divanadium pentaoxide; vanadium pentoxide }	023-001-00-8	215-239-8	1314-62-1		62.5 mg/kg	1.785	111.574 mg/kg	0.0112 %		
32	zinc { zinc oxide }	030-013-00-7	215-222-5	1314-13-2		320 mg/kg	1.245	398.308 mg/kg	0.0398 %		
33	benzene	601-020-00-8	200-753-7	71-43-2		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
34	toluene	601-021-00-3	203-625-9	108-88-3		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
35	ethylbenzene	601-023-00-4	202-849-4	100-41-4		<0.01 mg/kg		<0.01 mg/kg	<0.000001 %		<LOD
36	o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]	601-022-00-9	202-422-2 [1] 203-396-5 [2] 203-576-3 [3] 215-535-7 [4]	95-47-6 [1] 106-42-3 [2] 108-38-3 [3] 1330-20-7 [4]		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
37	TPH (C6 to C40) petroleum group			TPH		56.9 mg/kg		56.9 mg/kg	0.00569 %		
38	polychlorobiphenyls; PCB	602-039-00-4	215-648-1	1336-36-3		<0.28 mg/kg		<0.28 mg/kg	<0.000028 %		<LOD
								Total:	0.167 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
<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 for cumulative determinand results below the threshold of: 500 mg/kg (0.05%) because: PID recorded VOC <1ppm

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group (conc.: 0.00569%)

Classification of sample: TP01[2]

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

Sample details

Sample name:
TP01[2]
Sample Depth:
0.5 m
Moisture content:
11.5%
(no correction)

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

Hazard properties

None identified

Determinands

Moisture content: 11.5% No Moisture Correction applied (MC)

#		Determinand	EU CLP index number	EC Number	CAS Number	CLP Note	User entered data	Conv. Factor	Compound conc.	Classification value	MC Applied	Conc. Not Used
1	●	pH			PH		6.59 pH		6.59 pH	6.59 pH		
2		phenol	604-001-00-2	203-632-7	108-95-2		<7 mg/kg		<7 mg/kg	<0.0007 %		<LOD
3		naphthalene	601-052-00-2	202-049-5	91-20-3		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
4	●	acenaphthylene		205-917-1	208-96-8		0.11 mg/kg		0.11 mg/kg	0.000011 %		
5	●	acenaphthene		201-469-6	83-32-9		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
6	●	fluorene		201-695-5	86-73-7		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
7	●	phenanthrene		201-581-5	85-01-8		0.23 mg/kg		0.23 mg/kg	0.000023 %		
8	●	anthracene		204-371-1	120-12-7		<0.02 mg/kg		<0.02 mg/kg	<0.000002 %		<LOD
9	●	fluoranthene		205-912-4	206-44-0		0.89 mg/kg		0.89 mg/kg	0.000089 %		
10	●	pyrene		204-927-3	129-00-0		0.69 mg/kg		0.69 mg/kg	0.000069 %		
11		benzo[a]anthracene	601-033-00-9	200-280-6	56-55-3		0.99 mg/kg		0.99 mg/kg	0.000099 %		
12		chrysene	601-048-00-0	205-923-4	218-01-9		1.24 mg/kg		1.24 mg/kg	0.000124 %		
13		benzo[b]fluoranthene	601-034-00-4	205-911-9	205-99-2		1.21 mg/kg		1.21 mg/kg	0.000121 %		
14		benzo[k]fluoranthene	601-036-00-5	205-916-6	207-08-9		0.54 mg/kg		0.54 mg/kg	0.000054 %		
15		benzo[a]pyrene; benzo[def]chrysene	601-032-00-3	200-028-5	50-32-8		0.99 mg/kg		0.99 mg/kg	0.000099 %		
16	●	indeno[123-cd]pyrene		205-893-2	193-39-5		1.01 mg/kg		1.01 mg/kg	0.000101 %		
17		dibenz[a,h]anthracene	601-041-00-2	200-181-8	53-70-3		0.43 mg/kg		0.43 mg/kg	0.000043 %		

