Appendix 13B

GQRA

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Tier 2 Generic Quantitative Risk Assessment

Proposed Derrygreenagh Power Project

Bord na Móna Powergen Limited

Project number: 60699676
60699676_Derrygreenagh PS CCGT/OCGT

January 2024

Delivering a better world

Quality information

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1. Introduction

AECOM Ireland Limited (AECOM) was commissioned by Bord na Móna Powergen Limited to prepare a Tier 2 Generic Quantitative Risk Assessment (GQRA) for the Proposed Development and Overall Project within Bord na Móna lands at Derrygreenagh, Co. Offaly; the assessment includes screening for land contamination.

Site investigation was required to assist with the identification of any potentially significant pollutant linkages associated with soil and groundwater in relation to the Proposed Development.

1.1 Background

The information assessed for the preparation of this report is found on Derrygreenagh Power Project EIAR – Volume I, Chapter 13: Soils and Geology[1].

The Proposed Development will be located within Bord na Móna lands, with the except of the 400kV substation and the southernmost sections of underground cable which are located on third party agricultural land close to the Old street-Woodland 400kV line. The Proposed Development will be located entirely within lands in the county of Offaly.

1.2 Proposed Development

The Overall Project (as defined in Chapter 1 and Chapter 5 (Section 5.1.3) of this EIAR) includes the Gas Connection Corridor (Chapter 5 Section 5.5), which is not subject of the application for consents (consents will be sought separately by Gas Networks Ireland) but is integral to the Project and is assessed in this EIAR. The Gas Connection Corridor is located within Third Party lands in the counties of Offaly and Westmeath.

A full description of the existing baseline environment is presented in Chapter 4: Existing Site and Conditions of this EIAR, while details of the Proposed Development and Overall Project are presented in Chapter 5 of this EIAR.

The nature of the Proposed Development and Overall Project is such that it will disturb the existing ground conditions and, in the absence of mitigating measures, has the potential to result in significant environmental effects.

1.3 Objectives

Based on the site background information, AECOM appreciates the objective of the GQRA is to determine whether potentially significant risks to human health or controlled waters exist in the context of the Proposed Development resulting from the pre-existing soil or groundwater chemistry at the Proposed Development site.

To achieve this objective, AECOM has completed the following:

- A summary of the intrusive investigation findings carried out to by the third-party company Irish Drilling Limited (IDL), to assess the potential significance of any potentially complete pollutant linkages identified.
- A comparison of soil and soil leachate analytical results with appropriate Generic Assessment Criteria (GAC), to assess potential risks to human health, controlled waters, and the Proposed Development.
- A revised Conceptual Site Model (CSM) and risk assessment based on the findings of the site investigation with specific regard to the Proposed Development.

[1] EIAR – Volume I, Chapter 13: Soils and Geology

1.4 Scope of Works

The following provides a summary of the overall works undertaken for the preparation of this report:

- Quantitative risk assessment of potential source-pathway-receptor linkages following redevelopment.
- Development of a Risk Assessment CSM with due regard to the results of the Tier 2 ground investigation results and subsequent qualitative risk assessment.
- Provide recommendations for further work, if required.

2. Tier 1 Preliminary Risk Assessment (PRA)

2.1 Desk Study Information

Table 1 provides information pertaining to the Site.

Table 1. Desk Study Information

Item	Description
Location	The Proposed Development will be located within Bord na Móna lands, except for the 400kV substation and sections of underground cable located on third party agricultural land at the Old street-Woodland 400kV line. The Proposed Development will be located entirely within lands in County Offaly. A full description of the existing baseline environment is presented in Chapter 4: Existing Site and Conditions of this EIAR, while details of the Proposed Development and Overall Project are presented in Chapter 5 of this EIAR. The nature of the Proposed Development and Overall Project is such that it will disturb the existing ground conditions and, in the absence of mitigating measures, has the potential to result in significant environmental effects.
History	The historical land use of the Power Plant Area, the Electricity Grid Connection and the Gas Connection Corridor were determined by examining the historical mapping for the area available on the OSi map viewer (GeoHive) and on Google Earth aerial photography. <u>Power Plant Area</u> The historic land use of the Power Plant Area on the historic 6inch mapping (1840s) is primarily as agricultural lands, but with four small buildings (in the present day Derrygreenagh Works site) and several tree lines shown on Derrygreenagh Hill, which is surrounded by undifferentiated bog. Land use is largely unchanged in the 25inch mapping series (late 1800s to early 1900s) apart from a small quarry noted on the southwest side of what is now the R400 immediately southwest of the Power Plant Area and the absence of the previous small structures. Aerial photography from 1985 (GoogleEarth) and from 1995 and 1996 (GeoHive) show the Derrygreenagh Works in existence but show no signs of the three sand and gravel quarries currently active in the nearby area. Aerial photography from 2005, 2007 (GoogleEarth) and from 2001 (GeoHive) show three cylindrical tanks in the lands on the southwest side of the R400 (the proposed Substation Site) at the Derrygreenagh Works and shows the establishment and expansion of the two Roadstone quarries in the vicinity. Derryarkin Pit has not yet commenced operations. Aerial photography from 2006 (GeoHive) does not show the three cylindrical tanks whereas the 2007 (GoogleEarth) aerial photography, suggesting a discrepancy in the dates of some of the aerial photographic record.) Aerial photography from 2008 (GoogleEarth) shows Derryarkin Pit has commenced operations and subsequent aerial photography from 2014, 2018, 2019, 2020 and 2022, (GoogleEarth) and from 2013 (GeoHive) shows the three cylindrical tanks at the proposed Substation Site are no longer present and show the operation and expansion of all three quarries. <u>Electricity Grid Connection</u> The historic land use of the Electricity Grid Connection on the historic 6inch mapping (1840s) is primarily as undifferentiated bog but with agricultural lands at the southern end

Item	Description
	close to the proposed 400kV loop-in Substation, with three small buildings present 170m south of the proposed substation (at location of present-day farmyard). A small water body (Lough Nashade) is shown within the bog within the eastward expansion of Electricity Grid Connection Route (at ITM 650738 734257). The Yellow River and Grand Canal are shown in their current configurations. Land use is largely unchanged in the 25inch mapping series (late 1800s to early 1900s), apart from Lough Nashade being shown as a smaller area of open water surrounded by willow trees (oziers). A spring and some structures are noted at ITM 650849 732197. The small structures within the 400kV substation site are no longer evident. Lough Nashade is not shown as a lake water body on present-day EPA and OSI mapping, however the former location of Lough Nashade is crossed by 2 streams or drainage ditches, one of which turns north-south just east of the EGC red line boundary, is annotated on OSI 1:50k mapping as 'Canal Supply' and is shown as flowing from south to north on EPA water feature mapping. Aerial photography from 1985 (GoogleEarth) appears to show Derryarkin Bog and the west side of Ballybeg Bog are undeveloped whereas Drumman Bog and the east side of Ballybeg Bog appear to have been harvested for peat. Aerial photography from 1995 and 1996 (GeoHive) show Derryarkin Bog and Ballybeg Bog appear to have been completely harvested for peat. The Derrygreenagh Works to the east of the R400 road is in existence but the aerial photographs show no signs of the three sand and gravel quarries currently active in the nearby area. Aerial photography from 2005, 2008, 2009, 2014, 2015, 2016, 2018, 2019 2020 and 2022 (GoogleEarth) and from 2001, 2006 and 2013 (GeoHive) show little change close to the Electricity Grid Connection other than the establishment and expansion of the two Roadstone quarries (pre-2005) and of Derryarkin Pit (2008) and an increased number of dispersed rural houses along the L1010 Togher Road (Rhode to Croghan). <u>Gas Connection Corridor</u> The historic land use along the Gas Connection Corridor on the historic 6inch mapping (1840s) and 25inch mapping series (late 1800s to early 1900s) is primarily as agricultural lands, apart from the bog land noted from Derrygreenagh Hill to approximately 500m north of Mongagh Bridge. Aerial photography from 1985, 2005, 2006, 2008, 2009, 2013, 2014, 2018, 2019, 2020, 2021 and 2022 (GoogleEarth) and from 1995, 1996, 2001, 2006 and 2013 (GeoHive) show little change in land use along the Gas Connection Corridor other than the construction of the M6 between 1985 and 1995, the expansion of Rochfortbridge to the southwest along the R446 and the construction of rural one-off housing.
Geology	<u>Power Plant Area</u> *Soil Geology* According to the Teagasc soils map (available on the GSI map viewer), the Power Plant Area is largely underlain by Made Ground. Adjoining areas are underlain by blanket peat (largely cutaway), made ground and deep, well drained mineral (mainly basic) soils (to the south and west). There is another hill of mineral soils (Knockdrin Hill) rising above the peatland to over 110m OD approximately 1.4km south-east of the Power Plant Area. Bog iron ore is reported to be exposed in several places on at the surface of Derrygreenagh Bog, to the west of the Power Plant Area and was historically used in iron production (Mott McDonald, 2010 (previous EIAR and interpretive reports) and on GSI Mineral Localities online mapping (Mineral Location ref. 1704)). The soil geology (according to EPA maps) is described mainly as cutover peat, with areas of manmade

Item	Description

soil, limestone till (predominantly derived from Carboniferous rocks) and sand and gravel (also derived from Carboniferous rocks).

The August 2008 Glover Site investigation report (conducted for previous EIAR at the site) and 2010 EIAR chapter indicated the general soil and subsoil stratigraphy encountered at the Power Plant Area was:

- made ground,
- peat and soft clay/silts (only at the northern end of the Power Plant Area) and
- glacial clay.
- completely to highly weathered Limestone and karst clays

The Made Ground was overlain by topsoil, to a maximum depth of 0.25 m.

The 2008 site investigation indicated that the area surrounding the Power Plant Area is underlain by peat deposits, described as plastic to spongy cream to dark brown/black amorphous to fibrous slightly sandy slightly silty occasionally gravelly peat, with occasional to many cobbles and boulders.

Subsoil Geology

According to the Quaternary Sediments map (available on the GSI map viewer) (see 13.2), the Power Plant Area is underlain by Made Ground (Fill) underlain by till derived from limestone and sand and gravels.

Underlying the areas of surface peat deposits, a soft clay/silt or clay layer was usually encountered, with gravel or stiff clay/silt occasionally encountered).

The mapped subsoil geology is shown on Figure 13.1 of this EIAR.

Bedrock Geology

According to the GSI's online map viewer (see Figure 13.3), the Power Plant Area is underlain by Carboniferous limestone and shale of the Lucan Formation (commonly known as Calp). This stratum comprises dark grey to black, fine-grained, occasionally cherty, micritic limestones that weather paler, usually to pale grey. There are rare, dark, coarser-grained, calcarenitic limestones, sometimes graded, and interbedded dark-grey calcareous mudstone.

<u>Electricity Grid Connection Route</u>

Soil Geology

According to the Teagasc soils map (available on the GSI map viewer), the OHL of the Electricity Grid Connection route is almost totally underlain by 'Cut Peat' and the UGC section crosses some minor areas mapped as various types of 'Till derived chiefly from limestone', consisting of either poorly drained, peaty gley soils or deep, well-drained mineral soil, depending on grain size. These non-peat areas are all located along the southern underground cable section of the Electricity Grid Connection route.

There are low hills to both the east (i.e., Clonin Hill 136 m OD) and west (i.e., Croghan Hill 234m OD) of, and within 2km of, the Electricity Grid Connection route, which are mapped as a mix of calcareous (limestone-derived) or non-calcareous mineral soils.

Subsoil Geology

According to the Quaternary Sediments map (available on the GSI map viewer) (see EIAR Volume 3 Figure 13.2), the Area is underlain by Cut over raised peat. Underlying the peat deposits, previous studies indicate that peaty, clayey subsoil overlies a natural sequence of glacial sands and gravels.

The mapped subsoil geology is shown on EIAR Volume 3 Figure 13.1.

Bedrock Geology

According to the GSI's online map viewer (see EIAR Volume 3 Figure 13.3), the majority of the Electricity Grid Connection is underlain by Carboniferous limestone and shale of the Lucan Formation (commonly known as Calp – see Section 0).

There is a karst spring mapped 1.1km east of the Grid Connection Substation (Karst Feature Unique ID IE_GSI_Karst_40K_3886, Historic GSI Karst Feature ID

Item	Description
	2323SEK001) at Tobardaly. This is the only karst feature located within 2kn of the Electricity Grid Connection route. An 800m section of the above ground Electricity Grid Connection route, beginning 750m south of the Power Plant Area, is located over a north-east to south-west-oriented area of volcanic bedrock, mapped as a mix of Basalt (generally massive black olivine basalts, weathered to various degrees) and Volcaniclastic agglomerates. These rocks are beneath the peat and subsoil cover but are the same rock types that outcrop at the surface at Croghan Hill, further to the south. Bedrock faults are mapped in the vicinity of the Electricity Grid Connection which appear to form an orthogonal fracture pattern, with fracture sets orientated northeast: southwest and northwest: southeast. The Electricity Grid Connection OHL crosses a mapped bedrock fracture of both orientations at 1.6km south of the Power Plant Area <u>Gas Connection Corridor</u> *Soil Geology* According to the Teagasc soils map (available on the GSI map viewer), the southernmost 2km end of the Gas Connection Corridor covers blanket peat (largely cutaway) and the remainder largely traverses greyish brown podzolic till soils derived from limestones, with short sections of undifferentiated alluvium and/or peaty gley soils in river valleys close to the R446 and Castlelost West. *Subsoil Geology* Quaternary Sediments mapping (available on the GSI map viewer) (see EIAR Volume 3 Figure 13.2) is very similar to the Teagasc Soil mapping and records that the southernmost 2km end of the Gas Connection Corridor covers cut-over raised peat and the remainder largely traverses till derived from limestones, with short sections of undifferentiated alluvium and/or peaty gley soils in river valleys close to the R446 and Castlelost West. The mapped subsoil geology is shown on EIAR Volume 3 Figure 13.1. *Bedrock Geology* According to the GSI's online map viewer (see EIAR Volume 3 Figure 13.3), the Gas Connection Corridor is largely underlain by Carboniferous limestone and shale of the Lucan Formation (dark grey to black, fine-grained, occasionally cherty, micritic limestones, with rarer interbedded calcarenitic limestones and calcareous mudstones). The Gas Connection Corridor traverses a 750m section of Volcaniclastic agglomerate bedrock between the Mongagh River and the M6. Just north of the M6, the older Waulsortian Limestone Formation is faulted against the Lucan Formation by a series of NE-SW trending bedrock faults. The Gas Connection Corridor traverses a 2km section of Waulsortian Limestone Formation bedrock southwest of Rochfortbridge, with a transitional boundary with the overlying Lucan Formation to the northwest. The Lucan Formation underlies the remainder of the Gas Connection Corridor to the northwestern interface with the national Gas Grid ("Gas Pipeline to the West" (BGE/77)).
Hydrogeology	These elements are discussed in Chapter 12 Water Environment in this EIAR.
Hydrology	These elements are discussed in Chapter 12 Water Environment in this EIAR.
Historical existing Site Investigations	<u>Power Plant Area</u> The extensive site investigation by Glover Site Investigation in 2008 completed as part of the 2010 Environmental Impact Assessment and identified a variety of waste materials in the made ground at the Derrygreenagh Works site, including brick rubble, plastic sheets, glass, steel bars, metal, rubbish, pieces of rubber, hardcore fill, domestic waste, pieces of conveyor belt, hydraulic hoses, and metal plates. The most significant thicknesses of waste materials were encountered in former waste disposal areas in the south of the BnM Derrygreenagh Works site, which are located outside the proposed southern boundary of the Power Plant Area.

Item	Description
	Further site investigations by BnM in May 2009 and by Anua in June 2013 also targeted the former waste disposal areas outside the proposed southern boundary of the Power Plant Area. Electricity Grid Connection Route Site investigations were undertaken in 2013 for the SSE Yellow River windfarm, a 29-turbine wind power scheme which is currently under construction (mid-2023). Turbine locations T1 to T12 are located on Derrygreenagh Bog, Derryarkin Bog and Derryiron Bog, within 2-3 km of the Electricity Grid Connection route. Peat probing conducted in 2013 for the windfarm EIAR at these locations indicated a presumed peat thickness of 0.05 to 3.0 m at these proposed turbine locations, however the EIAR noted that mechanically powered site investigations were not conducted and therefore peat thicknesses could be underestimated by that study. The Peat Risk Assessment for that study indicated a Peat Slide Hazard Ranking between 1 and 4 (on a scale of 0-25) indicating a Hazard Ranking Level of 'Insignificant'. Ground investigation data acquired along the OHL section of the EGC route in 2023 indicated that peat the land is relatively level and peat thicknesses reported were between <0.5 and 1.0m thick, with short sections of thicker peat (up to 2.0m thick) at the northern and southern ends of the OHL. Ground stability for pylon footings and temporary access tracks will be addressed at detailed design phase. Gas Connection Corridor There are no known previous site investigations along the route of the Gas Connection Corridor, other than geotechnical borehole records at intervals of approximately 0.25km to 0.5km along the route of the "Gas Pipeline to the West" project (accessed via the GSI Geotechnical viewer), which were to depths between 1.0 and 6.9 m depth and did not encounter bedrock.
Land Use	Power Plant Area There is potential for other historical pollution incidents and ground contamination related to the former Derrygreenagh Works operations. Electricity Grid Connection Route There has been no reported loss to ground within the Licence boundary and specifically areas which form of the Power Plant Area and Electricity Grid Connection. Gas Connection Corridor Historical pollution incidents and ground contamination may exist along the proposed gas connection route. Third-party ground investigations along this route are to be conducted by Gas Networks Ireland to inform the consent process for the gas pipeline.

3. Preliminary Conceptual Site Model & Qualitative Risk Assessment

3.1 General

A conceptual model has been developed for the Proposed Development site based on the information collated during the desktop review and is described in this section, identifying contaminant sources, contaminant migration pathways and potential receptors for the Site.

In the context of land contamination, there are three essential elements to any risk:

- A **source** of contamination, for example due to historical site operations.
- A **pathway**, a route by which receptors can become exposed to contaminants. Examples include vapour inhalation, soil ingestion and ground water migration.
- A **receptor,** a target that may be exposed to contaminants via the identified pathways. Examples include human occupiers/ users of the site, the water environment, property, or ecosystems.

Each of these elements can exist independently, but they create a risk only where they are linked together, so that a particular contaminant affects a particular receptor through a particular pathway. This kind of linked combination of contaminant source–pathway–receptor (SPR) is described as a pollutant linkage. The conceptual model was developed to describe viable SPR linkages for the Site.

The desktop study information was used to conceptualise the potential contaminant source areas, as well as the pathways and receptors.

3.2 Preliminary Conceptual Site Model (CSM)

At this stage, the preliminary CSM was developed to identify potentially complete linkages and to identify potential linkages that require further investigation to assess their existence and/ or potential significance.

The potential sources of contamination on or in the vicinity of each area, receptors on or near each area, and pathways on or near each area are discussed within this section.

3.2.1 Potential Sources of Contamination

On 22 March 2022 AECOM geo-environmental staff conducted a walkover at the Power Plant Area to observe local land use, to identify any potential sources of contamination, to identify any receptors with the potential to be affected by development on the site, identify which pre-existing wells on the Derrygreenagh Works site remained accessible for sampling and to assist with the layout of ground investigation locations for this study. The site walkover undertaken by AECOM did not note any obvious evidence of potentially contaminating activities.

The following potential sources of contamination have been identified during the desk study. Table 2 presents the potential sources present today.

Power Plant Area

The existing Derrygreenagh Works is operated by Bord na Móna Energy Limited (Derrygreenagh) and is managed under EPA IPC licence P0501-01, which enforces control measures to mitigative against potential risk to receptors.

Site annual environmental reports for the existing Derrygreenagh Works to the EPA for the period 2018 to 2022 have been reviewed via the EPA LEAP portal and there has been no reported loss to ground at the Derrygreenagh Works during this period.

An EPA Inspector's Report reported a historical oil spillage adjacent to Diesel Oil Store No. 2 in April 1999 due to a in an underground pipeline, which was subsequently repaired.

There is potential for other historical pollution incidents and ground contamination related to the former Derrygreenagh Works operations.

Site investigation findings between 2008 and 2013 indicated minor localised ground contamination by petroleum hydrocarbons and PCBs at the Power Plant Area, associated with fill material used to level the site and with the two former waste disposal areas outside the southern boundary of the Derrygreenagh Works site.

Electricity Grid Connection Route

Site annual environmental reports for the existing IPC Licence P0501-01 to the EPA for the period 2018 to 2022 have been reviewed via the EPA LEAP portal and there has been no reported loss to ground within the Licence boundary, and specifically within areas which form part of Electricity Grid Connection, during this period.

Gas Connection Corridor

Site annual environmental reports for the existing Derrygreenagh Works to the EPA for the period 2018 to 2022 have been reviewed via the EPA LEAP portal and there has been no reported loss to ground at the Derrygreenagh Works during this period, however historical pollution incidents and ground contamination may exist along the route (see Chapter 13 of this EIAR).

Table 2. Potential Sources of Contamination

Potential Source	Detail
Existing soil contamination	Existing contamination in the made ground and superficial deposits, as a result of potential historic pollution incidents could be exposed and disturbed during construction across the Site, depending on the depth of excavations.
Existing groundwater contamination	Existing contamination in the shallow groundwater (in the superficial deposits) and deep groundwater (in the limestone bedrock aquifers) from historical activities or pollution incidents.
Off-site sources	Pollution incidents at off-site sources could result in contamination reaching soil and/ or groundwater in direct contact with Power Station infrastructure or services.
On-site sources	Construction activities with the potential to contaminate soils and groundwater.

Table 3 lists the potential contaminant linkages and associated risks identified for the proposed Power Plant Area.

Table 3. Potential sources-pathways-receptors of contamination associated with the Power Plant Area

Potential Source	Description	Pathway	Description	Potentially Exposed Receptors
Existing soil contamination	Existing minor contamination in the made ground and superficial deposits, because of historic minor pollution incidents associated with fuel storage and vehicle maintenance activities could be exposed and disturbed during construction across the Site, depending on the depth of excavations.	Dermal contact	Direct contact with contaminated ground soils, soil derived dust, soil leachate and perched water in the made ground/ subsoil.	Construction workers
		Inhalation	Inhalation of made ground derived dust, organic vapours, or ground generated gas.	Construction workers Off-site industrial and residential land users
		Leaching and infiltration into water environment	Rainfall infiltration can generate and mobilise made ground soil/ mining spoil-derived leachate into groundwater within underlying aquifers.	Surface watercourses Groundwater Known/ unknown water supplies
Existing groundwater contamination	[Groundwater sampling of 8 on-site wells in 2023 (4 rounds) indicates that no significant existing groundwater contamination exists at the Power Plant Area (see Chapter 12). Detection of a PAH compound, fluoranthene at 0.04 µg/l, was below the relevant GTV (for Total Polycyclic Aromatic hydrocarbons of 0.075 µg/l). Other determinands were generally below the laboratory limits of detection or within typical ranges for a peat.	Abstraction via potable water well on site (i.e., the “Hostel Well”)	Consumption of potentially impacted groundwater.	Construction workers Operational Staff (potable groundwater supply)
		Migration vertically via subsoils to fractured bedrock aquifer (Lucan Formation) and lateral migration via bedrock+	Pollution incidents on-site during construction could result in contamination reaching soil and groundwater in direct contact with Power Station infrastructure or services.	Surface watercourses Groundwater Known/ unknown water supplies

Potential Source	Description	Pathway	Description	Potentially Exposed Receptors
Off-site sources	Pollution incidents at off-site sources could result in contamination reaching soil and/ or groundwater in direct contact with Power Station Plant Area abstraction well, infrastructure or services.	Introduction of new sources of contamination to subsurface	Pollution incidents at off-site sources could result in contamination reaching soil and groundwater in direct contact with Power Station infrastructure or services.	Construction workers Surface watercourses Groundwater Known/ unknown water supplies
On-site sources	Construction activities with the potential to contaminate soils and groundwater on the Site.		Pollution incidents on-site during construction could result in contamination reaching soil and groundwater beneath the Site.	

Table 4 lists the potential contaminant linkages and associated risks identified for the proposed Electricity Grid Connection.

Table 4. Potential sources-pathways-receptors of contamination associated with the Electricity Grid Connection

Potential Source	Description	Pathway	Description	Potentially Exposed Receptors
Existing soil contamination s	Soils along the entire Electricity Grid Connection route are uncontaminated natural soils (cutover peatland or agricultural soils (pastures) with no significant soil contamination reported.	Dermal contact	Direct contact with contaminated ground soils, soil derived dust, soil leachate and perched water in the made ground/ subsoil.	Construction workers
		Inhalation	Inhalation of made ground derived dust, organic vapours, or ground generated gas.	Construction workers Off-site industrial and residential land users
		Leaching and infiltration into water environment	Rainfall infiltration can generate and mobilise made ground soil/ fill material-derived leachate into groundwater within underlying aquifers.	Surface watercourses Groundwater Known/ unknown water supplies

Potential Source	Description	Pathway	Description	Potentially Exposed Receptors
Existing groundwater contamination	Groundwater aquifers (in the superficial deposits and limestone bedrock) uncontaminated.	Dermal contact	Direct contact with contaminated groundwater.	Construction workers
		Mobilisation and migration along preferential flow paths in superficial or bedrock aquifers	Rainfall infiltration can mobilise contaminated groundwater further into the subsurface from there to other water environment receptors.	Surface watercourses Groundwater Known/ unknown water supplies
Off-site sources	Pollution incidents at off-site sources could result in contamination reaching soil and/ or groundwater in direct contact with power transmission infrastructure along the Electricity Grid Connection route - unlikely.	Introduction of new sources of contamination to subsurface	Pollution incidents at off-route sources could result in contamination reaching soil and groundwater in direct contact with power transmission infrastructure or services.	Construction workers Surface watercourses Groundwater Known/ unknown water supplies
On-site sources	Construction activities with the potential to contaminate soils and groundwater along the Electricity Grid Connection route.		Pollution incidents on-site during construction could result in contamination reaching soil, groundwater, or surface water receptors along the Electricity Grid Connection route.	

Table 5 lists the potential contaminant linkages and associated risks identified for the Proposed Gas Connection Corridor.

Table 5. Potential sources-pathways-receptors of contamination associated with the Gas Connection Corridor Development

Potential Source	Description	Pathway	Description	Potentially Exposed Receptors
Existing soil contamination	No existing contamination in the superficial deposits anticipated.	Dermal contact	Direct contact with contaminated ground soils, soil derived dust, soil leachate and perched water in the made ground/ subsoil.	Construction workers
		Inhalation	Inhalation of dust or ground generated gas.	Construction workers

Potential Source	Description	Pathway	Description	Potentially Exposed Receptors
				Residential land users
		Leaching and infiltration into water environment	Rainfall infiltration can generate and mobilise made ground soil/ leachate into groundwater within underlying aquifers.	Surface watercourses Groundwater Known/ unknown water supplies
Existing groundwater contamination	No existing contamination in the shallow groundwater anticipated	Dermal contact	Direct contact with contaminated groundwater.	Construction workers
		Mobilisation and migration along preferential flow paths in superficial or bedrock aquifers	Rainfall infiltration can mobilise contaminated groundwater further into the subsurface from there to other water environment receptors.	Surface watercourses Groundwater Known/ unknown water supplies
Off-site sources	Pollution incidents at off-site sources could result in contamination reaching soil and/ or groundwater in direct contact with gas transmission infrastructure - unlikely	Introduction of new sources of contamination to subsurface	Pollution incidents at off-site sources could result in contamination reaching soil and groundwater in direct contact with gas transmission infrastructure.	Construction workers Surface watercourses Groundwater Known/ unknown water supplies
On-site sources	Construction activities with the potential to contaminate soils and groundwater on the route.		Pollution incidents on-site during construction could result in contamination reaching soil and groundwater beneath the route.	

3.3 Qualitative Assessment of Source-Pathway-Receptor Linkages

A preliminary qualitative risk assessment has been undertaken for these potential source-pathway-receptor linkages based on EPA contaminated site assessment[2] guidance – Stage 1 Site Characterisation & Assessment - Step 1 Preliminary Site Assessment.

This assessment is based on consideration of both:

- The likelihood of an event (probability – considers both the presence of the hazard and receptor and the integrity of the pathway); and
- The severity of the potential consequence – considers both the potential severity of the hazard and the sensitivity of the receptor.

[2] EPA (2013) "Guidance On The Management Of Contaminated Land And Groundwater At EPA Licensed Sites" (ISBN: 978-1-84095-511-8), Environmental Protection Agency 2013

Based on the information provided in this report, a preliminary risk assessment has been formulated, which identifies possible pollutants linkages at the Site.

The method of dealing with identified risks and the level of significance of those risks will be function of site use. The risk associated with each potential pollutant linkage under the proposed industrial end-use.

Table 6. Summary of Environmental Risks Associated with the Power Plant Area

Source	Potential Pollutants	Pathway	Receptor	Classification of consequence	Likelihood of occurrence	Classified risk	Mitigation
Existing soil contamination	Hydrocarbons PAHs Asbestos Heavy metals PCBs Phenols suite SVOCs Total Sulphate. Total sulphur. VOCs.	Dermal/ ingestion/ inhalation of vapours and dust	Construction workers Off-site industrial and residential land users	Effect on human health [Medium]	Low likelihood Existing minor contamination in the made ground and superficial deposits, because of historic minor pollution incidents associate with fuel storage and vehicle maintenance activities could be exposed and disturbed during construction across the Site, depending on the depth of excavations.	Low risk	None required.
		Leaching of soil contamination into shallow groundwater	Surface watercourses Groundwater Known/ unknown water supplies	Pollution of groundwater [Medium]	Low likelihood: Existing minor contamination in the made ground and superficial deposits, because of historic minor pollution incidents associate with fuel storage and vehicle maintenance activities could be exposed and disturbed during construction across the Site, depending on the depth of excavations	Low risk	None required
Existing groundwater contamination	Hydrocarbons PAHs Asbestos Heavy metals PCBs Phenols suite SVOCs Total Sulphate. Total sulphur. VOCs.	Abstraction via potable water well on site (i.e., the “Hostel Well”)	Construction workers Operational Staff (potable groundwater supply)	Effect on human health [Medium]	Low likelihood Groundwater sampling of 8 on-site wells in 2023 (4 rounds) indicates that no significant existing groundwater contamination exists at the Power Plant Area (see Chapter 12 of this EIAR). Detection of a PAH compound, fluoranthene at 0.04 µg/l, was below the relevant GTV (for Total Polycyclic Aromatic hydrocarbons of 0.075 µg/l). Other determinands were generally below the laboratory limits of detection or within typical ranges for a peatland area.	Low risk	None required
		Migration vertically via subsoils to fractured bedrock aquifer (Lucan Formation) and lateral migration via bedrock	Surface watercourses Groundwater Known/ unknown water supplies	Pollution of surface and groundwater [Medium]	Low likelihood Groundwater sampling of 8 on-site wells in 2023 (4 rounds) indicates that no significant existing groundwater contamination exists at the Power Plant Area (see Chapter 12 of this EIAR). Detection of a PAH compound, fluoranthene at 0.04 µg/l, was below the relevant GTV (for Total Polycyclic Aromatic hydrocarbons of 0.075 µg/l).	Low risk	None required

Source	Potential Pollutants	Pathway	Receptor	Classification of consequence	Likelihood of occurrence	Classified risk	Mitigation
					Other determinands were generally below the laboratory limits of detection or within typical ranges for a peatland area.		
Off-site sources	Hydrocarbons PAHs Asbestos Heavy metals PCBs Phenols suite SVOCs Total Sulphate. Total sulphur. VOCs.	Introduction of new sources of contamination to subsurface	Construction workers Surface watercourses Groundwater Known/ unknown water supplies	Effect on human health [Medium] Pollution of surface and groundwater [Medium]	Unlikely Pollution incidents at off-site sources could result in contamination reaching soil and/ or groundwater in direct contact with Power Station abstraction well, infrastructure or services.	Low risk	None required
On-site sources	Hydrocarbons PAHs Asbestos Heavy metals PCBs Phenols suite SVOCs Total Sulphate. Total sulphur. VOCs.	Introduction of new sources of contamination to subsurface	Construction workers Surface watercourses Groundwater Known/ unknown water supplies	Effect on human health [Medium] Pollution of surface and groundwater [Medium]	Unlikely Construction activities with the potential to contaminate soils and groundwater on the Site.	Low risk	Use of PPE

Table 7. Summary of Environmental Risks Associated with the Electric Grid Connection Route

Source	Potential Pollutants	Pathway	Receptor	Classification of consequence	Likelihood of occurrence	Classified risk	Mitigation
Existing soil contamination	Hydrocarbons PAHs Asbestos Heavy metals PCBs Phenols suite SVOCs Total Sulphate. Total sulphur. VOCs.	Dermal/ ingestion/ inhalation of vapours and dust	Construction workers Off-site industrial and residential land users	Effect on human health [Medium]	Low likelihood: Soils along the entire Electricity Grid Connection Route are uncontaminated natural soils (cutover peatland) or agricultural soils (pastures) with no significant soil contamination reported.	Low risk	None required.
		Leaching of soil contamination into shallow groundwater	Surface watercourses Groundwater Known/ unknown water supplies	Pollution of groundwater [Medium]	Low likelihood: Soils along the entire Electricity Grid Connection Route are uncontaminated natural soils (cutover peatland) or agricultural soils (pastures) with no significant soil contamination reported.	Low risk	None required
Existing groundwater contamination	Hydrocarbons PAHs Asbestos Heavy metals PCBs Phenols suite SVOCs Total Sulphate. Total sulphur. VOCs.	Abstraction via potable water well on site (i.e., the “Hostel Well”)	Construction workers Operational Staff (potable groundwater supply)	Effect on human health [Medium]	Unlikely Groundwater aquifers (in the superficial deposits and limestone bedrock) - uncontaminated	Low risk	None required
		Migration vertically via subsoils to fractured bedrock aquifer (Lucan Formation) and lateral migration via bedrock	Surface watercourses Groundwater Known/ unknown water supplies	Pollution of surface and groundwater [Medium]	Low risk Groundwater aquifers (in the superficial deposits and limestone bedrock) - uncontaminated	Low risk	None required
Off-site sources	Hydrocarbons PAHs Asbestos Heavy metals PCBs Phenols suite SVOCs Total Sulphate. Total sulphur.	Introduction of new sources of contamination to subsurface	Construction workers Surface watercourses Groundwater Known/ unknown water supplies	Effect on human health [Medium] Pollution of surface and groundwater [Medium]	Low Risk Construction activities with the potential to contaminate soils and groundwater along the Electricity Grid Connection route.	Low risk	None required

Source	Potential Pollutants	Pathway	Receptor	Classification of consequence	Likelihood of occurrence	Classified risk	Mitigation
	VOCs.						
On-site sources	Hydrocarbons PAHs Asbestos Heavy metals PCBs Phenols suite SVOCs Total Sulphate. Total sulphur. VOCs.	Introduction of new sources of contamination to subsurface	Construction workers Surface watercourses Groundwater Known/ unknown water supplies	Effect on human health [Medium] Pollution of surface and groundwater [Medium]	Unlikely Pollution incidents on-site during construction could result in contamination reaching soil, groundwater, or surface water receptors along the Electricity Grid Connection route.	Moderate/ low risk	Use of PPE

Table 8. Summary of Environmental Risks Associated with the Gas Connection Corridor

Source	Potential Pollutants	Pathway	Receptor	Classification of consequence	Likelihood of occurrence	Classified risk	Mitigation
Existing soil contamination	Hydrocarbons PAHs Asbestos Heavy metals PCBs Phenols suite SVOCs Total Sulphate. Total sulphur. VOCs.	Dermal/ ingestion/ inhalation of vapours and dust	Construction workers Off-site industrial and residential land users	Effect on human health [Medium]	Low likelihood: No existing contamination in the superficial deposits anticipated.	Low risk	None required.
		Leaching of soil contamination into shallow groundwater	Surface watercourses Groundwater Known/ unknown water supplies	Pollution of groundwater [Medium]	Low likelihood: No existing contamination in the superficial deposits anticipated.	Low risk	None required
Existing groundwater contamination	Hydrocarbons PAHs Asbestos Heavy metals	Abstraction via potable water well on site (i.e., the “Hostel Well”)	Construction workers Operational Staff (potable	Effect on human health [Medium]	Low likelihood No existing contamination in the shallow groundwater anticipated	Low risk	None required

Source	Potential Pollutants	Pathway	Receptor	Classification of consequence	Likelihood of occurrence	Classified risk	Mitigation
	PCBs Phenols suite SVOCs Total Sulphate. Total sulphur. VOCs.		groundwater supply)				
		Migration vertically via subsoils to fractured bedrock aquifer (Lucan Formation) and lateral migration via bedrock	Surface watercourses Groundwater Known/ unknown water supplies	Pollution of surface and groundwater [Medium]	Low likelihood No existing contamination in the shallow groundwater anticipated.	Low risk	None required
Off-site sources	Hydrocarbons PAHs Asbestos Heavy metals PCBs Phenols suite SVOCs Total Sulphate. Total sulphur. VOCs.	Introduction of new sources of contamination to subsurface	Construction workers Surface watercourses Groundwater Known/ unknown water supplies	Effect on human health [Medium] Pollution of surface and groundwater [Medium]	Unlikely Pollution incidents at off-site sources could result in contamination reaching soil and/ or groundwater in direct contact with gas transmission infrastructure - unlikely	Low risk	None required
On-site sources	Hydrocarbons PAHs Asbestos Heavy metals PCBs Phenols suite SVOCs Total Sulphate. Total sulphur. VOCs.	Introduction of new sources of contamination to subsurface	Construction workers Surface watercourses Groundwater Known/ unknown water supplies	Effect on human health [Medium] Pollution of surface and groundwater [Medium]	Unlikely Construction activities with the potential to contaminate soils and groundwater on the route.	Low risk	Use of PPE

4. 2023 Ground Investigation Details

4.1 General

The potential significance of the potentially more significant pollutant linkages identified in the Tier 1 PRA was assessed by carrying out an intrusive ground investigation. The investigation was undertaken to investigate the ground conditions beneath the Proposed Development.

4.2 Ground Investigation Fieldworks

The 2023 ground investigation were conducted by the third-party IDL for Bord na Mona and concerns the Power Plant Area and the Electricity Grid Connection elements of the overall Proposed Development.

The site investigation works within the Power Plant Area conducted for environmental purposes consisted of:

Table 9. Power Plant Area – 2023 Intrusive Investigation

Type	Names	Description	Comments
18 Cable percussion boreholes to a depth of 10.7m bgl	BH101, BH102 BH103, BH104, BH105, BH106, BH107, BH108, BH109, BH110, BH111, BH112, BH113, BH114, BH115, BH116, BH117, BH118	Boreholes to between 3.50 and 10.70m below ground to investigate subsoils and obtain geotechnical and geo-environmental samples or test results	BH113, BH114, and BH115 are outside the redline boundary of the Power Plant Area site and are within the former waste disposal areas. 19 soil samples, 1 at each borehole except for BH112 (2 samples)
17 Trial pits to a depth of 4.5m bgl	TP201, TP204, TP205, TP206, TP207, TP209, TP210, TP211, TP212, TP216, TP217, TP218, TP219, TP220, TP311, TP312, TP313	Trial pits to between 0.50 and 4.50m below ground to investigate subsoils and obtain geotechnical and geo-environmental samples or test results	TP216, TP217, TP218, TP219, and TP220 are outside the redline boundary. 17 soil samples, 1 at each trial pit
Pumping Well	PW301	Pumping Well 10.10 m deep – intended for hydraulic testing of bedrock but met obstruction at 10.10m and was terminated	1 soil sample BH301

The site investigation works for environmental purposes along the Electricity Grid Connection consisted of:

Table 10. Electric Grid Connection Route – 2023 Intrusive Investigation

Section/Area	Naming	Description	Comments
OHL	BHT01 to BHT07 BHT09 to BHT15 BHT17	15 boreholes (pylon locations) to a depth of 10.7m bgl	15 soil samples
220kV Substation	BHSS01 to BHSS05	5 boreholes to a depth up to 9.2m bgl	5 soil samples
OHL	TPT01 to TPT18	18 trial pits (pylon locations) to a depth of 4.5m bgl	18 soil samples

Section/Area	Naming	Description	Comments
UGC	TPC01 to TPC07	7 trial pits to a depth of 4.6m bgl	7 soil samples
220kV Substation	TP213, TP214 and TP215 l	3 trial pits to a depth of 4.5m bgl	3 soil samples
400kV Substation	TPSS01 to TPSS06	6 trial pits to a depth of 4.8m bgl	12 soil samples 2 at each trial pit
Interface Cable Compound	TPCC01	1 trial pit to a depth of 4.5m bgl	1 soil samples
Borrow Pit	TPBP01 to TPBP08	8 trial pits to a depth of 3.5m bgl	8 soil samples
Process Discharge	TP301 to TP310	10 Trial Pits to a depth of 4.5m bgl	10 soil samples

4.2.1 Laboratory Testing

Soil samples were obtained at regular intervals throughout the soil profile by IDL (between 13 April 2023 and 13 June 2023) and were analysed for an extensive suite of geo-environmental parameters as potential ground contaminants. Soil sample analysis by ALS Laboratories (UK) Limited for IDL was for some or all the following parameters:

- Acid neutralisation capacity (at pH 4 and pH 6)
- Anion suite
- Asbestos (ID and/or quantification)
- CEN Readings
- Chromium (III & VI)
- Coronene (PAH)
- Cyanide (Complex/Free/Total/Thiocyanate)
- Metals suite
- Dissolved Organic/Inorganic carbon
- Extractable Petroleum hydrocarbons (EPH) (CWG and GC-FID)
- Fluoride
- Gasoline Range Organics
- Loss on Ignition
- Magnesium
- Mercury (dissolved)
- Polycyclic Aromatic Hydrocarbon (PAH) suite)
- Poly Chlorinated Biphenyl (PCB) suite
- pH
- Phenols suite
- Sample Description
- Semi-volatile Organic Compound (SVOC) suite

- Total Organic Carbon (TOC)
- Total Sulphate
- Total sulphur
- Total Petroleum Hydrocarbons – Criteria Working Group (TPH_CWG)
- Volatile Organic Compound (VOC) suite.

Eighteen selected soil samples from BH101 to BH108, BH110 to BH115, BH301, BHSS04 and BHSS05 were also subjected to leachate extraction (CEN 10:1) and these eluates was analysed for:

- pH
- Electrical Conductivity
- Chromium (III & VI)
- Metals suite (11 heavy metals in addition to chromium)
- Dissolved Organic Carbon
- Fluoride
- Chloride
- Soluble Sulphate (2:1 extract)
- Total Dissolved Solids

Soil samples results are reported in the Irish Drilling Limited site investigation report in Appendix 13A (refer to EIAR Volume II), and the raw soil and soil leachate chemistry results are screened against relevant Generic Assessment Criteria in the Generic Quantitative Risk Assessment report in this report). Elements of surface water and groundwater analytical schedule of analysis are discussed in Chapter 12 Water Environment in this EIAR.

5. Site Investigation Findings

5.1 Geology

Borehole and trial pit logs and ground investigation location maps are provided in EIAR Volume II Appendix 13A. Copies of the recent ground investigation borehole logs conducted by IDL are provided in the contactors factual report (EIAR Appendix 13A).

It is important to emphasize that elements of surface water and groundwater are discussed in Chapter 12 Water Environment in this EIAR, the assessment of the Gas Connection Corridor is based on desk study information only, and that AECOM was not present on site during third-party intrusive works.

The geological successions recorded during the investigation conducted by IDL are discussed below.

5.1.1 Power Plant Area

Borehole and trial pit logs and ground investigation location maps are provided in EIAR Volume II Appendix 13A.

Non-natural soil material was encountered during the site investigation at the Power Plant Area in the form of fill materials and made ground in certain boreholes and trial pits (undifferentiated fill (BH102, BH103), clay fill (BH105), gravel fill (BH106, BH110), peat & clay fill (BH118, TP204), and reworked peat (TP205, TP311)). These non-natural soils included some anthropogenic materials in several trial pits and boreholes, such as metal fragments (BH103), tar/Type 804 fill/road fill (BH112) and plastic and timber fragments (TP313, along the stormwater discharge route to the Mongagh River).

5.1.2 Electric Grid Connection Route

Borehole and trial pit logs and ground investigation location maps are provided in EIAR Volume II Appendix 13A.

Anthropogenic material was encountered during the ground investigation at the Electricity Grid Connection in the form of fragments of timber, plastic, glass, and discarded hand tools in a trial pit along the UGC section of the EGC only (TPC02, TPC03, TPC04 and TPC05, see trial pit logs in Volume II Appendix 13A).