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
18		benzo[ghi]perylene				0.9	mg/kg		0.9	mg/kg	0.00009 %		
			205-883-8	191-24-2									
19		coronene				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<LOD
			205-881-7	191-07-1									
20		arsenic { arsenic trioxide }				16.3	mg/kg	1.32	21.521	mg/kg	0.00215 %		
		033-003-00-0	215-481-4	1327-53-3									
21		barium { barium oxide }				123	mg/kg	1.117	137.33	mg/kg	0.0137 %		
			215-127-9	1304-28-5									
22		beryllium { beryllium oxide }				0.83	mg/kg	2.775	2.304	mg/kg	0.00023 %		
		004-003-00-8	215-133-1	1304-56-9									
23		boron { diboron trioxide; boric oxide }				0.4	mg/kg	3.22	1.288	mg/kg	0.000129 %		
		005-008-00-8	215-125-8	1303-86-2									
24		cadmium { cadmium oxide }				<0.5	mg/kg	1.142	<0.571	mg/kg	<0.0000571 %		<LOD
		048-002-00-0	215-146-2	1306-19-0									
25		chromium in Cr(VI) compounds { chromium(VI) oxide }				<5	mg/kg	1.923	<9.616	mg/kg	<0.000962 %		<LOD
		024-001-00-0	215-607-8	1333-82-0									
26		copper { dicopper oxide; copper (I) oxide }				54.3	mg/kg	1.126	61.136	mg/kg	0.00611 %		
		029-002-00-X	215-270-7	1317-39-1									
27		lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	269	mg/kg		269	mg/kg	0.0269 %		
		082-001-00-6											
28		mercury { mercury dichloride }				1.03	mg/kg	1.353	1.394	mg/kg	0.000139 %		
		080-010-00-X	231-299-8	7487-94-7									
29		nickel { nickel chromate }				12.3	mg/kg	2.976	36.608	mg/kg	0.00366 %		
		028-035-00-7	238-766-5	14721-18-7									
30		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				1.1	mg/kg	1.405	1.546	mg/kg	0.000155 %		
		034-002-00-8											
31		vanadium { divanadium pentaoxide; vanadium pentoxide }				54.9	mg/kg	1.785	98.007	mg/kg	0.0098 %		
		023-001-00-8	215-239-8	1314-62-1									
32		zinc { zinc oxide }				204	mg/kg	1.245	253.922	mg/kg	0.0254 %		
		030-013-00-7	215-222-5	1314-13-2									
33		benzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-021-00-3	203-625-9	108-88-3									
35		ethylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<LOD
		601-023-00-4	202-849-4	100-41-4									
36		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<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]									
37		TPH (C6 to C40) petroleum group				43.3	mg/kg		43.3	mg/kg	0.00433 %		
				TPH									
										Total:	0.0937 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
<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 for cumulative determinand results below the threshold of: 500 mg/kg (0.05%) because: PID recorded VOC <1ppm

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group (conc.: 0.00433%)

Classification of sample: FE02

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

Sample details

Sample name:	LoW Code:	
FE02	Chapter:	17: Construction and Demolition Wastes (including excavated soil from contaminated sites)
Sample Depth:		
0.1 m	Entry:	17 05 03 * (Soil and stones containing hazardous substances)
Moisture content:		
14.5% (no correction)		

Hazard properties

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

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group (conc.: 0.106%)

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

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group (conc.: 0.106%)

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

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group (conc.: 0.106%)

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

Hazard Statements hit:

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

Because of determinands:

lead compounds with the exception of those specified elsewhere in this Annex (Note 1 conc.: 0.123%)
zinc oxide (compound conc.: 0.554%)

Determinands

Moisture content: 14.5% No Moisture Correction applied (MC)