5.2 Observations of Potential Contamination

During field soil sampling, the following pertinent observations were made by IDL for the Power Plant Area and the Electric Grid Connection Route:

- Olfactory evidence of contamination was not reported by the drilling contractor during the soil sampling on the samples collected on the Power Plant Area and the Electric Grid Connection Route or at the associated substations and other sites (i.e., no hydrocarbon or other odours). No on-site screening of soil samples for organic vapours was undertaken during ground investigation.
- No visual evidence of obvious gross soil contamination was reported during the soil sampling.

6. Quantitative Risk Assessment – Tier 2 Screening

6.1 Introduction

A preliminary qualitative risk assessment has been undertaken for these potential source-pathway-receptor linkages based on EPA contaminated site assessment guidance – Stage 1 Site Characterisation & Assessment - Step 1 Preliminary Site Assessment (Section 3 of this report).

The Environmental Protection Agency (EPA) have guidance for managing land contamination at IE Licence sites in Ireland[2]. The EPA guidance considers that the most appropriate approach is a 'suitable for use' one, in which risks to human health and the wider environment are assessed within the context of the current or proposed use of the land in question. There is no Irish contaminated land risk assessment methodology, therefore the Tier 2 screening methodology adopted by AECOM is consistent with EPA guidance, which recommends a risk assessment approach aligned with the UK Environment Agency Report CLR11: Model Procedures for the Management of Land Contamination (and its successor Land Contamination: Risk Management (LCRM) guidance, which came into force in November 2019)[3].

Potentially contaminated land is assessed through the identification and assessment of pollutant linkages (source-pathway-receptor relationships). Implicit in the guidance is the use of risk assessment to assess whether identified pollutant linkages may be significant.

A preliminary Conceptual Site Model (CSM) was derived in Section 3, Preliminary Conceptual Site Model & Qualitative Risk Assessment for the Site and is summarised in Table 5. Summary of Environmental Risks Associated with the Power Plant Area, Table 6. Summary of Environmental Risks Associated with the Electrical Grid Connection, and Table 7. Summary of Environmental Risks Associated with the Gas Connection Corridor.

The CSM identifies potential pollutant linkages which may be present on the Site. To quantify the potentially more significant risks identified by the preliminary CSM, samples of soil and selected soil samples from BH101 to BH108, BH110 to BH115 and BH301 collected in the Power Plant Area, and BHSS04 and BHSS05, collected in the Electric Grid Connection were also subjected to leachate extraction (CEN 10:1).

To assess the potential significance of the concentrations of substances detected, analytical results have initially been compared with appropriate Generic Assessment Criteria (GAC) selected from an AECOM-compiled database of currently applicable criteria.

Elements of surface water and groundwater analytical schedule of analysis are discussed in Chapter 12 Water Environment in this EIAR.

6.2 Human Health

6.2.1 Justification of Selected GAC

A full description of the existing baseline environment is presented in Chapter 4: Existing Site and Conditions of this EIAR, while details of the Proposed Development and Overall Project are presented in Chapter 5 of this EIAR.

The nature of the Proposed Development and Overall Project is such that it will disturb the existing ground conditions and, in the absence of mitigating measures, has the potential to result in significant environmental effects.

For most chemicals of potential concern (CoPC), GAC have been sourced from peer reviewed, UK-published sources utilising the general procedure described in technical information supporting the Environment Agency's Contaminated Land Exposure Assessment (CLEA) model. These sources

[3] https://www.gov.uk/government/publications/land-contamination-risk-management-lcrm/lcrm-stage-1-risk-assessment#tier-2-generic-quantitative-risk-assessment

include the LQM/CIEH[4], EIC/AGS/CL:AIRE[5] GAC and SoBRA Groundwater GAC[6]. For some chemicals where such criteria have not been published, the same methodology has been utilised by AECOM for the derivation of GAC. For a small number of CoPC with limited toxicological data, other European criteria were selected, or Regional Screening Levels (RSLs) developed by the United States Environment Protection Agency (USEPA) were used.

Stage 1 Tier 2 tables summarising the available analytical data and exceedances of human health GAC for soil and soil leachates are presented in Appendix A Table A1 – A5.

Elements of surface water and groundwater analytical schedule of analysis are discussed in Chapter 12 Water Environment in this EIAR.

6.2.2 Soil Screening

Soil samples from the site were screened by AECOM against Generic Assessment Criteria (GAC) relevant to Human Health (HH) impacts and the continued Commercial/ Industrial Land use of the Site.

The human health soil GAC were typically derived assuming:

- Soil properties akin to “sandy loam” were present across the Site.
- Exposure pathways include ingestion of soil/ dust, inhalation of vapours, inhalation of fugitive dust and dermal contact; and
- Proposed end use – commercial/ industrial.

Tables summarizing the available analytical data screened against HH GAC for soil and for soil leachate are presented as Appendix A Table A1 - A5 of this report. The laboratory analytical result reports are presented within EIAR Appendix 13A.

6.2.2.1 Power Plant Area

Asbestos Screening

None of the 36 no. soil samples submitted for analysis detected the presence of asbestos (either as dispersed fibres or as Asbestos Containing Materials (ACMs)).

Discussion of Screening Results

Tables summarising the available analytical data for the Power Plant Area screened against HH GAC for soil and soil leachate are presented in Appendix A Table A1 - A5. The laboratory analytical result reports are presented within EIAR Appendix 13A.

A review of the soil data analysed from the Site shows that most soil results were either below laboratory detection limits or below the relevant GAC (see Appendix A Table A1 - A5 of this report).

Low concentrations of a range of metals, petroleum hydrocarbons and PAHs were reported in near-surface soil samples from across the Power Plant Area, but all at below the human health GAC. Soil sample depth ranged from 0.6 to 3.5 m bgl but were typically from between 1.0 and 1.5 m bgl.

The only parameter to exceed a relevant GAC at the Power Plant Area was antimony in the soil leachate samples from BH104 (1.0m) and BH112 (1.6m). Both GAC exceedances for antimony in soil leachate were less than twice the GAC applied (Irish 2014 Drinking Water Standard, DWS, of 5 microgrammes per litre (mg/L)), are below the revised 2023 Irish antimony DWS of 10 mg/L and are therefore considered insignificant.

[4] CL:AIRE. Soil Generic Assessment Criteria for Human Health Risk Assessment. CL:AIRE in associated with The Environmental Industries Commission, January 2010.
[5] SoBRA. Development of Generic Assessment Criteria for Assessing Vapour Risks to Human Health from Volatile Contaminants in Groundwater. Society of Brownfield Risk Assessment. Version 1.0. February 2017.

6.2.2.2 Electric Grid Connection Route

Asbestos Screening

None of the 79 no. soil samples submitted for analysis detected the presence of asbestos (either as dispersed fibres or as ACMs).

Discussion of Screening Results

Tables summarising the available analytical data for the Electricity Grid Connection screened against HH GAC for soil and soil leachate are presented in Appendix A Table A1 - A5. The laboratory analytical result reports are presented within EIAR Appendix 13A.

Soil sample results from the EGC ground investigation locations were screened by AECOM against Generic Assessment Criteria (GAC) relevant to Human Health (HH) impacts and the continued Commercial/ Industrial Land use of the lands.

A review of the soil data analysed from the EGC ground investigation locations shows that most soil results were either below laboratory detection limits or below the relevant GAC (see EIAR Volume II Appendix 13B – soils GQRA report).

The only parameter to exceed a relevant GAC in samples from EGC ground investigation locations was antimony in the soil leachate samples from BHSS04 (3.5m and BHSS05 (2.5m) in the 220kV substation. Both GAC exceedances for antimony in soil leachate were less than twice the GAC applied (Irish 2014 Drinking Water Standard, DWS, of 5 micrograms per litre (mg/L)), are below the revised 2023 Irish antimony DWS of 10 mg/L and are therefore considered insignificant.

6.2.3 Sensitivity of Potentially Exposed Receptors

6.2.3.1 Power Plant Area

The principal soil and geological resource receptors which have the potential to be impacted upon by the Power Plant Area during construction, operation, and decommissioning include:

- **Agriculture land and soil resources:** the soil resources within the Power Plant Area are classified as made ground land use and of negligible sensitivity. The peatlands and agricultural lands outside the redline boundary but within the 2km study area are not anticipated to be impacted by the Proposed Development.
- **Designated sites:** There are no designated sites (SPA, pNHA, NHA or SAC) within the Power Plant Area or within 5km of same. The nearest designated geological site is Croghan Hill, which is located approximately 4.8km from the Power Plant Area. Croghan Hill will not be impacted by the Proposed Development due to the intervening distances. The remaining study area (5km radius of the Power Plant Area) is considered of local importance and of low sensitivity.

The receptors which could be affected by contamination which is created or affected by construction and/ or operation of the Proposed Development are:

- **Geology:** The Power Plant Area will not impact on any high sensitivity geological heritage features (i.e., designated sites such as Croghan Hill or major aquifers).
- **Surface water:** There are no surface water courses within or bordering the Power Plant Area. There is an open water body within the three sand and gravel quarries in the Study Area which are not classified by the EPA under the WFD.
- **Rivers**: 500m to the north is the Kiltotan and Collinstown surface water body (Mongagh River (Castlejordan_020 surface water body – Code IE_EA_07C040100) and 1.5km to the south-east (Yellow River (Yellow [Castlejordan] surface water body – Code IE_EA_07Y020100) of the Power Plant area are >500m from the Proposed Development Site and are both classified by EPA as having Good WFD status downstream of the nearest point to the Proposed Development. The Mongagh River WFD risk projection is shown as ‘Review’, whereas the Yellow River is stated to be ‘Not at Risk’ of achieving Good WFD Status downstream of the closest point to the Power Plant Area. The Yellow River has both a Poor WFD Status and is at Risk of not achieving Good WFD Status in its upper reaches, southwest (upstream) of the closest point to the Power Plant Area.

- **Abstractions (Surface Water):** There are no known surface water abstractions within 2km of the Power Plant Area.
- **Abstractions (Groundwater):** The following domestic supply, public supply and on-site abstraction wells exist in the vicinity of the Power Plant Area:
  - There is one recorded domestic groundwater abstraction well within the study area on the GSI well database (GSI well ref: 2323SEW023), which is located 1.94 km southwest from the Power Plant Area. This well has been recorded by GSI as having a 'Poor' yield (33m3/day).
  - There are no wells used for public supply or group water schemes within the 2km Study Area of the Power Plant Area according to GSI well records. It should be noted that the GSI database is incomplete and additional private/domestic well supplies may exist within 2km of the Power Plant Area.
  - There is one well located in the Power Plant Area - 'PW1' – and one well located approximately 80m outside and to the south of the Proposed Development - the 'Hostel Well' (see Chapter 12 for further details). These wells are not recorded in the GSI well database. PW1 well was drilled to 65mbGL in 2008, has a yield of at least 1,008 m3/ day from the limestone bedrock aquifer but is not currently in use. The Hostel Well supplies all the current water requirements for the Derrygreenagh Works, but there are no details on the well depth, construction, drilled geology, or pump testing for this well.
- Surface water and groundwater risks and receptors are discussed further in Chapter 12 of this EIAR: Water Environment.

6.2.3.2 Electricity Grid Connection

The principal soil and geological resource receptors which have the potential to be impacted upon by the Electricity Grid Connection during construction, operation, and decommissioning include:

- **Agriculture land and peatland soil resources:** the Electricity Grid Connection crosses cut-over peatland, short sections of industrial access roads and railways serving the former peat harvesting areas and agricultural lands at the 400kV Substation site which are typical of the area. As the peatland has already been extensively worked for fuel, it is considered to be of moderate sensitivity.
- **Designated sites:** There are no SPA, pNHA, NHA or SAC within 5km of the Route and one pNHA 400m south of the southern end of the route. The Grand Canal pNHA is of regional importance as a diverse habitat and is therefore considered to be of High or Very High sensitivity. Croghan Hill is a geological heritage site 1.87km from the EGC route and 400kV substation. Neither The Grand Canal pNHA nor Croghan Hill are at risk from the land and soils aspects of the proposed construction activities.

Other receptors which could be affected by contamination which is created or affected by construction and/ or operation of the Electricity Grid Connection are:

- **Geology:** The Electricity Grid Connection will impact on a high sensitivity soil (peat) environment.
- **Surface water:** There are four surface water courses along or bordering the Electricity Grid Connection.
- **Surface Water:** The following surface water courses are within 500m of the Electricity Grid Connection:

Surface water and groundwater risks and receptors are discussed further in Chapter 12 of this EIAR: Water Environment.

7. Revised Qualitative Risk Assessment

Following the intrusive investigation works with soil sampling conducted by IDL, and the subsequent laboratory chemical analysis of soil and soil leachate samples from the Site undertaken by ALS Laboratories (UK) Limited, a revised qualitative risk assessment has been carried out by AECOM.

The revised assessment has been undertaken for potential source-pathway-receptor linkages based on current EPA guidance. The guidance document describes a method for the classification of the severity and likelihood of identified risks. This assessment is based on consideration of both:

- The likelihood of an event (probability – considers both the presence of the hazard and receptor and the integrity of the pathway).
- The severity of the potential consequence (considers both the potential severity of the hazard and the sensitivity of the receptor).

The method of dealing with identified risks and the level of significance of those risks will be a function of site use. The risks associated with each potential pollutant linkage considers the findings of the site investigation work undertaken. It is important to emphasize that elements of surface water and groundwater are discussed in Chapter 12 Water Environment in this EIAR, and the assessment of the Gas Connection Corridor is based on desk study information only, therefore, these two aspects have not been covered in this document, only risks related to potential soil contamination and soil leaching were addressed. A revised CSM, summarising potentially viable contaminant linkages with risk assessment, is provided below:

Table 11. Revised Quantitative Risk Assessment for the Power Plant Area

Source	Potential Pollutants	Pathway	Receptor	Classification of consequence	Likelihood of occurrence	Classified risk	Mitigation
Existing soil contamination	Hydrocarbons PAHs Asbestos Heavy metals PCBs Phenols suite SVOCs Total Sulphate. Total sulphur. VOCs.	Dermal/ ingestion/ inhalation of vapours and dust	Construction workers Off-site industrial and residential land users	Effect on human health [Medium]	Low likelihood Low concentrations of a range of metals, petroleum hydrocarbons and PAHs were reported in near-surface soil samples from across the Power Plant Area, but all at below the human health GAC. Soil sample depth ranged from 0.6 to 3.5 m bgl but were typically from between 1.0 and 1.5 m bgl (consistent with anticipated excavation depths at the Power Plant Area).	Low risk	Use of PPE.
	Chromium (III & VI). Metals suite DOC. Fluoride. Chloride. Soluble Sulphate (2:1 extract). Total Dissolved Solids.	Leaching of soil contamination into shallow groundwater	Surface watercourses Groundwater Known/ unknown water supplies	Pollution of groundwater [Medium]	Low likelihood: The only parameter to exceed a relevant GAC at the Power Plant Area was antimony in the soil leachate samples from BH104 (1.0m) and BH112 (1.6m). Both GAC exceedances for antimony in soil leachate were less than twice the GAC applied (Irish 2014 Drinking Water Standard, DWS, of 5 microgrammes per litre (mg/L)), are below the revised 2023 Irish antimony DWS of 10 mg/L and are therefore considered insignificant.	Low risk	None required

Table 12. Revised Quantitative Risk Assessment for the Electric Grid Connection Route

Source	Potential Pollutants	Pathway	Receptor	Classification of consequence	Likelihood of occurrence	Classified risk	Mitigation
Existing soil contamination	Hydrocarbons PAHs Asbestos Heavy metals PCBs Phenols suite SVOCs Total Sulphate. Total sulphur. VOCs.	Dermal/ ingestion/ inhalation of vapours and dust	Construction workers Off-site industrial and residential land users	Effect on human health [Medium]	Low likelihood: Screening of the soil data analysed from the EGC ground investigation locations against human health and controlled waters GAC shows that most soil results were either below laboratory detection limits or below the relevant GAC.	Low risk	Use of PPE.
	Chromium (III & VI). Metals suite DOC. Fluoride. Chloride. Soluble Sulphate (2:1 extract). Total Dissolved Solids.	Leaching of soil contamination into shallow groundwater	Surface watercourses Groundwater Known/ unknown water supplies	Pollution of groundwater [Medium]	Low likelihood: The only parameter to exceed a relevant GAC at the Power Plant Area was antimony in the soil leachate samples from BH104 (1.0m) and BH112 (1.6m). Both GAC exceedances for antimony in soil leachate were less than twice the GAC applied (Irish 2014 Drinking Water Standard, DWS, of 5 microgrammes per litre (mg/L)), are below the revised 2023 Irish antimony DWS of 10 mg/L and are therefore considered insignificant.	Low risk	None required

8. Conclusions

A Tier 1 Preliminary Risk Assessment (PRA) is presented in Section 2 of this report. A Conceptual Site Model (CSM) based on the findings of the updated PRA for the Proposed Development is included in Section 3 of this report. The preliminary CSM includes several identified potentially complete pollutant linkages.

To refine the CSM, AECOM conducted a Tier 2 Generic Quantitative Risk Assessment (GQRA) to assess the soil and soil leachate quality potential at the site, based on soil chemical data from the intrusive Environmental Site Investigation conducted by IDL between 13 April 2023 and 13 June 2023, with soil samples analysed for an extensive suite of geo-environmental parameters as potential ground contaminants.

The conclusions reached following the site investigation and subsequent Tier 2 GQRA are summarised below:

- Non-natural soil material was encountered during the site investigation at the Power Plant Area in the form of fill materials and made ground in certain boreholes and trial pits (undifferentiated fill (BH102, BH103), clay fill (BH105), gravel fill (BH106, BH110), peat & clay fill (BH118, TP204), and reworked peat (TP205, TP311)). These non-natural soils included some anthropogenic materials in several trial pit sand boreholes, such as metal fragments (BH103), tar/Type 804 fill/road fill (BH112) and plastic and timber fragments (TP313, along the stormwater discharge route to the Mongagh River).
- Anthropogenic material was encountered during the ground investigation along the Electricity Grid Connection route in the form of fragments of timber, plastic, glass, and discarded hand tools in a trial pit along the UGC section of the EGC only (TPC02, TPC03, TPC04 and TPC05, see trial pit logs in Volume II Appendix 13A). Top of bedrock was recorded depths ranging from 1.8m (BH10) to 7.8m bgl (BH05).
- No asbestos fibres were identified in any of the soil samples analysed for asbestos to date. Nevertheless, site contractors should be made aware during earth works of the possibility that asbestos (either as dispersed fibres or as asbestos-containing materials) may be locally present in made ground soils at the Site, related to historical construction and operational activities at the Derrygreenagh Works site from the 1950s to the 2020s.
- The potential significance of concentrations of contaminants of concern recorded in soil samples have been assessed with reference to Generic Assessment Criteria (GAC) applicable to the Site's potential future use (commercial/ industrial).
- A review of the soil data analysed to date from the Site shows that soil results were either below laboratory detection limits or below relevant generic assessment criteria, other than the following:

<u>Power Plant Area</u>

  - Low concentrations of a range of metals, petroleum hydrocarbons and PAHs were reported in near-surface soil samples from across the Power Plant Area, but all at below applicable human health GACs. Soil sample depth ranged from 0.6 to 3.5 m bgl but were typically from between 1.0 and 1.5 m bgl.
  - The only parameter to exceed a relevant GAC at the Power Plant Area was antimony in the soil leachate samples from BH104 (1.0m) and BH112 (1.6m). Both GAC exceedances for antimony in soil leachate were less than twice the GAC applied (Irish 2014 Drinking Water Standard, DWS, of 5 microgrammes per litre (mg/L)), are below the revised 2023 Irish antimony DWS of 10 mg/L and are therefore considered insignificant.

Electric Grid Connection Route

- A review of the soil data analysed from the EGC ground investigation locations shows that most soil results were either below laboratory detection limits or below the relevant GAC.
- The only parameter to exceed a relevant GAC in samples from EGC ground investigation locations was antimony in the soil leachate samples from BHSS04 (3.5m and BHSS05 (2.5m) in the 220kV substation. Both GAC exceedances for antimony in soil leachate were less than twice the GAC applied (Irish 2014 Drinking Water Standard, DWS, of 5 microgrammes per litre (mg/L)), are below the revised 2023 Irish antimony DWS of 10 mg/L and are therefore considered insignificant.

- The GAC exceedances for soil leachate samples are not considered to pose a significant risk to the surface water and groundwater environments for the following reasons:
  - The soil leachate GAC exceedances are marginal (generally less than two orders of magnitude of the relevant GAC).

Based on the report findings, the following recommendations are made:

- Contractors should be made aware of the risks posed by potential soil contamination and adopt suitably protective PPE during site development and any ongoing maintenance works.

Appendix A – Tier 2 Soil and Groundwater Screening Tables

AECOM

Table A1. Soil Analytical Results against GAC
Derrygreenagh

			Sample ID	BH101	BH102	BH103	BH104	BH105	BH-106	BH107	BH108	BH-109
			Sample Depth	1	1	1.5	1	1	4	1.5	1	1
			Date Sampled	13/04/2023	14/04/2023	14/04/2023	18/04/2023	18/04/2023	16/04/2023	25/04/2023	25/04/2023	20/04/2023
			Lab Report Number	230418-53	230421-102	230421-102	230421-103	230421-103	230426-63	230502-27	230502-27	230426-63
			GAC_HH_COM/ IND_SLOAM_>3.48%TOC									
Chemical Name	Units	MDL										
Sulphate, Total Potential as SO4	g/kg			1.28	0.852	0.6	1.17	0.96	0.696	-	-	1.8
Loss on ignition	%	0.7		2.49	16.7	2.45	22.9	0.913	1.18	2.31	2.73	82
Perylene-d12	%			83.6	86.4	89.4	84	100	111	77.8	78.2	106
PAH 16 Total + Coronene	mg/kg	0.318		<0.318	<0.318	<0.318	0.794	<0.318	<0.318	<0.318	<0.318	<0.318
EPH												
>C10-C40 Aliphatics	mg/kg	5		10.1	337	8.98	145	<5	39.8	<5	<5	192
NA												
Asbestos Actinolite	No units			0	0	0	0	0	0	0	0	0
Asbestos Anthophyllite	No units			0	0	0	0	0	0	0	0	0
CEN 10:1 - Dissolved solids, Total (meter)	mg/kg	100		736	1760	988	2250	516	686	704	-	-
WAC	mg/kg			10	10	10	10	10	10	10	10	10
Asbestos Tremolite	No units			0	0	0	0	0	0	0	0	0
Petroleum Hydrocarbons												
>C10-C44 Aliphatics & Aromatics	mg/kg	10		72.6	1620	<10	820	<10	62.7	<10	<10	3010
Field												
pH	pH_Units			8.69	8.3	8.43	8.28	8.46	7.99	7.95	8.1	-
Electrical Conductivity	µS/cm			97.2	230	129	292	67	89.7	93.2	116	-
TPH												
>C10-C44 Aliphatics	mg/kg	5		52.3	569	<5	281	<5	57.1	<5	<5	2130
>EC10-EC44 Aromatics	mg/kg	5		20.4	1050	<5	539	<5	5.59	<5	<5	877
>C5-C40	mg/kg	35		<35	1040	<35	597	<35	42.1	<35	<35	811
GRO >C5-C10	mg/kg	0.02		<0.02	0.0596	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
EPH >C10-C40	mg/kg	35		<35	1040	<35	597	<35	42.1	<35	<35	811
>C5-C6 Aliphatics	mg/kg	0.01	12,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>C5-C10 Aliphatics	mg/kg	0.05		<0.05	0.0596	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
>C6-C8 Aliphatics	mg/kg	0.01	40,000[#1]	<0.01	0.0328	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>C8-C10 Aliphatics	mg/kg	0.01	11,000[#1]	<0.01	0.0268	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>C10-C12 Aliphatics	mg/kg	1	47,000[#1]	<1	<1	<1	<1	<1	<1	<1	<1	<1
>C12-C16 Aliphatics	mg/kg	1	90,000[#1]	<1	24.5	<1	2.55	<1	<1	<1	<1	<1
>C16-C21 Aliphatics	mg/kg	1		2.17	94.3	<1	37.6	<1	<1	<1	<1	26.2
>C21-C35 Aliphatics	mg/kg	1		39.4	322	4.94	195	<1	52	2.77	<1	1630
>C35-C44 Aliphatics	mg/kg	1	1,800,000[#1]	10.7	127	<1	45.5	<1	5.06	<1	<1	476
>C5-C10 Aromatics	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
>EC5-EC7 Aromatics	mg/kg	0.01	86,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>EC7-EC8 Aromatics	mg/kg	0.01	180,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>EC8-EC10 Aromatics	mg/kg	0.01	17,000[#1]	<0.01	0.0179	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>EC10-EC12 Aromatics	mg/kg	1	34,000[#1]	<1	<1	<1	<1	<1	<1	<1	<1	2.78
>EC12-EC16 Aromatics	mg/kg	1	38,000[#1]	<1	9.45	<1	2.75	<1	<1	<1	<1	1.29
>EC16-EC21 Aromatics	mg/kg	1	28,000[#1]	<1	70.3	<1	28.4	<1	<1	<1	<1	24.4
>EC21-EC35 Aromatics	mg/kg	1	28,000[#1]	18.2	690	2.14	366	<1	4.26	<1	<1	708
>EC35-EC44 Aromatics	mg/kg	1	28,000[#1]	1.47	279	<1	141	<1	<1	<1	<1	140
>EC40-EC44 Aromatics	mg/kg	1		<1	111	<1	51.9	<1	<1	<1	<1	14.2
>C5-C44 Aliphatics & Aromatics	mg/kg	10		72.6	1620	<10	820	<10	62.7	<10	<10	3010
BTEX												
Benzene	mg/kg	0.009	98[#3]	<0.009	<0.18	<0.009	<0.18	<0.009	<0.009	<0.009	<0.009	<0.18
Toluene	mg/kg	0.007	180,000[#1]	<0.007	<0.14	<0.007	<0.14	<0.007	<0.007	<0.007	<0.007	<0.14
Ethylbenzene	mg/kg	0.004	27,000[#1]	<0.004	<0.08	<0.004	<0.08	<0.004	<0.004	<0.004	<0.004	<0.08
Xylene (m & p)	mg/kg	0.01		<0.01	<0.2	<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.2
Xylene Total	mg/kg	0.02	30,000[#1]	<0.02	<0.4	<0.02	<0.4	<0.02	<0.02	<0.02	<0.02	<0.4
Xylene (o)	mg/kg	0.01	33,000[#1]	<0.01	<0.2	<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.2
Total BTEX	mg/kg	0.04		<0.04	<0.8	<0.04	<0.8	<0.04	<0.04	<0.04	<0.04	<0.8
Oxygenates												
MTBE	mg/kg	0.01	24,000[#4]	<0.01	<0.2	<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.2
Tert Amyl Methyl Ether	mg/kg	0.01		-	-	-	-	-	-	<0.01	<0.01	-
Chlorinated Hydrocarbons												
Chloromethane	mg/kg	0.007	1.6[#4]	-	-	-	-	-	-	<0.007	<0.007	-
Vinyl chloride	mg/kg	0.006	2.2[#5]	-	-	-	-	-	-	<0.006	<0.006	-
Chloroethane	mg/kg	0.01	2,100[#4]	-	-	-	-	-	-	<0.01	<0.01	-
1,1-dichloroethene	mg/kg	0.01	92[#4]	-	-	-	-	-	-	<0.01	<0.01	-
Dichloromethane	mg/kg	0.01	560[#4]	-	-	-	-	-	-	<0.01	<0.01	-
trans-1,2-dichloroethene	mg/kg	0.01	81[#4]|300[#2]	-	-	-	-	-	-	<0.01	<0.01	-
1,1-dichloroethane	mg/kg	0.008	850[#4]	-	-	-	-	-	-	<0.008	<0.008	-
cis-1,2-dichloroethene	mg/kg	0.006	47[#4]|2300[#2]	-	-	-	-	-	-	<0.006	<0.006	-
Chloroform	mg/kg	0.008	350[#1]	-	-	-	-	-	-	<0.008	<0.008	-
1,1,1-trichloroethane	mg/kg	0.007	3,000[#1]	-	-	-	-	-	-	<0.007	<0.007	-
Carbon tetrachloride	mg/kg	0.01	14[#1]	-	-	-	-	-	-	<0.01	<0.01	-
Trichloroethene	mg/kg	0.009	3.4[#5]	-	-	-	-	-	-	<0.009	<0.009	-
1,1,2-trichloroethane	mg/kg	0.01	400[#4]	-	-	-	-	-	-	<0.01	<0.01	-
Tetrachloroethene	mg/kg	0.005	130[#5]	-	-	-	-	-	-	<0.005	<0.005	-
VOC												
2,2-dichloropropane	mg/kg	0.01		-	-	-	-	-	-	<0.01	<0.01	-
Bromochloromethane	mg/kg	0.01	630[#2]	-	-	-	-	-	-	<0.01	<0.01	-
1,1-dichloropropene	mg/kg	0.01		-	-	-	-	-	-	<0.01	<0.01	-
1,2-dichloroethane	mg/kg	0.005	1.7[#1]	-	-	-	-	-	-	<0.005	<0.005	-
1,2-dichloropropane	mg/kg	0.01	12[#4]	-	-	-	-	-	-	<0.01	<0.01	-
Dibromomethane	mg/kg	0.009	99[#2]	-	-	-	-	-	-	<0.009	<0.009	-
Bromodichloromethane	mg/kg	0.007	1.3[#2]	-	-	-	-	-	-	<0.007	<0.007	-
cis-1,3-dichloropropene	mg/kg	0.01		-	-	-	-	-	-	<0.01	<0.01	-
trans-1,3-dichloropropene	mg/kg	0.01		-	-	-	-	-	-	<0.01	<0.01	-
1,3-dichloropropane	mg/kg	0.007	23,000[#2]	-	-	-	-	-	-	<0.007	<0.007	-
Chlorodibromomethane	mg/kg	0.01	39[#2]	-	-	-	-	-	-	<0.01	<0.01	-
1,1,1,2-tetrachloroethane	mg/kg	0.01	560[#1]	-	-	-	-	-	-	<0.01	<0.01	-
Styrene	mg/kg	0.01	180,000[#4]	-	-	-	-	-	-	<0.01	<0.01	-
Bromoform	mg/kg	0.01	3,100[#4]	-	-	-	-	-	-	<0.01	<0.01	-
Isopropylbenzene	mg/kg	0.005	7,700[#4]	-	-	-	-	-	-	<0.005	<0.005	-
1,1,2,2-tetrachloroethane	mg/kg	0.01	1,100[#1]	-	-	-	-	-	-	<0.01	<0.01	-
1,2,3-trichloropropane	mg/kg	0.016	0.11[#2]	-	-	-	-	-	-	<0.016	<0.016	-
n-propylbenzene	mg/kg	0.01	11,000[#4]	-	-	-	-	-	-	<0.01	<0.01	-
1,3,5-trimethylbenzene	mg/kg	0.008	1,500[#2]	-	-	-	-	-	-	<0.008	<0.008	-
tert-butylbenzene	mg/kg	0.014	120,000[#2]	-	-	-	-	-	-	<0.014	<0.014	-
1,2,4-trimethylbenzene	mg/kg	0.009	220[#4]	-	-	-	-	-	-	<0.009	<0.009	-
sec-butylbenzene	mg/kg	0.01	120,000[#2]	-	-	-	-	-	-	<0.01	<0.01	-
p-isopropyltoluene	mg/kg	0.01		-	-	-	-	-	-	<0.01	<0.01	-
n-butylbenzene	mg/kg	0.011	58,000[#2]	-	-	-	-	-	-	<0.011	<0.011	-
1,2-dibromo-3-chloropropane	mg/kg	0.014	0.064[#2]	-	-	-	-	-	-	<0.014	<0.014	-
Hexachlorobutadiene	mg/kg	0.02	120[#1]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.02	<0.1
PAH												
Naphthalene	mg/kg	0.009	1,100[#1]	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009
Acenaphthylene	mg/kg	0.012	100,000[#1]	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012
Acenaphthene	mg/kg	0.008	100,000[#1]	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
Fluorene	mg/kg	0.01	71,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Phenanthrene	mg/kg	0.015	23,000[#1]	<0.015	<0.015	<0.015	0.0462	<0.015	<0.015	<0.015	<0.015	<0.015
Anthracene	mg/kg	0.016	540,000[#1]	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016
Fluoranthene	mg/kg	0.017	23,000[#1]	<0.017	<0.017	<0.017	0.125	<0.017	<0.017	<0.017	<0.017	<0.017
Pyrene	mg/kg	0.015	54,000[#1]	<0.015	0.0253	<0.015	0.105	<0.015	<0.015	<0.015	<0.015	<0.015
Benz(a)anthracene	mg/kg	0.014	180[#1]	<0.014	<0.014	<0.014	0.0612	<0.014	<0.014	<0.014	<0.014	<0.014
Chrysene	mg/kg	0.01	350[#1]	<0.01	<0.01	<0.01	0.0838	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(a) pyrene	mg/kg	0.015	36[#1]	<0.015	<0.015	<0.015	0.059	<0.015	<0.015	<0.015	<0.015	<0.015
Indeno(1,2,3-c,d)pyrene	mg/kg	0.018	510[#1]	<0.018	<0.018	<0.018	0.0705	<0.018	<0.018	<0.018	<0.018	<0.018
Dibenz(a,h)anthracene	mg/kg	0.023	3.6[#1]	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023
Benzo(g,h,i)perylene	mg/kg	0.024	4,000[#1]	<0.024	<0.024	<0.024	0.0894	<0.024	<0.024	<0.024	<0.024	<0.024
Benzo(b)fluoranthene	mg/kg	0.015	45[#1]	<0.015	<0.015	<0.015	0.114	<0.015	<0.015	<0.015	<0.015	<0.015
Benzo(k)fluoranthene	mg/kg	0.014	1,200[#1]	<0.014	<0.014	<0.014	0.04	<0.014	<0.014	<0.014	<0.014	<0.014
PAH 16 Total	mg/kg	0.118		<0.118	<0.118	<0.118	0.794	<0.118	<0.118	<0.118	<0.118	<0.118
PAH 17 Total	mg/kg	10		<10	<10	<10	<10	<10	<10	<10	<10	<10
SVOC												
Coronene	mg/kg	0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2
2-methylnaphthalene	mg/kg	0.1	3,000[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-bromophenyl phenyl ether	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorophenyl phenyl ether	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Azobenzene	mg/kg	0.1	26[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bis(2-chloroethoxy) methane	mg/kg	0.1	2,500[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bis(2-chloroethyl)ether	mg/kg	0.1	1[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbazole	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzofuran	mg/kg	0.1	1,200[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorocyclopentadiene	mg/kg	0.1	7.5[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachloroethane	mg/kg	0.1	120[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenolics												
2-methylphenol	mg/kg	0.1	180,000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitrophenol	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4-dimethylphenol	mg/kg	0.1	30,000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chloro-3-methylphenol	mg/kg	0.1	82,000[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-methylphenol	mg/kg	0.1	180,000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-nitrophenol	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenol	mg/kg	0.01	1,300[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-chloronaphthalene	mg/kg	0.1	2,200[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cresol Total	mg/kg	0.01	180,000[#4]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Total Monohydric Phenols (S) Corrected	mg/kg	0.035		<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
Xylenols	mg/kg	0.015		<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	0.128

Env Stds Comments
#1:LQM/CIEH S4ULs 2015
#2:USEPA RSL (NOV 2021)
#3:Defra C4SL (2014)
#4:EIC/AGS/CL:AIRE
#5:Defra C4SL (2021)
GAC: Generic Assessment Criteria
(blank): No assessment criteria available
- : Not analysed

Key
XXX Exceedance of HH Soil. Commercial/Industrial. Sandy Loam. TOC >=3.48%

Table A1. Soil Analytical Results against GAC
Derrygreenagh

			Sample ID	BH110	BH111	BH112	BH112	BH113	BH-114	BH-115	BH116	BH117	BH118
			Sample Depth	1	1.5	0.6	1.6	2	1	3	7	4.5	3.5
			Date Sampled	27/04/2023	27/04/2023	12/04/2023	12/04/2023	25/04/2023	21/04/2023	20/04/2023	11/05/2023	10/05/2023	12/05/2023
			Lab Report Number	230502-30	230510-54	230418-53	230418-53	230502-27	230426-63	230426-63	230518-59	230515-36	230518-59
			GAC_HH_COM/ IND_SLOAM_>3.48%TOC										
Chemical Name	Units	MDL											
Sulphate, Total Potential as SO4	g/kg			-	0.6	0.6	0.918	-	0.6	0.777	0.6	0.6	0.6
Loss on ignition	%	0.7		1.08	2.99	2.66	4.23	1.45	0.967	0.878	-	-	-
Perylene-d12	%			78	99.4	86.2	83.5	84.5	94.2	100	93.1	88.1	86.1
PAH 16 Total + Coronene	mg/kg	0.318		<0.318	-	<0.318	<0.318	<0.318	<0.318	<0.318	-	-	-
EPH													
>C10-C40 Aliphatics	mg/kg	5		<5	<5	30.3	16.9	90.2	19.1	8.65	-	-	-
NA													
Asbestos Actinolite	No units			0	0	0	0	0	0	0	0	0	0
Asbestos Anthophyllite	No units			0	0	0	0	0	0	0	0	0	0
CEN 10:1 - Dissolved solids, Total (meter)	mg/kg	100		-	760	1410	694	580	573	571	-	-	-
WAC	mg/kg			10	10	10	10	10	10	10	-	-	-
Asbestos Tremolite	No units			0	0	0	0	0	0	0	0	0	0
Petroleum Hydrocarbons													
>C10-C44 Aliphatics & Aromatics	mg/kg	10		<10	<10	83.4	43.2	81.1	16.7	<10	<10	<10	<10
Field													
pH	pH_Units			7.91	8.12	8.27	8.6	7.97	8.11	8.19	-	-	-
Electrical Conductivity	µS/cm			71.3	99.7	189	90.8	76.6	75.5	74.6	-	-	-
TPH													
>C10-C44 Aliphatics	mg/kg	5		<5	<5	76.3	10.4	77.9	12.8	6.69	<5	<5	<5
>EC10-EC44 Aromatics	mg/kg	5		<5	<5	7.15	32.8	<5	<5	<5	<5	<5	<5
>C5-C40	mg/kg	35		<35	-	<35	67	96.5	<35	<35	-	-	-
GRO >C5-C10	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	2.68	0.1	<0.02	<0.02	<0.02
EPH >C10-C40	mg/kg	35		<35	-	<35	67	96.5	<35	<35	-	-	-
>C5-C6 Aliphatics	mg/kg	0.01	12,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	0.0339	0.0242	<0.01	<0.01	<0.01
>C5-C10 Aliphatics	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	1.68	0.1	<0.05	<0.05	<0.05
>C6-C8 Aliphatics	mg/kg	0.01	40,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	0.147	0.0403	<0.01	<0.01	<0.01
>C8-C10 Aliphatics	mg/kg	0.01	11,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	1.5	0.0357	<0.01	<0.01	<0.01
>C10-C12 Aliphatics	mg/kg	1	47,000[#1]	<1	<1	<1	<1	<1	1.25	<1	<1	<1	<1
>C12-C16 Aliphatics	mg/kg	1	90,000[#1]	<1	<1	<1	<1	<1	5.39	<1	<1	<1	<1
>C16-C21 Aliphatics	mg/kg	1		<1	<1	<1	<1	<1	5.36	<1	<1	<1	<1
>C21-C35 Aliphatics	mg/kg	1		<1	3.56	63.5	9.48	67	<1	6.69	<1	<1	<1
>C35-C44 Aliphatics	mg/kg	1	1,800,000[#1]	<1	<1	12.8	<1	10.6	<1	<1	<1	<1	<1
>C5-C10 Aromatics	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	0.999	<0.05	<0.05	<0.05	<0.05
>EC5-EC7 Aromatics	mg/kg	0.01	86,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>EC7-EC8 Aromatics	mg/kg	0.01	180,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>EC8-EC10 Aromatics	mg/kg	0.01	17,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	0.999	0.0242	<0.01	<0.01	<0.01
>EC10-EC12 Aromatics	mg/kg	1	34,000[#1]	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>EC12-EC16 Aromatics	mg/kg	1	38,000[#1]	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>EC16-EC21 Aromatics	mg/kg	1	28,000[#1]	<1	<1	<1	1.87	<1	1.7	<1	<1	<1	<1
>EC21-EC35 Aromatics	mg/kg	1	28,000[#1]	<1	1.02	5.99	24.2	1.79	<1	1.25	<1	<1	<1
>EC35-EC44 Aromatics	mg/kg	1	28,000[#1]	<1	<1	<1	6.71	<1	<1	<1	<1	<1	<1
>EC40-EC44 Aromatics	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>C5-C44 Aliphatics & Aromatics	mg/kg	10		<10	<10	83.4	43.2	77.9	14.5	<10	<10	<10	<10
BTEX													
Benzene	mg/kg	0.009	98[#3]	<0.009	<0.009	<0.09	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009
Toluene	mg/kg	0.007	180,000[#1]	<0.007	<0.007	<0.07	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
Ethylbenzene	mg/kg	0.004	27,000[#1]	<0.004	<0.004	<0.04	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Xylene (m & p)	mg/kg	0.01		<0.01	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Xylene Total	mg/kg	0.02	30,000[#1]	<0.02	<0.02	<0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Xylene (o)	mg/kg	0.01	33,000[#1]	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Total BTEX	mg/kg	0.04		<0.04	<0.04	<0.4	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Oxygenates													
MTBE	mg/kg	0.01	24,000[#4]	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tert Amyl Methyl Ether	mg/kg	0.01		<0.01	<0.01	-	-	<0.01	-	-	<0.01	<0.01	<0.01
Chlorinated Hydrocarbons													
Chloromethane	mg/kg	0.007	1.6[#4]	<0.007	<0.007	-	-	<0.007	-	-	<0.007	<0.007	<0.007
Vinyl chloride	mg/kg	0.006	2.2[#5]	<0.006	<0.006	-	-	<0.006	-	-	<0.006	<0.006	<0.006
Chloroethane	mg/kg	0.01	2,100[#4]	<0.01	<0.01	-	-	<0.01	-	-	<0.01	<0.01	<0.01
1,1-dichloroethene	mg/kg	0.01	92[#4]	<0.01	<0.01	-	-	<0.01	-	-	<0.01	<0.01	<0.01
Dichloromethane	mg/kg	0.01	560[#4]	<0.01	<0.01	-	-	<0.01	-	-	<0.01	<0.01	<0.01
trans-1,2-dichloroethene	mg/kg	0.01	81[#4]|300[#2]	<0.01	<0.01	-	-	<0.01	-	-	<0.01	<0.01	<0.01
1,1-dichloroethane	mg/kg	0.008	850[#4]	<0.008	<0.008	-	-	<0.008	-	-	<0.008	<0.008	<0.008
cis-1,2-dichloroethene	mg/kg	0.006	47[#4]|2300[#2]	<0.006	<0.006	-	-	<0.006	-	-	<0.006	<0.006	<0.006
Chloroform	mg/kg	0.008	350[#1]	<0.008	<0.008	-	-	<0.008	-	-	<0.008	<0.008	<0.008
1,1,1-trichloroethane	mg/kg	0.007	3,000[#1]	<0.007	<0.007	-	-	<0.007	-	-	<0.007	<0.007	<0.007
Carbon tetrachloride	mg/kg	0.01	14[#1]	<0.01	<0.01	-	-	<0.01	-	-	<0.01	<0.01	<0.01
Trichloroethene	mg/kg	0.009	3.4[#5]	<0.009	<0.009	-	-	<0.009	-	-	<0.009	<0.009	<0.009
1,1,2-trichloroethane	mg/kg	0.01	400[#4]	<0.01	<0.01	-	-	<0.01	-	-	<0.01	<0.01	<0.01
Tetrachloroethene	mg/kg	0.005	130[#5]	<0.005	<0.005	-	-	<0.005	-	-	<0.005	<0.005	<0.005
VOC													
2,2-dichloropropane	mg/kg	0.01		<0.01	<0.01	-	-	<0.01	-	-	<0.01	<0.01	<0.01
Bromochloromethane	mg/kg	0.01	630[#2]	<0.01	<0.01	-	-	<0.01	-	-	<0.01	<0.01	<0.01
1,1-dichloropropene	mg/kg	0.01		<0.01	<0.01	-	-	<0.01	-	-	<0.01	<0.01	<0.01
1,2-dichloroethane	mg/kg	0.005	1.7[#1]	<0.005	<0.005	-	-	<0.005	-	-	<0.005	<0.005	<0.005
1,2-dichloropropane	mg/kg	0.01	12[#4]	<0.01	<0.01	-	-	<0.01	-	-	<0.01	<0.01	<0.01
Dibromomethane	mg/kg	0.009	99[#2]	<0.009	<0.009	-	-	<0.009	-	-	<0.009	<0.009	<0.009
Bromodichloromethane	mg/kg	0.007	1.3[#2]	<0.007	<0.007	-	-	<0.007	-	-	<0.007	<0.007	<0.007
cis-1,3-dichloropropene	mg/kg	0.01		<0.01	<0.01	-	-	<0.01	-	-	<0.01	<0.01	<0.01
trans-1,3-dichloropropene	mg/kg	0.01		<0.01	<0.01	-	-	<0.01	-	-	<0.01	<0.01	<0.01
1,3-dichloropropane	mg/kg	0.007	23,000[#2]	<0.007	<0.007	-	-	<0.007	-	-	<0.007	<0.007	<0.007
Chlorodibromomethane	mg/kg	0.01	39[#2]	<0.01	<0.01	-	-	<0.01	-	-	<0.01	<0.01	<0.01
1,1,1,2-tetrachloroethane	mg/kg	0.01	560[#1]	<0.01	<0.01	-	-	<0.01	-	-	<0.01	<0.01	<0.01
Styrene	mg/kg	0.01	180,000[#4]	<0.01	<0.01	-	-	<0.01	-	-	<0.01	<0.01	<0.01
Bromoform	mg/kg	0.01	3,100[#4]	<0.01	<0.01	-	-	<0.01	-	-	<0.01	<0.01	<0.01
Isopropylbenzene	mg/kg	0.005	7,700[#4]	<0.005	<0.005	-	-	<0.005	-	-	<0.005	<0.005	<0.005
1,1,2,2-tetrachloroethane	mg/kg	0.01	1,100[#1]	<0.01	<0.01	-	-	<0.01	-	-	<0.01	<0.01	<0.01
1,2,3-trichloropropane	mg/kg	0.016	0.11[#2]	<0.016	<0.016	-	-	<0.016	-	-	<0.016	<0.016	<0.016
n-propylbenzene	mg/kg	0.01	11,000[#4]	<0.01	<0.01	-	-	<0.01	-	-	<0.01	<0.01	<0.01
1,3,5-trimethylbenzene	mg/kg	0.008	1,500[#2]	<0.008	<0.008	-	-	<0.008	-	-	<0.008	<0.008	<0.008
tert-butylbenzene	mg/kg	0.014	120,000[#2]	<0.014	<0.014	-	-	<0.014	-	-	<0.014	<0.014	<0.014
1,2,4-trimethylbenzene	mg/kg	0.009	220[#4]	<0.009	<0.009	-	-	<0.009	-	-	<0.009	<0.009	<0.009
sec-butylbenzene	mg/kg	0.01	120,000[#2]	<0.01	<0.01	-	-	<0.01	-	-	<0.01	<0.01	<0.01
p-isopropyltoluene	mg/kg	0.01		<0.01	<0.01	-	-	<0.01	-	-	<0.01	<0.01	<0.01
n-butylbenzene	mg/kg	0.011	58,000[#2]	<0.011	<0.011	-	-	<0.011	-	-	<0.011	<0.011	<0.011
1,2-dibromo-3-chloropropane	mg/kg	0.014	0.064[#2]	<0.014	<0.014	-	-	<0.014	-	-	<0.014	<0.014	<0.014
Hexachlorobutadiene	mg/kg	0.02	120[#1]	<0.02	<0.02	<0.1	<0.1	<0.02	<0.1	<0.1	<0.02	<0.02	<0.02
PAH													
Naphthalene	mg/kg	0.009	1,100[#1]	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009
Acenaphthylene	mg/kg	0.012	100,000[#1]	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012
Acenaphthene	mg/kg	0.008	100,000[#1]	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
Fluorene	mg/kg	0.01	71,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Phenanthrene	mg/kg	0.015	23,000[#1]	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Anthracene	mg/kg	0.016	540,000[#1]	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016
Fluoranthene	mg/kg	0.017	23,000[#1]	<0.017	<0.017	<0.017	<0.017	0.0202	<0.017	<0.017	<0.017	<0.017	<0.017
Pyrene	mg/kg	0.015	54,000[#1]	<0.015	<0.015	<0.015	<0.015	0.0315	<0.015	<0.015	<0.015	<0.015	<0.015
Benz(a)anthracene	mg/kg	0.014	180[#1]	<0.014	<0.014	<0.014	<0.014	0.0184	<0.014	<0.014	<0.014	<0.014	<0.014
Chrysene	mg/kg	0.01	350[#1]	<0.01	<0.01	<0.01	<0.01	0.0189	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(a) pyrene	mg/kg	0.015	36[#1]	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Indeno(1,2,3-c,d)pyrene	mg/kg	0.018	510[#1]	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018
Dibenz(a,h)anthracene	mg/kg	0.023	3.6[#1]	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023
Benzo(g,h,i)perylene	mg/kg	0.024	4,000[#1]	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024
Benzo(b)fluoranthene	mg/kg	0.015	45[#1]	<0.015	<0.015	<0.015	<0.015	0.0204	<0.015	<0.015	<0.015	<0.015	<0.015
Benzo(k)fluoranthene	mg/kg	0.014	1,200[#1]	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014
PAH 16 Total	mg/kg	0.118		<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118
PAH 17 Total	mg/kg	10		<10	<10	<10	<10	<10	<10	<10	-	-	-
SVOC													
Coronene	mg/kg	0.2		<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	-	-	-
2-methylnaphthalene	mg/kg	0.1	3,000[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-bromophenyl phenyl ether	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorophenyl phenyl ether	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Azobenzene	mg/kg	0.1	26[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bis(2-chloroethoxy) methane	mg/kg	0.1	2,500[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bis(2-chloroethyl)ether	mg/kg	0.1	1[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbazole	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzofuran	mg/kg	0.1	1,200[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorocyclopentadiene	mg/kg	0.1	7.5[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachloroethane	mg/kg	0.1	120[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenolics													
2-methylphenol	mg/kg	0.1	180,000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitrophenol	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4-dimethylphenol	mg/kg	0.1	30,000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chloro-3-methylphenol	mg/kg	0.1	82,000[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-methylphenol	mg/kg	0.1	180,000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-nitrophenol	mg/kg	0.1		<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenol	mg/kg	0.01	1,300[#1]	<0.01	<0.01	0.011	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-chloronaphthalene	mg/kg	0.1	2,200[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cresol Total	mg/kg	0.01	180,000[#4]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Total Monohydric Phenols (S) Corrected	mg/kg	0.035		<0.035	<0.035	0.055	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
Xylenols	mg/kg	0.015		<0.015	<0.015	0.044	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015