#	Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
	EU CLP index number	EC Number	CAS Number									
1	pH		PH		7.13	pH		7.13	pH	7.13 pH		
2	phenol											
	604-001-00-2	203-632-7	108-95-2		<7	mg/kg		<7	mg/kg	<0.0007 %		<**LOD**
3	naphthalene											
	601-052-00-2	202-049-5	91-20-3		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
4	acenaphthylene											
		205-917-1	208-96-8		1.08	mg/kg		1.08	mg/kg	0.000108 %		
5	acenaphthene											
		201-469-6	83-32-9		0.27	mg/kg		0.27	mg/kg	0.000027 %		
6	fluorene											
		201-695-5	86-73-7		0.38	mg/kg		0.38	mg/kg	0.000038 %		
7	phenanthrene											
		201-581-5	85-01-8		7.78	mg/kg		7.78	mg/kg	0.000778 %		
8	anthracene											
		204-371-1	120-12-7		3.14	mg/kg		3.14	mg/kg	0.000314 %		
9	fluoranthene											
		205-912-4	206-44-0		28.5	mg/kg		28.5	mg/kg	0.00285 %		
10	pyrene											
		204-927-3	129-00-0		26.1	mg/kg		26.1	mg/kg	0.00261 %		
11	benzo[a]anthracene											
	601-033-00-9	200-280-6	56-55-3		19.9	mg/kg		19.9	mg/kg	0.00199 %		
12	chrysene											
	601-048-00-0	205-923-4	218-01-9		17.2	mg/kg		17.2	mg/kg	0.00172 %		
13	benzo[b]fluoranthene											
	601-034-00-4	205-911-9	205-99-2		27	mg/kg		27	mg/kg	0.0027 %		
14	benzo[k]fluoranthene											
	601-036-00-5	205-916-6	207-08-9		14.3	mg/kg		14.3	mg/kg	0.00143 %		
15	benzo[a]pyrene; benzo[def]chrysene											
	601-032-00-3	200-028-5	50-32-8		28.1	mg/kg		28.1	mg/kg	0.00281 %		
16	indeno[123-cd]pyrene											
		205-893-2	193-39-5		21.4	mg/kg		21.4	mg/kg	0.00214 %		
17	dibenz[a,h]anthracene											
	601-041-00-2	200-181-8	53-70-3		6.18	mg/kg		6.18	mg/kg	0.000618 %		
18	benzo[ghi]perylene											
		205-883-8	191-24-2		19.4	mg/kg		19.4	mg/kg	0.00194 %		
19	coronene											
		205-881-7	191-07-1		<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**LOD**
20	arsenic { arsenic trioxide }											
	033-003-00-0	215-481-4	1327-53-3		13.4	mg/kg	1.32	17.692	mg/kg	0.00177 %		
21	barium { barium oxide }											
		215-127-9	1304-28-5		479	mg/kg	1.117	534.806	mg/kg	0.0535 %		
22	beryllium { beryllium oxide }											
	004-003-00-8	215-133-1	1304-56-9		0.8	mg/kg	2.775	2.22	mg/kg	0.000222 %		
23	boron { diboron trioxide; boric oxide }											
	005-008-00-8	215-125-8	1303-86-2		0.36	mg/kg	3.22	1.159	mg/kg	0.000116 %		
24	cadmium { cadmium oxide }											
	048-002-00-0	215-146-2	1306-19-0		4.87	mg/kg	1.142	5.563	mg/kg	0.000556 %		
25	chromium in Cr(VI) compounds { chromium(VI) oxide }											
	024-001-00-0	215-607-8	1333-82-0		<5	mg/kg	1.923	<9.616	mg/kg	<0.000962 %		<**LOD**
26	copper { dicopper oxide; copper (I) oxide }											
	029-002-00-X	215-270-7	1317-39-1		47.2	mg/kg	1.126	53.142	mg/kg	0.00531 %		
27	lead { lead compounds with the exception of those specified elsewhere in this Annex }			1	1230	mg/kg		1230	mg/kg	0.123 %		
	082-001-00-6											
28	mercury { mercury dichloride }											
	080-010-00-X	231-299-8	7487-94-7		<0.5	mg/kg	1.353	<0.677	mg/kg	<0.0000677 %		<**LOD**