Env Stds Comments
#1:LQM/CIEH S4ULs 2015
#2:USEPA RSL (NOV 2021)
#3:Defra C4SL (2014)
#4:EIC/AGS/CL:AIRE
#5:Defra C4SL (2021)
GAC: Generic Assessment Criteria
(blank): No assessment criteria available
- : Not analysed

Key
XXX Exceedance of HH Soil. Commercial/Industrial. Sandy Loam. TOC >=3.48%

			Sample ID	BH101	BH102	BH103	BH104	BH105	BH-106	BH107	BH108	BH-109
			Sample Depth	1	1	1.5	1	1	4	1.5	1	1
			Date Sampled	13/04/2023	14/04/2023	14/04/2023	18/04/2023	18/04/2023	16/04/2023	25/04/2023	25/04/2023	20/04/2023
			Lab Report Number	230418-53	230421-102	230421-102	230421-103	230421-103	230426-63	230502-27	230502-27	230426-63
			GAC_HH_COM/ IND_SLOAM_>3.48%TOC									
Chemical Name	Units	MDL										
PCBs												
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.003	0.16[#2]	-	-	-	-	-	-	<0.003	<0.003	-
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.003	0.048[#2]	-	-	-	-	-	-	<0.003	<0.003	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.003	0.49[#2]	-	-	-	-	-	-	<0.003	<0.003	-
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.003	0.5[#2]	-	-	-	-	-	-	<0.003	<0.003	-
PCB 118	mg/kg	0.003	0.49[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.003	0.49[#2]	-	-	-	-	-	-	<0.003	<0.003	-
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.003	0.00015[#2]	-	-	-	-	-	-	<0.003	<0.003	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.003	0.5[#2]	-	-	-	-	-	-	<0.003	<0.003	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.003	0.5[#2]	-	-	-	-	-	-	<0.003	<0.003	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.003	0.51[#2]	-	-	-	-	-	-	<0.003	<0.003	-
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.003	0.00051[#2]	-	-	-	-	-	-	<0.003	<0.003	-
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.003	0.52[#2]	-	-	-	-	-	-	<0.003	<0.003	-
Total PCB WHO 12	mg/kg	0.036		-	-	-	-	-	-	<0.036	<0.036	-
PCB 28	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 52	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 101	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 138	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 153	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 180	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Total PCB 7 Congeners	mg/kg	0.021		<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021
Amino Aliphatics												
N-nitrosodi-n-propylamine	mg/kg	0.1	0.33[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anilines												
2-nitroaniline	mg/kg	0.1	8,000[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
3-nitroaniline	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chloroaniline	mg/kg	0.1	11[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-nitroaniline	mg/kg	0.1	110[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Explosives												
2,4-Dinitrotoluene	mg/kg	0.1	3,800[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,6-dinitrotoluene	mg/kg	0.1	1,900[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nitrobenzene	mg/kg	0.1	22[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Halogenated Benzenes												
1,3,5-Trichlorobenzene	mg/kg	0.02	130[#1]	-	-	-	-	-	-	<0.02	<0.02	-
Chlorobenzene	mg/kg	0.005	290[#1]	-	-	-	-	-	-	<0.005	<0.005	-
Bromobenzene	mg/kg	0.01	520[#4]	-	-	-	-	-	-	<0.01	<0.01	-
2-chlorotoluene	mg/kg	0.009	23,000[#2]	-	-	-	-	-	-	<0.009	<0.009	-
4-chlorotoluene	mg/kg	0.01	23,000[#2]	-	-	-	-	-	-	<0.01	<0.01	-
1,3-dichlorobenzene	mg/kg	0.008	170[#1]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.008	<0.008	<0.1
1,4-dichlorobenzene	mg/kg	0.005	25,000[#1]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.005	<0.005	<0.1
1,2-dichlorobenzene	mg/kg	0.01	11,000[#1]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.01	<0.01	<0.1
1,2,4-trichlorobenzene	mg/kg	0.02	1,300[#1]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02	<0.02	<0.1
1,2,3-trichlorobenzene	mg/kg	0.02	590[#1]	-	-	-	-	-	-	<0.02	<0.02	-
Hexachlorobenzene	mg/kg	0.1	120[#1]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Halogenated Hydrocarbons												
Dichlorodifluoromethane	mg/kg	0.006	370[#2]	-	-	-	-	-	-	<0.006	<0.006	-
Bromomethane	mg/kg	0.01	30[#2]	-	-	-	-	-	-	<0.01	<0.01	-
Trichlorofluoromethane	mg/kg	0.006	350,000[#2]	-	-	-	-	-	-	<0.006	<0.006	-
1,2-dibromoethane	mg/kg	0.01	0.16[#2]	-	-	-	-	-	-	<0.01	<0.01	-
Halogenated Phenols												
2-chlorophenol	mg/kg	0.1	5,800[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4-dichlorophenol	mg/kg	0.1	2,500[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4,5-trichlorophenol	mg/kg	0.1	82,000[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4,6-trichlorophenol	mg/kg	0.1	210[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pentachlorophenol	mg/kg	0.1	400[#1]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phthalates												
Bis(2-ethylhexyl) phthalate	mg/kg	0.1	86,000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Butyl benzyl phthalate	mg/kg	0.1	950,000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Di-n-butyl phthalate	mg/kg	0.1	15,000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Di-n-octyl phthalate	mg/kg	0.1	89,000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Diethylphthalate	mg/kg	0.1	290,000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethyl phthalate	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Solvents												
Carbon disulfide	mg/kg	0.007	47[#1]	-	-	-	-	-	-	<0.007	<0.007	-
Isophorone	mg/kg	0.1	2,400[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
SPOCAS												
ANC at pH 4	mol/kg	0.03		0.786	0.265	0.813	0.257	4.17	0.452	0.071 - 0.0713	0.316	<0.03
ANC pH_6 dry soil	mol/kg	0.03		0.0445	<0.03	0.0574	<0.03	0.0842	0.0551	<0.03	0.0328	<0.03
Metals												
Antimony	mg/kg	0.01	7,500[#4]	<0.6	0.013	0.015	4.78	<0.6	<0.6	<0.6	<0.6	<0.6
Arsenic	mg/kg	0.6	640[#3]	8.08	6.7	17.6	9.73	6.86	13.6	7.98	13.6	2.01
Barium	mg/kg	0.6	22,000[#4]	23.7	54.4	58.3	76.5	31.6	27	46.2	62.7	14
Beryllium	mg/kg	0.01	12[#1]	0.452	0.462	1.17	0.424	0.451	0.724	0.496	1.05	0.267
Boron	mg/kg	0.7	240,000[#1]	2.45	3.18	3.89	4.85	3.14	0.989	1.99	5.08	2.5
Cadmium	mg/kg	0.02	410[#3]	1.24	1.01	5.66	1.79	1.22	1.44	1.16	2.9	0.503
Chromium (III+VI)	mg/kg	0.9	8,600[#1]	10.5	15.6	12	24.8	8.76	17.8	12	17.5	3.58
Copper	mg/kg	1.4	68,000[#1]	14.6	27.9	13.6	152	13.7	17.9	8.82	23.1	8.04
Lead	mg/kg	0.7	2,330[#3]	12.5	70.1	15.4	117	16.3	18.3	22.3	23.1	6.33
Magnesium	mg/kg	8		-	-	-	-	-	-	1260	2560	-
Mercury	mg/kg	0.1	350[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	mg/kg	0.03	17,000[#4]	0.719	0.092	0.05	2.34	0.433	0.664	0.645	0.936	0.639
Nickel	mg/kg	0.2	980[#1]	30.8	26	139	50.1	31.2	55.7	36	69.5	15.9
Selenium	mg/kg	1	12,000[#1]	1.54	<1	<1	1.02	<1	<1	1.24	1.34	2.01
Vanadium	mg/kg	0.2	9,000[#1]	13.8	16.1	19.8	15.1	14.1	16.9	21.2	33	3.79
Zinc	mg/kg	1.9	730,000[#1]	122	112	248	236	89.3	153	83.6	164	49.9
Chromium (hexavalent)	mg/kg	0.6	49[#3]	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<1.2
Chromium (Trivalent)	mg/kg	0.9	8,600[#1]	10.5	15.6	12	24.8	8.76	17.8	12	17.5	3.58
Organics												
Organic Matter	%	0.35		0.778	25.7	0.45	20	<0.35	<0.35	0.491	0.796	29.1
TOC	%	0.2		0.451	14.9	0.261	11.6	<0.2	<0.2	0.285	0.462	16.9
Inorganics												
Sulphur	mg/kg	200		427	284	<200	389	320	232	<200	227	600
Cyanide Total	mg/kg	1	150[#2]	<1	<1	<1	<1	<1	<1	<1	<1	<1
Fluoride	mg/kg	5	47,000[#2]	<5	<5	<5	<5	<5	<5	<5	<5	-
Sulphate	mg/kg	48		-	465	122	-	-	-	-	-	-
Chloride	mg/kg	20		-	-	-	38	<20	30	20	24	-
Nitrate (as NO3-)	mg/kg	1	1,900,000[#2]	-	-	-	-	-	-	1.9	6.46	-
Moisture	%			15	33	16	42	13	16	16	20	84
Sulphate (soluble)	g/L	0.0002		0.0199	0.0621	0.016	0.0156	0.0113	0.0514	<0.004	0.0118	0.0292
pH (Lab)	pH_Units	1		8.44	7.75	8.5	8.04	9.01	8.45	8.35	8.59	5.54
Other												
Bis(2-chloroisopropyl)ether	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos												
Asbestos Gravimetric Quantification	mass %	0.001		-	<0.001	-	-	-	-	-	-	-
Asbestos Quantification - PCM Evaluation	%	0.001		-	<0.001	-	-	-	-	-	-	-
Asbestos Quantification - Total - %	%	0.001		-	<0.001	-	-	-	-	-	-	-
Surrogate												
Toluene-D8	%			81	95.6	95.6	94.6	95.9	75.2	98.6	97.2	92.8
Chrysene-d12 (surr.)	%			74.9	92.8	93.1	92.6	96.5	104	75.3	75.9	104
d10-Acenaphthene (SS)	%			83.9	96.4	89.4	94.1	93.5	93.9	90.1	90.6	99
d10-Phenanthrene (SS)	%			81.8	111	96.6	110	101	97.8	84.5	85.4	106
d8-Naphthalene (SS)	%			87.8	87.1	92.6	85	93.9	96.4	94.6	94.5	96
% Surrogate Recovery	%			106	96.7	100	105	90.9	104	91.7	96.4	94
GRO Surrogate	%			169	62.9	105	57.7	122	89.8	101	128	60.5

Env Stds Comments
#1:LQM/CIEH S4ULs 2015
#2:USEPA RSL (NOV 2021)
#3:Defra C4SL (2014)
#4:EIC/AGS/CL:AIRE
#5:Defra C4SL (2021)
GAC: Generic Assessment Criteria
(blank): No assessment criteria available
- : Not analysed

Key
XXX Exceedance of HH Soil. Commercial/Industrial. Sandy Loam. TOC >=3.48%

			Sample ID	BH110	BH111	BH112	BH112	BH113	BH-114	BH-115	BH116	BH117	BH118
			Sample Depth	1	1.5	0.6	1.6	2	1	3	7	4.5	3.5
			Date Sampled	27/04/2023	27/04/2023	12/04/2023	12/04/2023	25/04/2023	21/04/2023	20/04/2023	11/05/2023	10/05/2023	12/05/2023
			Lab Report Number	230502-30	230510-54	230418-53	230418-53	230502-27	230426-63	230426-63	230518-59	230515-36	230518-59
Chemical Name	Units	MDL	GAC_HH_COM/ IND_SLOAM_>3.48%TOC										
PCBs													
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.003	0.16[#2]	<0.003	<0.003	-	-	<0.003	-	-	<0.003	<0.003	<0.003
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.003	0.048[#2]	<0.003	<0.003	-	-	<0.003	-	-	<0.003	<0.003	<0.003
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.003	0.49[#2]	<0.003	<0.003	-	-	<0.003	-	-	<0.003	<0.003	<0.003
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.003	0.5[#2]	<0.003	<0.003	-	-	<0.003	-	-	<0.003	<0.003	<0.003
PCB 118	mg/kg	0.003	0.49[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.003	0.49[#2]	<0.003	<0.003	-	-	<0.003	-	-	<0.003	<0.003	<0.003
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.003	0.00015[#2]	<0.003	<0.003	-	-	<0.003	-	-	<0.003	<0.003	<0.003
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.003	0.5[#2]	<0.003	<0.003	-	-	<0.003	-	-	<0.003	<0.003	<0.003
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.003	0.5[#2]	<0.003	<0.003	-	-	<0.003	-	-	<0.003	<0.003	<0.003
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.003	0.51[#2]	<0.003	<0.003	-	-	<0.003	-	-	<0.003	<0.003	<0.003
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.003	0.00051[#2]	<0.003	<0.003	-	-	<0.003	-	-	<0.003	<0.003	<0.003
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.003	0.52[#2]	<0.003	<0.003	-	-	<0.003	-	-	<0.003	<0.003	<0.003
Total PCB WHO 12	mg/kg	0.036		<0.036	<0.036	-	-	<0.036	-	-	<0.036	<0.036	<0.036
PCB 28	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 52	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 101	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 138	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 153	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 180	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Total PCB 7 Congeners	mg/kg	0.021		<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021
Amino Aliphatics													
N-nitrosodi-n-propylamine	mg/kg	0.1	0.33[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anilines													
2-nitroaniline	mg/kg	0.1	8,000[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
3-nitroaniline	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chloroaniline	mg/kg	0.1	11[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-nitroaniline	mg/kg	0.1	110[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Explosives													
2,4-Dinitrotoluene	mg/kg	0.1	3,800[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,6-dinitrotoluene	mg/kg	0.1	1,900[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nitrobenzene	mg/kg	0.1	22[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Halogenated Benzenes													
1,3,5-Trichlorobenzene	mg/kg	0.02	130[#1]	<0.02	<0.02	-	-	<0.02	-	-	<0.02	<0.02	<0.02
Chlorobenzene	mg/kg	0.005	290[#1]	<0.005	<0.005	-	-	<0.005	-	-	<0.005	<0.005	<0.005
Bromobenzene	mg/kg	0.01	520[#4]	<0.01	<0.01	-	-	<0.01	-	-	<0.01	<0.01	<0.01
2-chlorotoluene	mg/kg	0.009	23,000[#2]	<0.009	<0.009	-	-	<0.009	-	-	<0.009	<0.009	<0.009
4-chlorotoluene	mg/kg	0.01	23,000[#2]	<0.01	<0.01	-	-	<0.01	-	-	<0.01	<0.01	<0.01
1,3-dichlorobenzene	mg/kg	0.008	170[#1]	<0.008	<0.008	<0.1	<0.1	<0.008	<0.1	<0.1	<0.008	<0.008	<0.008
1,4-dichlorobenzene	mg/kg	0.005	25,000[#1]	<0.005	<0.005	<0.1	<0.1	<0.005	<0.1	<0.1	<0.005	<0.005	<0.005
1,2-dichlorobenzene	mg/kg	0.01	11,000[#1]	<0.01	<0.01	<0.1	<0.1	<0.01	<0.1	<0.1	<0.01	<0.01	<0.01
1,2,4-trichlorobenzene	mg/kg	0.02	1,300[#1]	<0.02	<0.02	<0.1	<0.1	<0.02	<0.1	<0.1	<0.02	<0.02	<0.02
1,2,3-trichlorobenzene	mg/kg	0.02	590[#1]	<0.02	<0.02	-	-	<0.02	-	-	<0.02	<0.02	<0.02
Hexachlorobenzene	mg/kg	0.1	120[#1]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Halogenated Hydrocarbons													
Dichlorodifluoromethane	mg/kg	0.006	370[#2]	<0.006	<0.006	-	-	<0.006	-	-	<0.006	<0.006	<0.006
Bromomethane	mg/kg	0.01	30[#2]	<0.01	<0.01	-	-	<0.01	-	-	<0.01	<0.01	<0.01
Trichlorofluoromethane	mg/kg	0.006	350,000[#2]	<0.006	<0.006	-	-	<0.006	-	-	<0.006	<0.006	<0.006
1,2-dibromoethane	mg/kg	0.01	0.16[#2]	<0.01	<0.01	-	-	<0.01	-	-	<0.01	<0.01	<0.01
Halogenated Phenols													
2-chlorophenol	mg/kg	0.1	5,800[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4-dichlorophenol	mg/kg	0.1	2,500[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4,5-trichlorophenol	mg/kg	0.1	82,000[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4,6-trichlorophenol	mg/kg	0.1	210[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pentachlorophenol	mg/kg	0.1	400[#1]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phthalates													
Bis(2-ethylhexyl) phthalate	mg/kg	0.1	86,000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Butyl benzyl phthalate	mg/kg	0.1	950,000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Di-n-butyl phthalate	mg/kg	0.1	15,000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Di-n-octyl phthalate	mg/kg	0.1	89,000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Diethylphthalate	mg/kg	0.1	290,000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethyl phthalate	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Solvents													
Carbon disulfide	mg/kg	0.007	47[#1]	<0.007	<0.007	-	-	<0.007	-	-	<0.007	<0.007	<0.007
Isophorone	mg/kg	0.1	2,400[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
SPOCAS													
ANC at pH 4	mol/kg	0.03		1.81	0.0836 - 0.084	1.99	0.327	0.305	0.5	0.265	-	-	-
ANC pH_6 dry soil	mol/kg	0.03		0.088	<0.03	0.072	0.0371	0.048	0.0513	0.0584	-	-	-
Metals													
Antimony	mg/kg	0.01	7,500[#4]	<0.6	<0.01	<0.6	<0.6	0.945	<0.6	<0.6	-	-	-
Arsenic	mg/kg	0.6	640[#3]	5.03	13.9	3.21	6.15	18.2	9.39	6.18	2.62	1.2	13.3
Barium	mg/kg	0.6	22,000[#4]	23.2	44.8	35.2	34.2	20.5	28.7	13.4	26.4	49.7	13.7
Beryllium	mg/kg	0.01	12[#1]	0.256	0.887	0.429	0.413	0.512	1.41	0.327	0.91	1.18	1.61
Boron	mg/kg	0.7	240,000[#1]	2.46	-	3.95	3.05	<0.7	2.34	1.23	-	-	-
Cadmium	mg/kg	0.02	410[#3]	0.961	2.74	1.19	1.17	1.53	3.85	1.1	0.425	0.853	3.44
Chromium (III+VI)	mg/kg	0.9	8,600[#1]	6.68	19.2	10.2	10.3	26.4	8.35	14	35.9	9.62	17.1
Copper	mg/kg	1.4	68,000[#1]	12.3	22	15	11.4	20.4	15.9	11.8	23.4	7.15	46.1
Lead	mg/kg	0.7	2,330[#3]	9.72	27.4	11.4	13.6	32.8	16	48	20.3	9.65	84.4
Magnesium	mg/kg	8		2910	-	-	-	329	-	-	-	-	-
Mercury	mg/kg	0.1	350[#2]	<0.1	<1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	mg/kg	0.03	17,000[#4]	0.401	<0.03	0.403	0.5	1.23	0.586	0.592	-	-	-
Nickel	mg/kg	0.2	980[#1]	26.6	75.4	30.8	28.5	84.8	85.2	29.4	10.5	7.95	124
Selenium	mg/kg	1	12,000[#1]	<1	<10	1.03	<1	<1	<1	<1	<1	<1	<1
Vanadium	mg/kg	0.2	9,000[#1]	11.1	29.7	14.8	18.8	26.2	17	12.2	16.9	4.87	19.6
Zinc	mg/kg	1.9	730,000[#1]	61.2	157	72.1	72.7	181	180	94.6	20.4	24.2	328
Chromium (hexavalent)	mg/kg	0.6	49[#3]	-	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Chromium (Trivalent)	mg/kg	0.9	8,600[#1]	-	19.2	10.2	10.3	26.4	8.35	14	35.9	9.62	16.3
Organics													
Organic Matter	%	0.35		<0.35	0.517	<0.35	1.81	<0.35	<0.35	<0.35	<0.35	<0.35	<0.35
TOC	%	0.2		<0.2	0.3	<0.2	1.05	<0.2	<0.2	<0.2	-	-	-
Inorganics													
Sulphur	mg/kg	200		366	<200	<200	306	256	<200	259	<200	<200	<200
Cyanide Total	mg/kg	1	150[#2]	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Fluoride	mg/kg	5	47,000[#2]	<5	<5	<5	<5	<5	<5	<5	-	-	-
Sulphate	mg/kg	48		-	<48	-	-	-	-	-	<48	50.4	51.4
Chloride	mg/kg	20		<20	<20	-	-	<20	<20	<20	-	-	-
Nitrate (as NO3-)	mg/kg	1	1,900,000[#2]	4.2	-	-	-	<1	-	-	-	-	-
Moisture	%			12	15	9.4	19	7.7	14	13	19	13	18
Sulphate (soluble)	g/L	0.0002		0.0114	0.0158	0.032	<0.004	0.0126	0.0165	0.0295	0.013	0.0167	0.0195
pH (Lab)	pH_Units	1		8.65	8.53	8.76	7.78	8.65	8.63	8.87	8.51	8.74	8.38
Other													
Bis(2-chloroisopropyl)ether	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos													
Asbestos Gravimetric Quantification	mass %	0.001		-	-	-	-	-	-	-	-	-	-
Asbestos Quantification - PCM Evaluation	%	0.001		-	-	-	-	-	-	-	-	-	-
Asbestos Quantification - Total - %	%	0.001		-	-	-	-	-	-	-	-	-	-
Surrogate													
Toluene-D8	%			100	106	109	84.9	97.9	96.2	91.5	101	100	99.9
Chrysene-d12 (surr.)	%			74.5	97.7	79.9	78.6	80.6	89	95.5	101	92.8	79.3
d10-Acenaphthene (SS)	%			87.4	100	82.2	83.4	94.1	87.1	90.6	94	91.4	91.4
d10-Phenanthrene (SS)	%			83.4	95.1	81.8	82.7	88.4	90	93.5	93.5	85	86.3
d8-Naphthalene (SS)	%			90.1	107	85.8	86.8	99.3	89	92.9	93.2	96	93.3
% Surrogate Recovery	%			99.2	96.4	103	94.8	89.9	105	100	-	-	-
GRO Surrogate	%			116	106	72.1	104	99.9	113	95.5	108	107	104

Env Stds Comments
#1:LQM/CIEH S4ULs 2015
#2:USEPA RSL (NOV 2021)
#3:Defra C4SL (2014)
#4:EIC/AGS/CL:AIRE
#5:Defra C4SL (2021)
GAC: Generic Assessment Criteria
(blank): No assessment criteria available
- : Not analysed

Key
XXX Exceedance of HH Soil. Commercial/Industrial. Sandy Loam. TOC >=3.48%

			Field_ID	BH-301	BHSS01	BHSS02	BHSS03	BHSS04	BHSS05	BHT05	BHT07	BHT09	BHT1	BHT10
			Sample_Depth_Range	1	7.5	8	4	3.5	2.5	5	5.5	6	5	5.5
			Sampled_Date_Time	16/04/2023	16/05/2023	05/05/2023	10/05/2023	03/05/2023	03/05/2023	01/06/2023	31/05/2023	29/05/2023	13/06/2023	25/05/2023
			Lab Report Number											
			GAC_HH_COM/IND_SLOAM_>3.48%TOC											
ChemName	output unit	EQL												
Sulphate, Total Potential as SO4	g/kg			0.825 - 0.83	3.45	56.1	0.795 - 0.8	0.849 - 0.85	0.618 - 0.62	2.69	1.82	2.02	14.3	2.48
Loss on ignition	%	0.7		82.2	-	-	-	2.99	1.26	-	-	-	-	-
Perylene-d12	%			91.5	83.7	78.6	77.5	94.8	110	74.5	91.1	76.3	84.5	80.9
PAH 16 Total + Coronene	mg/kg	0.318		<0.318	-	-	-	-	-	-	-	-	-	-
EPH														
>C10-C40 Aliphatics	mg/kg	5		255	-	-	-	<5	<5	-	-	-	-	-
NA														
Asbestos Actinolite	No units			0	0	0	0	0	0	0	0	0	0	0
Asbestos Anthophyllite	No units			0	0	0	0	0	0	0	0	0	0	0
CEN 10:1 - Dissolved solids, Total (meter)	mg/kg	100		-	-	-	-	1380	988	-	-	-	-	-
WAC	mg/kg			10	-	-	-	10	10	-	-	-	-	-
Asbestos Tremolite	No units			0	0	0	0	0	0	0	0	0	0	0
Petroleum Hydrocarbons														
>C10-C44 Aliphatics & Aromatics	mg/kg	10		986 - 1000	26.3	13.2	<10	<10	<10	<10	<10	<10	<10	<10
Field														
pH	pH_Units			-	-	-	-	8.28	8.22	-	-	-	-	-
Electrical Conductivity	µS/cm			-	-	-	-	180	130	-	-	-	-	-
TPH														
>C10-C44 Aliphatics	mg/kg	5		700 - 749	23.3	10.6	<5	<5	<5	<5	<5	<5	<5	<5
>EC10-EC44 Aromatics	mg/kg	5		200 - 238	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5
>C5-C40	mg/kg	35		1040	-	-	-	-	-	-	-	-	-	-
GRO >C5-C10	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
EPH >C10-C40	mg/kg	35		1040	-	-	-	-	-	-	-	-	-	-
>C5-C6 Aliphatics	mg/kg	0.01	12,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>C5-C10 Aliphatics	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
>C6-C8 Aliphatics	mg/kg	0.01	40,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>C8-C10 Aliphatics	mg/kg	0.01	11,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>C10-C12 Aliphatics	mg/kg	1	47,000[#1]	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>C12-C16 Aliphatics	mg/kg	1	90,000[#1]	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>C16-C21 Aliphatics	mg/kg	1		14.2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>C21-C35 Aliphatics	mg/kg	1		580 - 600	20	10.2	<1	<1	<1	3.63	<1	3.95	<1	<1
>C35-C44 Aliphatics	mg/kg	1	1,800,000[#2]	154 - 200	3.23	<1	<1	<1	<1	<1	<1	<1	<1	<1
>C5-C10 Aromatics	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
>EC5-EC7 Aromatics	mg/kg	0.01	86,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>EC7-EC8 Aromatics	mg/kg	0.01	180,000[#2]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>EC8-EC10 Aromatics	mg/kg	0.01	17,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>EC10-EC12 Aromatics	mg/kg	1	34,000[#1]	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>EC12-EC16 Aromatics	mg/kg	1	38,000[#1]	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>EC16-EC21 Aromatics	mg/kg	1	28,000[#1]	9.05	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>EC21-EC35 Aromatics	mg/kg	1	28,000[#1]	200 - 206	1.65	1.53	<1	1.41	1.04	1.73	<1	1.03	<1	<1
>EC35-EC44 Aromatics	mg/kg	1	28,000[#1]	22.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>EC40-EC44 Aromatics	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>C5-C44 Aliphatics & Aromatics	mg/kg	10		986 - 1000	23.3	10.6	<10	<10	<10	<10	<10	<10	<10	<10
BTEX														
Benzene	mg/kg	0.001	98[#2]	<0.18	<0.009	<1.8	<0.009	<0.009	<0.009	<0.01	<0.001	<0.02	<0.001	<0.01
Toluene	mg/kg	0.001	180,000[#1]	<0.14	<0.007	<1.4	<0.007	<0.007	<0.007	<0.01	0.00121	<0.02	0.00175	<0.01
Ethylbenzene	mg/kg	0.001	27,000[#1]	<0.08	<0.004	<0.8	<0.004	<0.004	<0.004	<0.01	<0.001	<0.02	<0.001	<0.01
Xylene (m & p)	mg/kg	0.002		<0.2	<0.01	<2	<0.01	<0.01	<0.01	<0.02	<0.002	<0.04	<0.002	<0.02
Xylene Total	mg/kg	0.02	30,000[#1]	<0.4	<0.02	<4	<0.02	<0.02	<0.02	<0.2	<0.02	<0.4	<0.02	<0.2
Xylene (o)	mg/kg	0.002	33,000[#1]	<0.2	<0.01	<2	<0.01	<0.01	<0.01	<0.02	<0.002	<0.04	<0.002	<0.02
Total BTEX	mg/kg	0.007		<0.8	<0.04	<8	<0.04	<0.04	<0.04	<0.07	<0.007	<0.14	<0.007	<0.07
Oxygenates														
MTBE	mg/kg	0.0005	24,000[#4]	<0.2	<0.01	<2	<0.01	<0.01	<0.01	<0.005	<0.0005	<0.01	<0.0005	<0.005
Tert Amyl Methyl Ether	mg/kg	0.001		-	<0.01	<2	<0.01	<0.01	<0.01	<0.01	<0.001	<0.02	<0.001	<0.01
Chlorinated Hydrocarbons														
Chloromethane	mg/kg	0.002	1.6[#3]	-	<0.007	<1.4	<0.007	<0.007	<0.007	<0.02	<0.002	<0.04	<0.002	<0.02
Vinyl chloride	mg/kg	0.0005	2.2[#5]	-	<0.006	<1.2	<0.006	<0.006	<0.006	<0.005	<0.0005	<0.01	<0.0005	<0.005
Chloroethane	mg/kg	0.001	2,100[#4]	-	<0.01	<2	<0.01	<0.01	<0.01	<0.01	<0.001	<0.02	<0.001	<0.01
1,1-dichloroethene	mg/kg	0.0005	92[#4]	-	<0.01	<2	<0.01	<0.01	<0.01	<0.005	<0.0005	<0.01	<0.0005	<0.005
Dichloromethane	mg/kg	0.005	560[#4]	-	<0.01	<2	<0.01	<0.01	<0.01	<0.05	<0.005	<0.1	<0.005	<0.05
trans-1,2-dichloroethene	mg/kg	0.001	81[#4]|300[#2]	-	<0.01	<2	<0.01	<0.01	<0.01	<0.01	<0.001	<0.02	<0.001	<0.01
1,1-dichloroethane	mg/kg	0.0005	850[#4]	-	<0.008	<1.6	<0.008	<0.008	<0.008	<0.005	<0.0005	<0.01	<0.0005	<0.005
cis-1,2-dichloroethene	mg/kg	0.0005	47[#4]|300[#2]	-	<0.006	<1.2	<0.006	<0.006	<0.006	<0.005	<0.0005	<0.01	<0.0005	<0.005
Chloroform	mg/kg	0.003	350[#3]	-	<0.008	<1.6	<0.008	<0.008	<0.008	<0.03	<0.003	<0.06	<0.003	<0.03
1,1,1-trichloroethane	mg/kg	0.0005	3,000[#1]	-	<0.007	<1.4	<0.007	<0.007	<0.007	<0.005	<0.0005	<0.01	<0.0005	<0.005
Carbon tetrachloride	mg/kg	0.0005	14[#3]	-	<0.01	<2	<0.01	<0.01	<0.01	<0.005	<0.0005	<0.01	<0.0005	<0.005
Trichloroethene	mg/kg	0.001	3.4[#3]	-	<0.009	<1.8	<0.009	<0.009	<0.009	<0.01	<0.001	<0.02	<0.001	<0.01
1,1,2-trichloroethane	mg/kg	0.001	400[#4]	-	<0.01	<2	<0.01	<0.01	<0.01	<0.01	<0.001	<0.02	<0.001	<0.01
Tetrachloroethene	mg/kg	0.002	130[#3]	-	<0.005	<1	<0.005	<0.005	<0.005	<0.02	<0.002	<0.04	<0.002	<0.02
VOC														
2,2-dichloropropane	mg/kg	0.001		-	<0.01	<2	<0.01	<0.01	<0.01	<0.01	<0.001	<0.02	<0.001	<0.01
Bromochloromethane	mg/kg	0.002	630[#2]	-	<0.01	<2	<0.01	<0.01	<0.01	<0.02	<0.002	<0.04	<0.002	<0.02
1,1-dichloropropene	mg/kg	0.0005		-	<0.01	<2	<0.01	<0.01	<0.01	<0.005	<0.0005	<0.01	<0.0005	<0.005
1,2-dichloroethane	mg/kg	0.001	1.7[#3]	-	<0.005	<1	<0.005	<0.005	<0.005	<0.01	<0.001	<0.02	<0.001	<0.01
1,2-dichloropropane	mg/kg	0.0005	12[#3]	-	<0.01	<2	<0.01	<0.01	<0.01	<0.005	<0.0005	<0.01	<0.0005	<0.005
Dibromomethane	mg/kg	0.001	99[#4]	-	<0.009	<1.8	<0.009	<0.009	<0.009	<0.01	<0.001	<0.02	<0.001	<0.01
Bromodichloromethane	mg/kg	0.002	1.3[#2]	-	<0.007	<1.4	<0.007	<0.007	<0.007	<0.02	<0.002	<0.04	<0.002	<0.02
cis-1,3-dichloropropene	mg/kg	0.0005		-	<0.01	<2	<0.01	<0.01	<0.01	<0.005	<0.0005	<0.01	<0.0005	<0.005
trans-1,3-dichloropropene	mg/kg	0.001		-	<0.01	<2	<0.01	<0.01	<0.01	<0.01	<0.001	<0.02	<0.001	<0.01
1,3-dichloropropane	mg/kg	0.001	23,000[#2]	-	<0.007	<1.4	<0.007	<0.007	<0.007	<0.01	<0.001	<0.02	<0.001	<0.01
Chlorodibromomethane	mg/kg	0.002	39[#2]	-	<0.01	<2	<0.01	<0.01	<0.01	<0.02	<0.002	<0.04	<0.002	<0.02
1,1,1,2-tetrachloroethane	mg/kg	0.001	560[#1]	-	<0.01	<2	<0.01	<0.01	<0.01	<0.01	<0.001	<0.02	<0.001	<0.01
Styrene	mg/kg	0.002	180,000[#4]	-	<0.01	<2	<0.01	<0.01	<0.01	<0.02	<0.002	<0.04	<0.002	<0.02
Bromoform	mg/kg	0.002	3,100[#4]	-	<0.01	<2	<0.01	<0.01	<0.01	<0.055	<0.0055	<0.11	<0.002	<0.02
Isopropylbenzene	mg/kg	0.002	7,700[#4]	-	<0.005	<1	<0.005	<0.005	<0.005	<0.02	<0.002	<0.04	<0.002	<0.02
1,1,2,2-tetrachloroethane	mg/kg	0.002	1,100[#1]	-	<0.01	<2	<0.01	<0.01	<0.01	<0.02	<0.002	<0.04	<0.002	<0.02
1,2,3-trichloropropane	mg/kg	0.002	0.11[#2]	-	<0.016	<3.2	<0.016	<0.016	<0.016	<0.02	<0.002	<0.04	<0.002	<0.02
n-propylbenzene	mg/kg	0.002	11,000[#4]	-	<0.01	<2	<0.01	<0.01	<0.01	<0.02	<0.002	<0.04	<0.002	<0.02
1,3,5-trimethylbenzene	mg/kg	0.002	1,500[#2]	-	<0.008	<1.6	<0.008	<0.008	<0.008	<0.02	<0.002	<0.04	<0.002	<0.02
tert-butylbenzene	mg/kg	0.002	120,000[#2]	-	<0.014	<2.8	<0.014	<0.014	<0.014	<0.02	<0.002	<0.04	<0.002	<0.02
1,2,4-trimethylbenzene	mg/kg	0.003	220[#4]	-	<0.009	<1.8	<0.009	<0.009	<0.009	<0.03	<0.003	<0.06	<0.003	<0.03
sec-butylbenzene	mg/kg	0.001	120,000[#2]	-	<0.01	<2	<0.01	<0.01	<0.01	<0.01	<0.001	<0.02	<0.001	<0.01
p-isopropyltoluene	mg/kg	0.002		-	<0.01	<2	<0.01	<0.01	<0.01	<0.02	<0.002	<0.04	<0.002	<0.02
n-butylbenzene	mg/kg	0.003	58,000[#2]	-	<0.011	<2.2	<0.011	<0.011	<0.011	<0.03	<0.003	<0.06	<0.003	<0.03
1,2-dibromo-3-chloropropane	mg/kg	0.002	0.064[#2]	-	<0.014	<2.8	<0.014	<0.014	<0.014	<0.02	<0.002	<0.04	<0.002	<0.02
Hexachlorobutadiene	mg/kg	0.004	120[#3]	<0.1	<0.02	<0.1	<0.02	<0.02	<0.02	<0.04	<0.004	<0.08	<0.004	<0.04
PAH														
Naphthalene	mg/kg	0.008	1,100[#1]	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.008	<0.009	<0.008	<0.009
Acenaphthylene	mg/kg	0.012	100,000[#1]	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012
Acenaphthene	mg/kg	0.008	100,000[#1]	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
Fluorene	mg/kg	0.01	71,000[#3]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Phenanthrene	mg/kg	0.015	23,000[#2]	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Anthracene	mg/kg	0.016	540,000[#2]	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016
Fluoranthene	mg/kg	0.017	23,000[#3]	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
Pyrene	mg/kg	0.015	54,000[#3]	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Benz(a)anthracene	mg/kg	0.014	180[#3]	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014
Chrysene	mg/kg	0.01	350[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(a) pyrene	mg/kg	0.015	36[#3]	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Indeno(1,2,3-c,d)pyrene	mg/kg	0.018	510[#1]	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018
Dibenz(a,h)anthracene	mg/kg	0.023	3.6[#3]	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023
Benzo(g,h,i)perylene	mg/kg	0.024	4,000[#1]	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024
Benzo(b)fluoranthene	mg/kg	0.015	45[#1]	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Benzo(k)fluoranthene	mg/kg	0.014	1,200[#1]	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014
PAH 16 Total	mg/kg	0.118		<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118
PAH 17 Total	mg/kg	10		<10	-	-	-	<10	<10	-	-	-	-	-
SVOC														
Coronene	mg/kg	0.2		<0.2	-	-	-	<0.2	<0.2	-	-	-	-	-
2-methylnaphthalene	mg/kg	0.1	3,000[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-bromophenyl phenyl ether	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorophenyl phenyl ether	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Azobenzene	mg/kg	0.1	26[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bis(2-chloroethoxy) methane	mg/kg	0.1	2,500[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bis(2-chloroethyl)ether	mg/kg	0.1	1[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbazole	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzofuran	mg/kg	0.1	1,200[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorocyclopentadiene	mg/kg	0.1	7.5[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachloroethane	mg/kg	0.1	120[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenolics														
2-methylphenol	mg/kg	0.1	Use Cresol Total[#6]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitrophenol	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4-dimethylphenol	mg/kg	0.1	30,000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chloro-3-methylphenol	mg/kg	0.1	82,000[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-methylphenol	mg/kg	0.1	Use Cresol Total[#6]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-nitrophenol	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1
Phenol	mg/kg	0.01	1,300[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-chloronaphthalene	mg/kg	0.1	2,200[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cresol Total	mg/kg	0.01	180,000[#4]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Total Monohydric Phenols (S) Corrected	mg/kg	0.035		<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
Xylenols	mg/kg	0.015		0.141	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015