#		Determinand			CLP Note	User entered data		Conv. Factor	Compound conc.		Classification value	MC Applied	Conc. Not Used
		EU CLP index number	EC Number	CAS Number									
29		nickel { nickel chromate }				13.7	mg/kg	2.976	40.775	mg/kg	0.00408 %		
		028-035-00-7	238-766-5	14721-18-7									
30		selenium { selenium compounds with the exception of cadmium sulphoselenide and those specified elsewhere in this Annex }				1.86	mg/kg	1.405	2.613	mg/kg	0.000261 %		
		034-002-00-8											
31		vanadium { divanadium pentaoxide; vanadium pentoxide }				36.2	mg/kg	1.785	64.624	mg/kg	0.00646 %		
		023-001-00-8	215-239-8	1314-62-1									
32		zinc { zinc oxide }				4450	mg/kg	1.245	5538.977	mg/kg	0.554 %		
		030-013-00-7	215-222-5	1314-13-2									
33		benzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		601-020-00-8	200-753-7	71-43-2									
34		toluene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		601-021-00-3	203-625-9	108-88-3									
35		ethylbenzene				<0.01	mg/kg		<0.01	mg/kg	<0.000001 %		<**LOD**
		601-023-00-4	202-849-4	100-41-4									
36		o-xylene; [1] p-xylene; [2] m-xylene; [3] xylene [4]				<0.02	mg/kg		<0.02	mg/kg	<0.000002 %		<**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]									
37		TPH (C6 to C40) petroleum group				1058	mg/kg		1058	mg/kg	0.106 %		
				TPH									
										Total:	0.877 %		

Key

	User supplied data
	Determinand values ignored for classification, see column 'Conc. Not Used' for reason
	Hazardous result
	Determinand defined or amended by HazWasteOnline (see Appendix A)
	Speciated Deteminand - Unless the Determinand is Note 1, the Conversion Factor is used to calculate the compound concentration
	Newer version of determinand available
<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 for cumulative determinand results below the threshold of: 500 mg/kg (0.05%) because: PID recorded VOC <1ppm

Hazard Statements hit:

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

Because of determinand:

TPH (C6 to C40) petroleum group (conc.: 0.106%)

Appendix A: Classifier defined and non GB MCL determinands

pH (CAS Number: PH)

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

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

Description/Comments: Data from C&L Inventory Database
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 17 Jul 2015
Hazard Statements: Acute Tox. 4; H302 , Acute Tox. 1; H330 , Acute Tox. 1; H310 , Eye Irrit. 2; H319 , STOT SE 3; H335 , Skin Irrit. 2; H315

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

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 Acute 1; H400 , Aquatic Chronic 1; H410

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: 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

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

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

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: Skin Irrit. 2; H315 , Eye Irrit. 2; H319 , STOT SE 3; H335 , 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 Aug 2015
Hazard Statements: Carc. 2; H351

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

Description/Comments: Data from C&L Inventory Database; SDS Sigma Aldrich 28/02/2015
Data source: http://echa.europa.eu/web/guest/information-on-chemicals/cl-inventory-database
Data source date: 23 Jul 2015
Hazard Statements: Aquatic Acute 1; H400 , Aquatic Chronic 1; H410

- **coronene** (EC Number: 205-881-7, CAS Number: 191-07-1)

Description/Comments: Data from C&L Inventory Database; no entries in Registered Substances or Pesticides Properties databases; SDS: Sigma Aldrich, 1907/2006 compliant, dated 2012 - no entries; IARC – Group 3, not carcinogenic.
Data source: http://clp-inventory.echa.europa.eu/SummaryOfClassAndLabelling.aspx?SubstanceID=17010&HarmOnly=no?fc=true&lang=en
Data source date: 16 Jun 2014
Hazard Statements: STOT SE 2; H371

- **barium oxide** (EC Number: 215-127-9, CAS Number: 1304-28-5)

Description/Comments: Data from ECHA's C&L Inventory Database, Sigma Aldrich SDS dated 6/2/20
Data source: https://echa.europa.eu/information-on-chemicals/cl-inventory-database/-/discli/details/88825
Data source date: 02 Apr 2020
Hazard Statements: Acute Tox. 3; H301 , Skin Corr. 1B; H314 , Eye Dam. 1; H318 , Acute Tox. 1; H332

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

GB MCL index number: 082-001-00-6
Description/Comments: Least-worst case: IARC considers lead compounds Group 2A; Probably carcinogenic to humans; Lead REACH Consortium, following MCL protocols, considers many simple lead compounds to be Carcinogenic category 2
Additional Hazard Statement(s): Carc. 2; H351
Reason for additional Hazards Statement(s):
20 Nov 2021 - 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

divanadium pentaoxide; vanadium pentoxide (EC Number: 215-239-8, CAS Number: 1314-62-1)

GB MCL index number: 023-001-00-8
Description/Comments: Hazard statements H301, H330, H350 added by HazWasteOnline due to ATP 18 (Regulation (EU) 2022/692) considers vanadium pentoxide to be Carc. 1B; H350. The GB MCL Agency has reached the same opinion [but is yet to formerly make this change to the MCL List]. Substance has therefore been self-classified.
Additional Hazard Statement(s): Carc. 1B; H350 , Acute Tox. 3; H301 , Acute Tox. 2; H330
Reason for additional Hazards Statement(s):
20 Sep 2022 - Carc. 1B; H350 hazard statement sourced from: ATP 18 (Regulation (EU) 2022/692) considers vanadium pentoxide to be Carc. 1B; H350. The GB MCL Agency has reached the same opinion [but is yet to formerly make this change to the MCL List]. Substance has therefore been self-classified.
28 Sep 2022 - Acute Tox. 3; H301 hazard statement sourced from: ATP 18 (Regulation (EU) 2022/692) considers vanadium pentoxide to be "Acute tox 3; H301". The GB MCL Agency has reached the same opinion [but is yet to formerly make this change to the MCL List]. Substance has therefore been self-classified.
28 Sep 2022 - Acute Tox. 2; H330 hazard statement sourced from: ATP 18 (Regulation (EU) 2022/692) considers vanadium pentoxide to be "Acute tox 2; H330". The GB MCL Agency has reached the same opinion [but is yet to formerly make this change to the MCL List]. Substance has therefore been self-classified.

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

GB MCL index number: 601-023-00-4
Description/Comments:
Additional Hazard Statement(s): Carc. 2; H351
Reason for additional Hazards Statement(s):
20 Nov 2021 - Carc. 2; H351 hazard statement sourced from: IARC Group 2B (77) 2000

- **TPH (C6 to C40) petroleum group** (CAS Number: TPH)

Description/Comments: Unknown Oil

Hazard statements taken from WM3 1st Edition 2015
Data source: WM3 1st Edition 2015
Data source date: 25 May 2015
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

- **polychlorobiphenyls; PCB** (EC Number: 215-648-1, CAS Number: 1336-36-3)

GB MCL index number: 602-039-00-4
Description/Comments: Worst Case: IARC considers PCB Group 1; Carcinogenic to humans;

POP specific threshold from ATP1 (Regulation 756/2010/EU) to POPs Regulation (Regulation 850/2004/EC). Where applicable, the calculation method laid down in European standards EN 12766-1 and EN 12766-2 shall be applied.
Additional Hazard Statement(s): Carc. 1A; H350
Reason for additional Hazards Statement(s):
20 Nov 2021 - Carc. 1A; H350 hazard statement sourced from: IARC Group 1 (23, Sup 7, 100C) 2012

Appendix B: Rationale for selection of metal species

arsenic {arsenic trioxide}

Reasonable case CLP species based on hazard statements/molecular weight and most common (stable) oxide of arsenic. Industrial sources include: smelting; main precursor to other arsenic compounds (edit as required)

barium {barium oxide}

No chromium 6

beryllium {beryllium oxide}

Reasonable case CLP species based on hazard statements/molecular weight. Industrial sources include: most common (non alloy) form, used in ceramics (edit as required)

boron {diboron trioxide; boric oxide}

Reasonable case CLP species based on hazard statements/ molecular weight, physical form and low solubility. Industrial sources include: fluxing agent for glass/enamels; additive for fibre optics, borosilicate glass (edit as required)