Env Stds Comments
#1:LQM/CIEH S4ULs 2015
#2:USEPA RSL (NOV 2021)
#3:Defra C4SL (2014)
#4:EIC/AGS/CL:AIRE
#5:Defra C4SL (2021)
GAC: Generic Assessment Criteria
(blank): No assessment criteria available
- : Not analysed

Key
XXX Exceedance of HH Soil. Commercial/Industrial. Sandy Loam. TOC >=3.48%

			Field_ID	BHT11	BHT12	BHT13	BHT14	BHT15	BHT17	BHT2	BHT3	BHT4	BHT6
			Sample_Depth_Range	5	6	3	1.5	7	5.5	6	5.5	4	5.5
			Sampled_Date_Time	24/05/2023	24/05/2023	24/05/2023	19/05/2023	19/05/2023	17/05/2023	08/06/2023	07/06/2023	06/06/2023	02/06/2023
			Lab Report Number										
			GAC_HH_COM/IND_SLOAM_>3.48%TOC										
ChemName	output unit	EQL											
Sulphate, Total Potential as SO4	g/kg			1.37	3.36	1.47	0.855 - 0.86	1.48	1.02	2.46	2.52	1.44	2.03
Loss on ignition	%	0.7		-	-	-	-	-	-	-	-	-	-
Perylene-d12	%			78.6	86.8	89	88.3	76.3	80.2	85.3	75.5	80.1	72.6
PAH 16 Total + Coronene	mg/kg	0.318		-	-	-	-	-	-	-	-	-	-
EPH													
>C10-C40 Aliphatics	mg/kg	5		-	-	-	-	-	-	-	-	-	-
NA													
Asbestos Actinolite	No units			0	0	0	0	0	0	0	0	0	0
Asbestos Anthophyllite	No units			0	0	0	0	0	0	0	0	0	0
CEN 10:1 - Dissolved solids, Total (meter)	mg/kg	100		-	-	-	-	-	-	-	-	-	-
WAC	mg/kg			-	-	-	-	-	-	-	-	-	-
Asbestos Tremolite	No units			0	0	0	0	0	0	0	0	0	0
Petroleum Hydrocarbons													
>C10-C44 Aliphatics & Aromatics	mg/kg	10		<10	<10	<10	<10	<10	<10	86.9	<10	<10	<10
Field													
pH	pH_Units			-	-	-	-	-	-	-	-	-	-
Electrical Conductivity	µS/cm			-	-	-	-	-	-	-	-	-	-
TPH													
>C10-C44 Aliphatics	mg/kg	5		<5	<5	<5	<5	<5	<5	60.5	<5	<5	<5
>EC10-EC44 Aromatics	mg/kg	5		<5	<5	<5	5.39	<5	<5	26.4	<5	<5	<5
>C5-C40	mg/kg	35		-	-	-	-	-	-	-	-	-	-
GRO >C5-C10	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
EPH >C10-C40	mg/kg	35		-	-	-	-	-	-	-	-	-	-
>C5-C6 Aliphatics	mg/kg	0.01	12,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>C5-C10 Aliphatics	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
>C6-C8 Aliphatics	mg/kg	0.01	40,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>C8-C10 Aliphatics	mg/kg	0.01	11,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>C10-C12 Aliphatics	mg/kg	1	47,000[#1]	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>C12-C16 Aliphatics	mg/kg	1	90,000[#1]	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>C16-C21 Aliphatics	mg/kg	1		<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>C21-C35 Aliphatics	mg/kg	1		<1	2.66	<1	2.14	<1	<1	52.1	<1	<1	<1
>C35-C44 Aliphatics	mg/kg	1	1,800,000[#2]	<1	<1	<1	<1	<1	<1	8.02	<1	<1	<1
>EC5-C10 Aromatics	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
>EC5-EC7 Aromatics	mg/kg	0.01	86,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>EC7-EC8 Aromatics	mg/kg	0.01	180,000[#2]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>EC8-EC10 Aromatics	mg/kg	0.01	17,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>EC10-EC12 Aromatics	mg/kg	1	34,000[#1]	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>EC12-EC16 Aromatics	mg/kg	1	38,000[#1]	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>EC16-EC21 Aromatics	mg/kg	1	28,000[#1]	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>EC21-EC35 Aromatics	mg/kg	1	28,000[#1]	<1	<1	<1	4.11	<1	<1	20.5	<1	<1	<1
>EC35-EC44 Aromatics	mg/kg	1	28,000[#1]	<1	<1	<1	<1	<1	<1	5.23	<1	<1	<1
>EC40-EC44 Aromatics	mg/kg	1		<1	<1	<1	<1	<1	<1	1.49	<1	<1	<1
>C5-C44 Aliphatics & Aromatics	mg/kg	10		<10	<10	<10	<10	<10	<10	86.9	<10	<10	<10
BTEX													
Benzene	mg/kg	0.001	98[#2]	<0.001	<0.001	<0.001	<0.001	<0.02	<0.009	<0.001	<0.02	<0.001	<0.02
Toluene	mg/kg	0.001	180,000[#1]	0.00414	0.01	<0.001	0.00204	<0.02	<0.007	0.0146	<0.02	0.00711	0.0425
Ethylbenzene	mg/kg	0.001	27,000[#1]	<0.001	0.00154	<0.001	<0.001	<0.02	<0.004	0.00333	<0.02	0.0011	<0.02
Xylene (m & p)	mg/kg	0.002		<0.002	0.00411	<0.002	<0.002	<0.04	<0.01	0.00872	<0.04	0.00331	<0.04
Xylene Total	mg/kg	0.02	30,000[#1]	<0.02	<0.02	<0.02	<0.02	<0.4	<0.02	<0.02	<0.4	<0.02	<0.4
Xylene (o)	mg/kg	0.002	33,000[#1]	<0.002	<0.002	<0.002	<0.002	<0.04	<0.01	<0.002	<0.04	<0.002	<0.04
Total BTEX	mg/kg	0.007		<0.007	0.0157	<0.007	<0.007	<0.14	<0.04	0.0266	<0.14	0.0115	<0.14
Oxygenates													
MTBE	mg/kg	0.0005	24,000[#4]	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.01	<0.0005	<0.01
Tert Amyl Methyl Ether	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.02	<0.01	<0.001	<0.02	<0.001	<0.02
Chlorinated Hydrocarbons													
Chloromethane	mg/kg	0.002	1.6[#3]	<0.002	<0.002	<0.002	<0.002	<0.04	<0.007	<0.002	<0.04	<0.002	<0.04
Vinyl chloride	mg/kg	0.0005	2.2[#5]	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.006	<0.0005	<0.01	<0.0005	<0.01
Chloroethane	mg/kg	0.001	2,100[#4]	<0.001	<0.001	<0.001	<0.001	<0.02	<0.01	<0.001	<0.02	<0.001	<0.02
1,1-dichloroethene	mg/kg	0.0005	92[#4]	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.01	<0.0005	<0.01
Dichloromethane	mg/kg	0.005	560[#4]	<0.005	<0.005	0.0231	0.0313	<0.1	<0.01	<0.005	<0.1	<0.005	<0.1
trans-1,2-dichloroethene	mg/kg	0.001	81[#4]|300[#2]	<0.001	<0.001	<0.001	<0.001	<0.02	<0.01	<0.001	<0.02	<0.001	<0.02
1,1-dichloroethane	mg/kg	0.0005	850[#4]	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.008	<0.0005	<0.01	<0.0005	<0.01
cis-1,2-dichloroethene	mg/kg	0.0005	47[#4]|2300[#2]	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.006	<0.0005	<0.01	<0.0005	<0.01
Chloroform	mg/kg	0.003	350[#3]	<0.003	<0.003	<0.003	<0.003	<0.06	<0.008	<0.003	<0.06	<0.003	<0.06
1,1,1-trichloroethane	mg/kg	0.0005	3,000[#1]	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.007	<0.0005	<0.01	<0.0005	<0.01
Carbon tetrachloride	mg/kg	0.0005	14[#3]	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.01	<0.0005	<0.01
Trichloroethene	mg/kg	0.001	3.4[#5]	<0.001	<0.001	<0.001	<0.001	<0.02	<0.009	<0.001	<0.02	<0.001	<0.02
1,1,2-trichloroethane	mg/kg	0.001	400[#4]	<0.001	<0.001	<0.001	<0.001	<0.02	<0.01	<0.001	<0.02	<0.001	<0.02
Tetrachloroethene	mg/kg	0.002	130[#5]	<0.002	<0.002	<0.002	<0.002	<0.04	<0.005	<0.002	<0.04	<0.002	<0.04
VOC													
2,2-dichloropropane	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.02	<0.01	<0.001	<0.02	<0.001	<0.02
Bromochloromethane	mg/kg	0.002	630[#2]	<0.002	<0.002	<0.002	<0.002	<0.04	<0.01	<0.002	<0.04	<0.002	<0.04
1,1-dichloropropene	mg/kg	0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.01	<0.0005	<0.01
1,2-dichloroethane	mg/kg	0.001	1.7[#3]	<0.001	<0.001	<0.001	<0.001	<0.02	<0.005	<0.001	<0.02	<0.001	<0.02
1,2-dichloropropane	mg/kg	0.0005	12[#5]	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.01	<0.0005	<0.01
Dibromomethane	mg/kg	0.001	99[#4]	<0.001	<0.001	<0.001	<0.001	<0.02	<0.009	<0.001	<0.02	<0.001	<0.02
Bromodichloromethane	mg/kg	0.002	1.3[#2]	<0.002	<0.002	<0.002	<0.002	<0.04	<0.007	<0.002	<0.04	<0.002	<0.04
cis-1,3-dichloropropene	mg/kg	0.0005		<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.01	<0.0005	<0.01
trans-1,3-dichloropropene	mg/kg	0.001		<0.001	<0.001	<0.001	<0.001	<0.02	<0.01	<0.001	<0.02	<0.001	<0.02
1,3-dichloropropane	mg/kg	0.001	23,000[#2]	<0.001	<0.001	<0.001	<0.001	<0.02	<0.007	<0.001	<0.02	<0.001	<0.02
Chlorodibromomethane	mg/kg	0.002	39[#2]	<0.002	<0.002	<0.002	<0.002	<0.04	<0.01	<0.002	<0.04	<0.002	<0.04
1,1,1,2-tetrachloroethane	mg/kg	0.001	560[#1]	<0.001	<0.001	<0.001	<0.001	<0.02	<0.01	<0.001	<0.02	<0.001	<0.02
Styrene	mg/kg	0.002	180,000[#4]	<0.002	<0.002	<0.002	<0.002	<0.04	<0.01	<0.002	<0.04	<0.002	<0.04
Bromoform	mg/kg	0.002	3,100[#4]	<0.002	<0.002	<0.002	<0.002	<0.04	<0.01	<0.005	<0.098	<0.005	<0.107
Isopropylbenzene	mg/kg	0.002	7,700[#4]	<0.002	<0.002	<0.002	<0.002	<0.04	<0.005	<0.002	<0.04	<0.002	<0.04
1,1,2,2-tetrachloroethane	mg/kg	0.002	1,100[#1]	<0.002	<0.002	<0.002	<0.002	<0.04	<0.01	<0.002	<0.04	<0.002	<0.04
1,2,3-trichloropropane	mg/kg	0.002	0.11[#2]	<0.002	<0.002	<0.002	<0.002	<0.04	<0.016	<0.002	<0.04	<0.002	<0.04
n-propylbenzene	mg/kg	0.002	11,000[#4]	<0.002	<0.002	<0.002	<0.002	<0.04	<0.01	<0.002	<0.04	<0.002	<0.04
1,3,5-trimethylbenzene	mg/kg	0.002	1,500[#2]	<0.002	<0.002	<0.002	<0.002	<0.04	<0.008	<0.002	<0.04	<0.002	<0.04
tert-butylbenzene	mg/kg	0.002	120,000[#2]	<0.002	<0.002	<0.002	<0.002	<0.04	<0.014	<0.002	<0.04	<0.002	<0.04
1,2,4-trimethylbenzene	mg/kg	0.003	220[#4]	<0.003	<0.003	<0.003	<0.003	<0.06	<0.009	<0.003	<0.06	<0.003	<0.06
sec-butylbenzene	mg/kg	0.001	120,000[#2]	<0.001	<0.001	<0.001	<0.001	<0.02	<0.01	<0.001	<0.02	<0.001	<0.02
p-isopropyltoluene	mg/kg	0.002		<0.002	<0.002	<0.002	<0.002	<0.04	<0.01	<0.002	<0.04	<0.002	<0.04
n-butylbenzene	mg/kg	0.003	58,000[#2]	<0.003	<0.003	<0.003	<0.003	<0.06	<0.011	<0.003	<0.06	<0.003	<0.06
1,2-dibromo-3-chloropropane	mg/kg	0.002	0.064[#2]	<0.002	<0.002	<0.002	<0.002	<0.04	<0.014	<0.002	<0.04	<0.002	<0.04
Hexachlorobutadiene	mg/kg	0.004	120[#1]	<0.004	<0.004	<0.004	<0.004	<0.08	<0.02	<0.004	<0.08	<0.004	<0.08
PAH													
Naphthalene	mg/kg	0.008	1,100[#1]	<0.008	<0.008	<0.008	<0.008	<0.009	<0.009	<0.008	<0.009	<0.008	<0.009
Acenaphthylene	mg/kg	0.012	100,000[#1]	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012
Acenaphthene	mg/kg	0.008	100,000[#1]	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
Fluorene	mg/kg	0.01	71,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Phenanthrene	mg/kg	0.015	23,000[#1]	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Anthracene	mg/kg	0.016	540,000[#1]	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016
Fluoranthene	mg/kg	0.017	23,000[#1]	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
Pyrene	mg/kg	0.015	54,000[#1]	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Benz(a)anthracene	mg/kg	0.014	180[#3]	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014
Chrysene	mg/kg	0.01	350[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(a) pyrene	mg/kg	0.015	36[#3]	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Indeno(1,2,3-c,d)pyrene	mg/kg	0.018	510[#1]	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018
Dibenz(a,h)anthracene	mg/kg	0.023	3.6[#3]	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023
Benzo(g,h,i)perylene	mg/kg	0.024	4,000[#1]	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024
Benzo(b)fluoranthene	mg/kg	0.015	45[#1]	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Benzo(k)fluoranthene	mg/kg	0.014	1,200[#1]	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014
PAH 16 Total	mg/kg	0.118		<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118
PAH 17 Total	mg/kg	10		-	-	-	-	-	-	-	-	-	-
SVOC													
Coronene	mg/kg	0.2		-	-	-	-	-	-	-	-	-	-
2-methylnaphthalene	mg/kg	0.1	3,000[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-bromophenyl phenyl ether	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorophenyl phenyl ether	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Azobenzene	mg/kg	0.1	26[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bis(2-chloroethoxy) methane	mg/kg	0.1	2,500[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bis(2-chloroethyl)ether	mg/kg	0.1	1[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbazole	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzofuran	mg/kg	0.1	1,200[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorocyclopentadiene	mg/kg	0.1	7.5[#2]	<0.2	<0.2	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachloroethane	mg/kg	0.1	120[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenolics													
2-methylphenol	mg/kg	0.1	Use Cresol Total[#6]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitrophenol	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4-dimethylphenol	mg/kg	0.1	30,000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chloro-3-methylphenol	mg/kg	0.1	82,000[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-methylphenol	mg/kg	0.1	Use Cresol Total[#6]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-nitrophenol	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenol	mg/kg	0.01	1,300[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-chloronaphthalene	mg/kg	0.1	2,200[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cresol Total	mg/kg	0.01	180,000[#4]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Total Monohydric Phenols (S) Corrected	mg/kg	0.035		<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
Xylenols	mg/kg	0.015		<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015

Env Stds Comments
#1:LQM/CIEH S4ULs 2015
#2:USEPA RSL (NOV 2021)
#3:Defra C4SL (2014)
#4:EIC/AGS/CL:AIRE
#5:Defra C4SL (2021)
GAC: Generic Assessment Criteria
(blank): No assessment criteria available
- : Not analysed

Key
XXX Exceedance of HH Soil. Commercial/Industrial. Sandy Loam. TOC >=3.48%

			Field_ID	BH-301	BHSS01	BHSS02	BHSS03	BHSS04	BHSS05	BHT05	BHT07	BHT09	BHT1	BHT10
			Sample_Depth_Range	1	7.5	8	4	3.5	2.5	5	5.5	6	5	5.5
			Sampled_Date_Time	16/04/2023	16/05/2023	05/05/2023	10/05/2023	03/05/2023	03/05/2023	01/06/2023	31/05/2023	29/05/2023	13/06/2023	25/05/2023
			Lab Report Number											
			GAC_HH_COM/IND_SLOAM_>3.48%TOC											
ChemName	output unit	EQL												
PCBs														
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.003	0.16[#2]	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.003	0.048[#2]	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.003	0.49[#2]	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.003	0.5[#2]	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 118	mg/kg	0.003	0.49[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.003	0.49[#2]	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.003	0.00015[#2]	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.003	0.5[#2]	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.003	0.5[#2]	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.003	0.51[#2]	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.003	0.00051[#2]	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.003	0.52[#2]	-	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Total PCB WHO 12	mg/kg	0.036		-	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036
PCB 28	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 52	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 101	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 138	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 153	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 180	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Total PCB 7 Congeners	mg/kg	0.021		<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021
Amino Aliphatics														
N-nitrosodi-n-propylamine	mg/kg	0.1	0.33[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anilines														
2-nitroaniline	mg/kg	0.1	8.000[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
3-nitroaniline	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chloroaniline	mg/kg	0.1	11[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-nitroaniline	mg/kg	0.1	110[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Explosives														
2,4-Dinitrotoluene	mg/kg	0.1	3.800[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,6-dinitrotoluene	mg/kg	0.1	1.900[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nitrobenzene	mg/kg	0.1	22[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Halogenated Benzenes														
1,3,5-Trichlorobenzene	mg/kg	0.007	130[#1]	-	<0.02	<4	<0.02	<0.02	<0.02	<0.07	<0.007	<0.14	<0.007	<0.07
Chlorobenzene	mg/kg	0.002	290[#1]	-	<0.005	<1	<0.005	<0.005	<0.005	<0.02	<0.002	<0.04	<0.002	<0.02
Bromobenzene	mg/kg	0.002	520[#4]	-	<0.01	<2	<0.01	<0.01	<0.01	<0.02	<0.002	<0.04	<0.002	<0.02
2-chlorotoluene	mg/kg	0.003	23.000[#2]	-	<0.009	<1.8	<0.009	<0.009	<0.009	<0.03	<0.003	<0.06	<0.003	<0.03
4-chlorotoluene	mg/kg	0.003	23.000[#2]	-	<0.01	<2	<0.01	<0.01	<0.01	<0.03	<0.003	<0.06	<0.003	<0.03
1,3-dichlorobenzene	mg/kg	0.005	170[#1]	<0.1	<0.008	<0.1	<0.008	<0.008	<0.008	<0.05	<0.005	<0.1	<0.005	<0.05
1,4-dichlorobenzene	mg/kg	0.005	25.000[#1]	<0.1	<0.005	<0.1	<0.005	<0.005	<0.005	<0.05	<0.005	<0.1	<0.005	<0.05
1,2-dichlorobenzene	mg/kg	0.005	11.000[#1]	<0.1	<0.01	<0.1	<0.01	<0.01	<0.01	<0.05	<0.005	<0.1	<0.005	<0.05
1,2,4-trichlorobenzene	mg/kg	0.007	1.300[#1]	<0.1	<0.02	<0.1	<0.02	<0.02	<0.02	<0.07	<0.007	<0.1	<0.007	<0.07
1,2,3-trichlorobenzene	mg/kg	0.01	590[#1]	-	<0.02	<4	<0.02	<0.02	<0.02	<0.1	<0.01	<0.2	<0.01	<0.1
Hexachlorobenzene	mg/kg	0.1	120[#1]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Halogenated Hydrocarbons														
Dichlorodifluoromethane	mg/kg	0.0005	370[#2]	-	<0.006	<1.2	<0.006	<0.006	<0.006	<0.005	<0.0005	<0.01	<0.0005	<0.005
Bromomethane	mg/kg	0.001	30[#5]	-	<0.01	<2	<0.01	<0.01	<0.01	<0.01	<0.001	<0.02	<0.001	<0.01
Trichlorofluoromethane	mg/kg	0.0005	350,000[#2]	-	<0.006	<1.2	<0.006	<0.006	<0.006	<0.005	<0.0005	<0.01	<0.0005	<0.005
1,2-dibromoethane	mg/kg	0.001	0.16[#2]	-	<0.01	<2	<0.01	<0.01	<0.01	<0.01	<0.001	<0.02	<0.001	<0.01
	mg/kg			1,030,000	961,000	1,030,000	1,230,000	1,070,000	1,080,000	1,050,000	1,010,000	1,050,000	1,110,000	1,170,000
Halogenated Phenols														
2-chlorophenol	mg/kg	0.1	5.800[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4-dichlorophenol	mg/kg	0.1	2.500[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4,5-trichlorophenol	mg/kg	0.1	82.000[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4,6-trichlorophenol	mg/kg	0.1	210[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pentachlorophenol	mg/kg	0.1	400[#1]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phthalates														
Bis(2-ethylhexyl) phthalate	mg/kg	0.1	86.000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Butyl benzyl phthalate	mg/kg	0.1	950.000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Di-n-butyl phthalate	mg/kg	0.1	15.000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Di-n-octyl phthalate	mg/kg	0.1	89.000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Diethylphthalate	mg/kg	0.1	290.000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethyl phthalate	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Solvents														
Carbon disulfide	mg/kg	0.001	47[#1]	-	<0.007	<1.4	<0.007	<0.007	<0.007	<0.01	<0.001	<0.02	0.0068	<0.01
Isophorone	mg/kg	0.1	2.400[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
SPOCAS														
ANC at pH 4	mol /kg	0.03		0.114	-	-	-	0.906	1.28	-	-	-	-	-
ANC pH 6 dry soil	mol /kg	0.03		<0.03	-	-	-	0.03 - 0.0303	0.0479 - 0.048	-	-	-	-	-
Metals														
Antimony	mg/kg	0.01	7.500[#4]	<0.6	-	-	-	0.053	0.074	-	-	-	-	-
Arsenic	mg/kg	0.6	640[#3]	3.54	3.7	34.6	1.25	3.59	2.45	2.36	2.05	3.65	9.69	1.88
Barium	mg/kg	0.6	22,000[#4]	27.8	39	20.6	16.4	25.1	18.1	10	7.03	74.2	12.9	40.8
Beryllium	mg/kg	0.01	12[#3]	0.254	0.392	0.335	0.274	0.469	0.368	0.169	0.17	0.317	0.174	0.461
Boron	mg/kg	0.7	240,000[#1]	3.97	-	-	-	-	-	-	-	-	-	-
Cadmium	mg/kg	0.02	410[#3]	0.67	1.27	67	0.723	0.834	1.83	0.423	0.302	0.836	0.379	0.875
Chromium (III+VI)	mg/kg	0.9	Use either CrIII or CrVI[#5]	4.07	11.4	97.6	6.29	11.4	8.04	7.44	3.07	7.52	5.85	5.21
Copper	mg/kg	1.4	68,000[#5]	11.7	15	23.5	10.3	9.89	9.44	5.88	3.74	10.5	5.21	12.3
Lead	mg/kg	0.7	2,330[#3]	10	8.76	49.3	7.32	12.9	8.89	4.88	3.86	7	3.6	10.2
Mercury	mg/kg	0.1	350[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	mg/kg	0.03	17,000[#4]	0.943	-	-	-	0.081	0.1	-	-	-	-	-
Nickel	mg/kg	0.2	980[#1]	18.6	39.5	315	17.7	29.6	20.9	11.5	9.32	22.3	13	22.2
Selenium	mg/kg	1	12,000[#5]	2.17	1.34	23.7	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium	mg/kg	0.2	9,000[#1]	4.65	17.7	246	9.02	15.3	12	4.75	4.51	11.6	5.28	10.3
Zinc	mg/kg	1.9	730,000[#1]	55.7	89.3	646	39	76.1	70.4	38.8	20.7	51.7	26.7	55.2
Chromium (hexavalent)	mg/kg	0.6	49[#3]	<0.6	<0.6	4.35	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Chromium (Trivalent)	mg/kg	0.9	8,600[#1]	4.07	11.4	93.2	6.29	11.4	8.04	7.44	3.07	7.52	5.85	5.21
Organics														
Organic Matter	%	0.35		41.9	0.355	6.48	<0.35	0.917	0.44	2.78	7.52	2.69	9.45	0.46
TOC	%	0.2		24.3	-	-	-	0.532	0.255	-	-	-	-	-
Inorganics														
Sulphur	mg/kg	200		275 - 280	1150	18,700	265 - 270	280 - 283	206 - 210	895 - 900	608 - 610	670 - 673	4750	825 - 830
Cyanide Total	mg/kg	1	150[#2]	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Fluoride	mg/kg	5	47,000[#2]	-	-	-	-	<5	<5	-	-	-	-	-
Sulphate	mg/kg	48		-	310 - 314	318 - 320	300 - 301	200 - 204	210	310 - 314	420 - 422	278 - 280	460 - 464	186 - 190
Chloride	mg/kg	20		-	-	-	-	<20	<20	-	-	-	-	-
Moisture	%			79	9.1	15	9.2	19	12	19	3.7	8	11	19
Soluble Sulphate 2:1 extract as SO4 BRE	g/L	0.002		<0.002	-	-	-	-	-	-	-	-	-	-
Sulphate (soluble)	g/L	0.0002		0.037 - 0.0371	0.019 - 0.0194	0.125	0.016	0.0129 - 0.013	0.0117 - 0.012	0.02 - 0.0204	0.017 - 0.0171	0.0226 - 0.023	0.04	0.018
pH (Lab)	pH_Units	1		5.08	8.67	7.18	8.51	8.34	8.59	8.94	9.46	8.66	8.69	8.64
Other														
Bis(2-chloroisopropyl)ether	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate														
Toluene-D8	%			91.1	94.8	99.4	101	101	99.6	103	102	100	101	91.6
Chrysene-d12 (surr.)	%			88.8	95.8	89	84.5	91.1	106	79.6	96.5	81.6	89	93.7
d10-Acenaphthene (SS)	%			94	93.9	90	88.9	99.9	103	91.7	94.9	92.1	91	92.4
d10-Phenanthrene (SS)	%			92.8	93.8	84.9	81.9	99.5	94	83.9	91.3	83.8	89.5	87.3
d8-Naphthalene (SS)	%			97.8	90.4	94.4	94.9	100	103	91.3	94.3	92.7	89.1	87.7
% Surrogate Recovery	%			102	-	-	-	97.2	95.2	-	-	-	-	-
GRO Surrogate	%			61.6	122	30.9	98.1	107	100	92.9	101	74.2	124	62