cadmium {cadmium oxide}

Reasonable case CLP species based on hazard statements/molecular weight, very low solubility in water. Industrial sources include: electroplating baths, electrodes for storage batteries, catalysts, ceramic glazes, phosphors, pigments and nematocides. (edit as required) Worst case compounds in CLP: cadmium sulphate, chloride, fluoride & iodide not expected as either very soluble and/or compound's industrial usage not related to site history (edit as required)

chromium in Cr(VI) compounds {chromium(VI) oxide}

Worst case CLP species based on hazard statements/molecular weight. Industrial sources include: production stainless steel, electroplating, wood preservation, anti-corrosion agents or coatings, pigments (edit as required)

copper {dicopper oxide; copper (I) oxide}

Reasonable case CLP species based on hazard statements/molecular weight and insolubility in water. Industrial sources include: oxidised copper metal, brake pads, pigments, antifouling paints, fungicide. (edit as required) Worse case copper sulphate is very soluble and likely to have been leached away if ever present and/or not enough soluble sulphate detected. (edit as required)

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

No chromium 6

mercury {mercury dichloride}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

nickel {nickel chromate}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

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

Harmonised group entry used as most reasonable case. Pigment cadmium sulphoselenide not likely to be present in this soil. No evidence for the other CLP entries: sodium selenite, nickel II selenite and nickel selenide, to be present in this soil. (edit as required)

vanadium {divanadium pentaoxide; vanadium pentoxide}

Worst case CLP species based on hazard statements/molecular weight (edit as required)

zinc {zinc oxide}

No chromium 6

Appendix C: Version

HazWasteOnline Classification Engine: WM3 1st Edition v1.2.GB - Oct 2021
HazWasteOnline Classification Engine Version: 2025.295.6830.12358 (22 Oct 2025)
HazWasteOnline Database: 2025.289.6822.12346 (16 Oct 2025)

This classification utilises the following guidance and legislation:
WM3 v1.2.GB - Waste Classification - 1st Edition v1.2.GB - Oct 2021
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 Waste 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
14th ATP - Regulation (EU) 2020/217 of 4 October 2019
15th ATP - Regulation (EU) 2020/1182 of 19 May 2020
The Chemicals (Health and Safety) and Genetically Modified Organisms (Contained Use)(Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1567 of 16th December 2020
The Waste and Environmental Permitting etc. (Legislative Functions and Amendment etc.) (EU Exit) Regulations 2020 - UK: 2020 No. 1540 of 16th December 2020
GB MCL List - version 1.1 of 09 June 2021
GB MCL List v2.0 - version 2.0 of 20th October 2023
GB MCL List v3.0 - version 3.0 of 11th January 2024
GB MCL List v4.0 - version 4.0 of 2nd March 2024
GB MCL List v5.0 - version 5.0 of 26th June 2024
GB MCL List v6.0 - version 6.0 of 15th February 2025

APPENDIX E

Report of address search for radon risk

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Address searched: The Studio, Nep Town Road, Henfield, BN5 9DY
Date of report: 27 October 2025

Guidance for existing properties

Is this property in a radon Affected Area? - No

A radon Affected Area is defined as where the radon level in at least one property in every hundred is estimated to be at or above the Action Level.

The estimated probability of the property being above the Action Level for radon is: 0-1%

The probability result is only valid for properties above ground. All basement and cellar areas are considered to be at additional risk from high radon levels.
The result may not be valid for buildings larger than 25 metres.
If this site if for redevelopment, you should undertake a GeoReport provided by the British Geological Survey.

This report informs you of the estimated probability that this particular property is above the Action Level for radon. This does not necessarily mean there is a radon problem in the property; the only way to find out whether it is above or below the Action Level is to carry out a radon measurement in an existing property.

Radon Affected Areas are designated by the UK Health Security Agency. UKHSA advises that radon gas should be measured in all properties within Radon Affected Areas.

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

Further information is available from UKHSA or https://www.ukradon.org

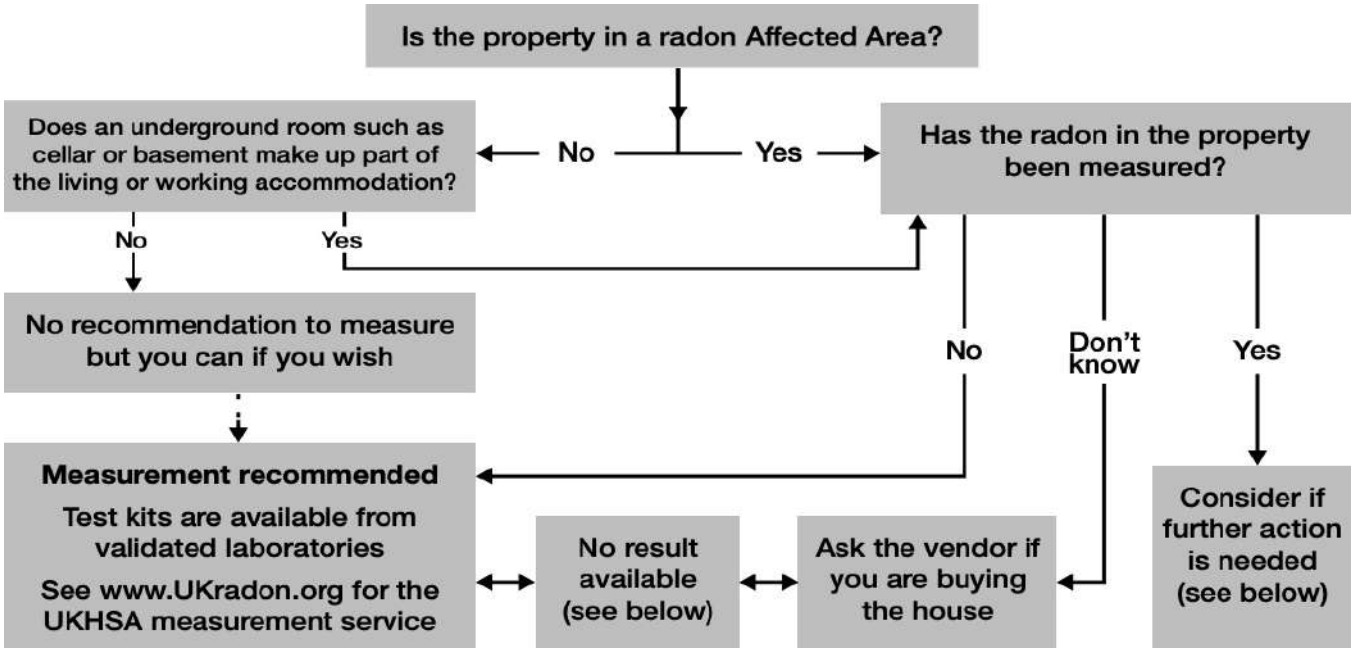
Guidance for new buildings and extensions to existing properties

What is the requirement under Building Regulations for radon protection in new buildings and extensions at the property location? - None

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

See the Radon and Building Regulations for more details.

UKHSA guidance for occupiers and prospective purchases



Existing radon test results: There is no public record of individual radon measurements. Results of previous tests can only be obtained from the seller. Radon levels can be significantly affected by changes to the building or its use, particularly by alterations to the heating and ventilation which can also be affected by changes in occupier. If in doubt, test again for reassurance.

Radon Bond: This is simply a retained fund, the terms of which are negotiated between the purchaser and the vendor. It allows the conveyance of the property to proceed without undue delay. The purchaser is protected against the possible cost of radon reduction work and the seller does not lose sale proceeds if the result is low. Make sure the agreement allows enough time to complete the test, get the result and arrange the work if needed.

High Results: Exposure to high levels of radon increases the risk of developing lung cancer. If a test in a home gives a result at or above the Action Level of 200 Becquerels per cubic metre of air (Bq/m3), formal advice will be given to lower the level. Radon reduction will also be recommended if the occupants include smokers or ex-smokers when the radon level is at or above the Target Level of 100 Bq/m3; these groups have a higher risk. Information on health risks and radon reduction work is available from UKHSA. Guidance about radon reduction work is also available from some Local Authorities, the Building Research Establishment and specialist contractors.

UKHSA designated radon website: https://www.ukradon.org
Building Research Establishment: http://www.bre.co.uk/page.jsp?id=3137

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