Env Stds Comments
#1:LQM/CIEH S4Uls 2015
#2:USEPA RSL (NOV 2021)
#3:Defra C4SL (2014)
#4:EIC/AGS/CL:AIRE
#5:Defra C4SL (2021)
GAC: Generic Assessment Criteria
(blank): No assessment criteria available
- : Not analysed
Key
XXX Exceedance of HH Soil. Commercial/Industrial. Sandy Loam. TOC >=3.48%

			Field_ID	BHT11	BHT12	BHT13	BHT14	BHT15	BHT17	BHT2	BHT3	BHT4	BHT6
			Sample_Depth_Range	5	6	3	1.5	7	5.5	6	5.5	4	5.5
			Sampled_Date_Time	24/05/2023	24/05/2023	24/05/2023	19/05/2023	19/05/2023	17/05/2023	08/06/2023	07/06/2023	06/06/2023	02/06/2023
			Lab Report Number										
			GAC_HH_COM/IND_SLOAM_>3.48%TOC										
ChemName	output unit	EQL											
PCBs													
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.003	0.16[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.003	0.048[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.003	0.49[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.003	0.5[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 118	mg/kg	0.003	0.49[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.003	0.49[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.003	0.00015[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.003	0.5[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.003	0.5[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.003	0.51[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.003	0.00051[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.003	0.52[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Total PCB WHO 12	mg/kg	0.036		<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036
PCB 28	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 52	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 101	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 138	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 153	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 180	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Total PCB 7 Congeners	mg/kg	0.021		<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021
Amino Aliphatics													
N-nitrosodi-n-propylamine	mg/kg	0.1	0.33[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anilines													
2-nitroaniline	mg/kg	0.1	8.000[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
3-nitroaniline	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chloroaniline	mg/kg	0.1	11[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-nitroaniline	mg/kg	0.1	110[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Explosives													
2,4-Dinitrotoluene	mg/kg	0.1	3.800[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,6-dinitrotoluene	mg/kg	0.1	1.900[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nitrobenzene	mg/kg	0.1	22[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Halogenated Benzenes													
1,3,5-Trichlorobenzene	mg/kg	0.007	130[#1]	<0.007	<0.007	<0.007	<0.007	<0.14	<0.02	<0.007	<0.14	<0.007	<0.14
Chlorobenzene	mg/kg	0.002	290[#1]	<0.002	<0.002	<0.002	<0.002	<0.04	<0.005	<0.002	<0.04	<0.002	<0.04
Bromobenzene	mg/kg	0.002	520[#4]	<0.002	<0.002	<0.002	<0.002	<0.04	<0.01	<0.002	<0.04	<0.002	<0.04
2-chlorotoluene	mg/kg	0.003	23.000[#2]	<0.003	<0.003	<0.003	<0.003	<0.06	<0.009	<0.003	<0.06	<0.003	<0.06
4-chlorotoluene	mg/kg	0.003	23.000[#2]	<0.003	<0.003	<0.003	<0.003	<0.06	<0.01	<0.003	<0.06	<0.003	<0.06
1,3-dichlorobenzene	mg/kg	0.005	170[#1]	<0.005	<0.005	<0.005	<0.005	<0.1	<0.008	<0.005	<0.1	<0.005	<0.1
1,4-dichlorobenzene	mg/kg	0.005	25.000[#1]	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.1	<0.005	<0.1
1,2-dichlorobenzene	mg/kg	0.005	11.000[#1]	<0.005	<0.005	<0.005	<0.005	<0.1	<0.01	<0.005	<0.1	<0.005	<0.1
1,2,4-trichlorobenzene	mg/kg	0.007	1.300[#1]	<0.007	<0.007	<0.007	<0.007	<0.1	<0.02	<0.007	<0.1	<0.007	<0.1
1,2,3-trichlorobenzene	mg/kg	0.01	590[#1]	<0.01	<0.01	<0.01	<0.01	<0.2	<0.02	<0.01	<0.2	<0.01	<0.2
Hexachlorobenzene	mg/kg	0.1	120[#1]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Halogenated Hydrocarbons													
Dichlorodifluoromethane	mg/kg	0.0005	370[#2]	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.006	<0.0005	<0.01	<0.0005	<0.01
Bromomethane	mg/kg	0.001	30[#2]	<0.001	<0.001	<0.001	<0.001	<0.02	<0.01	<0.001	<0.02	<0.001	<0.02
Trichlorofluoromethane	mg/kg	0.0005	350,000[#2]	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.006	<0.0005	<0.01	<0.0005	<0.01
1,2-dibromoethane	mg/kg	0.001	0.16[#2]	<0.001	<0.001	<0.001	<0.001	<0.02	<0.01	<0.001	<0.02	<0.001	<0.02
	mg/kg			1,120,000	1,090,000	1,190,000	1,600,000	1,290,000	975,000	996,000	1,090,000	1,270,000	1,120,000
Halogenated Phenols													
2-chlorophenol	mg/kg	0.1	5.800[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4-dichlorophenol	mg/kg	0.1	2.500[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4,5-trichlorophenol	mg/kg	0.1	82.000[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4,6-trichlorophenol	mg/kg	0.1	210[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pentachlorophenol	mg/kg	0.1	400[#1]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phthalates													
Bis(2-ethylhexyl) phthalate	mg/kg	0.1	86.000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Butyl benzyl phthalate	mg/kg	0.1	950.000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Di-n-butyl phthalate	mg/kg	0.1	15.000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Di-n-octyl phthalate	mg/kg	0.1	89.000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Diethylphthalate	mg/kg	0.1	290.000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethyl phthalate	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Solvents													
Carbon disulfide	mg/kg	0.001	47[#1]	0.00106	<0.001	<0.001	0.00361	<0.02	<0.007	0.00334	<0.02	<0.001	<0.02
Isophorone	mg/kg	0.1	2.400[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
SPOCAS													
ANC at pH 4	mol /kg	0.03		-	-	-	-	-	-	-	-	-	-
ANC pH 6 dry soil	mol /kg	0.03		-	-	-	-	-	-	-	-	-	-
Metals													
Antimony	mg/kg	0.01	7.500[#4]	-	-	-	-	-	-	-	-	-	-
Arsenic	mg/kg	0.6	640[#3]	2.38	2.17	1.71	1.9	2.04	1.13	3.63	2.68	1.08	6.28
Barium	mg/kg	0.6	22,000[#4]	10.4	7.45	9.37	8.27	38	20.9	20.3	60.9	7.78	84.7
Beryllium	mg/kg	0.01	12[#3]	0.216	0.167	0.199	0.237	0.331	0.262	0.216	0.492	0.142	0.542
Boron	mg/kg	0.7	240,000[#1]	-	-	-	-	-	-	-	-	-	-
Cadmium	mg/kg	0.02	410[#3]	0.344	0.379	0.44	0.385	0.696	0.618	0.469	0.858	0.273	0.963
Chromium (III+VI)	mg/kg	0.9	Use either CrIII or CrVI[#5]	4.26	4.1	3.23	8.52	4.5	4.95	3.61	6.95	3.36	11.1
Copper	mg/kg	1.4	68,000[#3]	4.47	4.11	4.22	4.38	9.17	7.52	5.98	15.8	2.48	19.2
Lead	mg/kg	0.7	2,330[#3]	3.64	3.03	3.43	7.1	6.87	4.69	5.69	10.5	2.28	24.3
Mercury	mg/kg	0.1	350[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum	mg/kg	0.03	17,000[#4]	-	-	-	-	-	-	-	-	-	-
Nickel	mg/kg	0.2	980[#1]	14.8	15.3	8.95	15	18.1	14.7	12.6	27.9	7.35	38.9
Selenium	mg/kg	1	12,000[#1]	<1	<1	<1	<1	<1	<1	<1	1.23	<1	1.34
Vanadium	mg/kg	0.2	9,000[#1]	4.46	4.58	4.32	4.65	9.33	8.45	5.23	12.5	3.6	15.7
Zinc	mg/kg	1.9	730,000[#1]	27.8	17.8	26.1	29.4	49.4	37.3	44	72.5	17.9	104
Chromium (hexavalent)	mg/kg	0.6	49[#3]	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Chromium (Trivalent)	mg/kg	0.9	8,600[#1]	4.26	4.1	3.23	8.52	4.5	4.95	3.61	6.95	3.36	11.1
Organics													
Organic Matter	%	0.35		0.402	<0.35	<0.35	0.648	8.57	<0.35	7.28	1.88	3.55	3.84
TOC	%	0.2		-	-	-	-	-	-	-	-	-	-
Inorganics													
Sulphur	mg/kg	200		458 - 460	1120	490 - 491	285 - 290	490 - 494	340	819 - 820	840	480 - 481	676 - 680
Cyanide Total	mg/kg	1	150[#2]	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Fluoride	mg/kg	5	47,000[#2]	-	-	-	-	-	-	-	-	-	-
Sulphate	mg/kg	48		310 - 314	270 - 273	245 - 250	227 - 230	240 - 242	318 - 320	235 - 240	240 - 243	295 - 300	415 - 420
Chloride	mg/kg	20		-	-	-	-	-	-	-	-	-	-
Moisture	%			2.8	9	3	8.9	9.3	11	18	17	7.8	12
Soluble Sulphate 2:1 extract as SO4 BRE	g/L	0.002		-	-	-	-	-	-	-	-	-	-
Sulphate (soluble)	g/L	0.0002		0.0169 - 0.017	0.025 - 0.0253	0.017 - 0.0174	0.013	0.011	0.011 - 0.0112	0.045 - 0.0454	0.035 - 0.0354	0.0179 - 0.018	0.0577 - 0.058
pH (Lab)	pH_Units	1		9.61	9.43	9.66	8.93	8.61	8.77	8.4	8.6	9.56	8.57
Other													
Bis(2-chloroisopropyl)ether	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate													
Toluene-D8	%			116	98.6	101	105	98.6	95.1	96.7	102	103	101
Chrysene-d12 (surr.)	%			87.5	96.7	98.6	97.2	76.6	78.4	85.5	77.9	80	80.7
d10-Acenaphthene (SS)	%			92.9	91.8	91.9	92	90.9	92.6	95.6	95.5	95.9	88
d10-Phenanthrene (SS)	%			87.7	87.9	88.5	88.9	83.5	87.5	91.5	89.4	90.4	87.7
d8-Naphthalene (SS)	%			88.3	87.8	87.3	88	96.2	96.9	99.4	99.6	101	85.9
% Surrogate Recovery	%			-	-	-	-	-	-	-	-	-	-
GRO Surrogate	%			103	113	89.7	90	79.4	80.7	91.8	93.8	95.3	21.8

Env Stds Comments
#1:LQM/CIEH S4ULs 2015
#2:USEPA RSL (NOV 2021)
#3:Defra C4SL (2014)
#4:EIC/AGS/CL:AIRE
#5:Defra C4SL (2021)
GAC: Generic Assessment Criteria
(blank): No assessment criteria available
- : Not analysed
Key
XXX Exceedance of HH Soil. Commercial/Industrial. Sandy Loam. TOC >=3.48%

			Field_ID	TP201	TP204	TP205	TP206	TP207	TP209	TP210	TP211	TP212	TP213	TP214	TP215	TP216	TP217	TP218	TP219
			Sample_Depth_Range	2.3-3	0.8-0.85	2.45-2.55	1-1.1	1-1.1	1-1.1	1-1.1	1-1.1	1.1-1.2	1-1.1	1-1.1	1-1.1	1-1.1-2	1-1.1-2	1-1.1	1-1.1
			Sampled_Date_Time	02/05/2023	02/05/2023	03/05/2023	08/05/2023	03/05/2023	03/05/2023	08/05/2023	09/05/2023	09/05/2023	10/05/2023	10/05/2023	10/05/2023	08/05/2023	05/05/2023	04/05/2023	03/05/2023
			Lab_Report_Number																
			GAC_HH_COM/ IND_SLOAM_>3.48%TOC																
ChemName	output unit	EQL																	
Sulphate, Total Potential as SO4	g/kg			2.22	1.77	1.19	1.31	0.62 -0.624	0.6	1.17	0.6	0.618 -0.62	1.1	0.726 -0.73	0.936 -0.94	1.12	0.897 -0.9	0.708 -0.71	0.64 -0.642
Perylene-d12	%			91.1	105	94.3	97.9	90	106	104	98.7	91.3	81.2	82.6	82.4	81.9	100	92.6	108
NA																			
Asbestos Actinolite	No units			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asbestos Anthophyllite	No units			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asbestos Tremolite	No units			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Petroleum Hydrocarbons																			
EC10 C44 Aliphatics & Aromatics	mg/kg	10		<10	1650 - 2000	<10	37.6	<10	<10	<10	<10	<10	<10	<10	<10	<10	17.7	<10	<10
TPH																			
>C10 C44 Aliphatics	mg/kg	5		<5	300 - 333	<5	27.4	<5	<5	<5	<5	<5	<5	<5	<5	<5	8.57	<5	<5
>EC10 EC44 Aromatics	mg/kg	5		<5	1000 -1310	<5	10.2	<5	<5	<5	<5	<5	<5	<5	<5	<5	9.15	<5	<5
GRO >C5-C10	mg/kg	0.02		<0.02	0.442	<0.02	0.221	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
>C5-C6 Aliphatics	mg/kg	0.01	12,000[f1]	<0.01	0.0305	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>C5-C10 Aliphatics	mg/kg	0.05		<0.05	0.298	<0.05	0.152	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
>C6-C8 Aliphatics	mg/kg	0.01	40,000[f1]	<0.01	0.0521	<0.01	0.0496	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>C8-C10 Aliphatics	mg/kg	0.01	11,000[f1]	<0.01	0.216	<0.01	0.103	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>C10-C12 Aliphatics	mg/kg	1	47,000[f2]	<1	16.3	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>C12-C16 Aliphatics	mg/kg	1	90,000[f1]	<1	31.8	<1	6.68	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>C16-C21 Aliphatics	mg/kg	1		<1	80.2	<1	8.02	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>C21-C35 Aliphatics	mg/kg	1		<1	163 - 200	<1	11.5	<1	<1	<1	<1	<1	<1	<1	<1	<1	8.01	<1	<1
>C35-C44 Aliphatics	mg/kg	1	1,800,000[f1]	<1	41.9	<1	1.09	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>C5-C10 Aromatics	mg/kg	0.05		<0.05	0.144	<0.05	0.069	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
>EC5-EC7 Aromatics	mg/kg	0.01	86,000[f1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>EC7-EC8 Aromatics	mg/kg	0.01	180,000[f1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>EC8-EC10 Aromatics	mg/kg	0.01	17,000[f1]	<0.01	0.144	<0.01	0.069	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>EC10 EC12 Aromatics	mg/kg	1	34,000[f2]	<1	8.34	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>EC12 EC16 Aromatics	mg/kg	1	38,000[f1]	<1	23.9	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>EC16 EC21 Aromatics	mg/kg	1	28,000[f1]	<1	41.2	<1	1.01	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>EC21 EC35 Aromatics	mg/kg	1	28,000[f1]	2.09	891 -900	2.42	8.16	<1	1.07	<1	<1	<1	<1	2.28	<1	<1	6.95	<1	<1
>EC35 EC44 Aromatics	mg/kg	1	28,000[f1]	<1	300 - 348	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.65	<1	<1
>EC40 EC44 Aromatics	mg/kg	1		<1	88.6	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>C5-C44 Aliphatics & Aromatics	mg/kg	10		<10	1650 - 2000	<10	37.8	<10	<10	<10	<10	<10	<10	<10	<10	<10	17.7	<10	<10
BTEX																			
Benzene	mg/kg	0.001	98[f2]	<0.009	<0.18	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009
Toluene	mg/kg	0.001	180,000[f1]	<0.007	<0.14	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
Ethylbenzene	mg/kg	0.001	27,000[f1]	<0.004	<0.08	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Xylene (m & p)	mg/kg	0.002		<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Xylene Total	mg/kg	0.02	30,000[f1]	<0.02	<0.4	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Xylene (o)	mg/kg	0.002	33,000[f1]	<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Total BTEX	mg/kg	0.007		<0.04	<0.8	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Oxygenates																			
MTBE	mg/kg	0.0005	24,000[f4]	<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Terr Amyl Methyl Ether	mg/kg	0.001		<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chlorinated Hydrocarbons																			
Chloromethane	mg/kg	0.002	1.6[f5]	<0.007	<0.14	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
Vinyl chloride	mg/kg	0.0005	2.2[f5]	<0.006	<0.12	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Chloroethane	mg/kg	0.001	2,100[f5]	<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1-dichloroethene	mg/kg	0.0005	92[f5]	<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dichloromethane	mg/kg	0.005	560[f5]	<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
trans-1,2-dichloroethene	mg/kg	0.001	81[f5]/300[f2]	<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1-dichloroethane	mg/kg	0.0005	850[f5]	<0.008	<0.16	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
cis-1,2-dichloroethene	mg/kg	0.0005	47[f5]/2300[f2]	<0.006	<0.12	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Chloroform	mg/kg	0.003	350[f5]	<0.008	<0.16	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
1,1,1-trichloroethane	mg/kg	0.0005	3,000[f3]	<0.007	<0.14	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
Carbon tetrachloride	mg/kg	0.0005	14[f5]	<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Trichloroethene	mg/kg	0.001	3.4[f5]	<0.009	<0.18	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009
1,1,2-trichloroethane	mg/kg	0.001	400[f5]	<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tetrachloroethene	mg/kg	0.002	130[f5]	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
VOC																			
2,2-dichloropropane	mg/kg	0.001		<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bromochloromethane	mg/kg	0.002	630[f5]	<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1-dichloropropene	mg/kg	0.0005		<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2-dichloroethane	mg/kg	0.001	1.7[f5]	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,2-dichloropropane	mg/kg	0.0005	12[f5]	<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dibromomethane	mg/kg	0.001	99[f5]	<0.009	<0.18	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009
Bromodichloromethane	mg/kg	0.002	1.3[f5]	<0.007	<0.14	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
cis-1,3-dichloropropene	mg/kg	0.0005		<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
trans-1,3-dichloropropene	mg/kg	0.001		<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,3-dichloropropane	mg/kg	0.001	23,000[f2]	<0.007	<0.14	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
Chlorodibromomethane	mg/kg	0.002	39[f2]	<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1,1,2-tetrachloroethane	mg/kg	0.001	560[f5]	<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Styrene	mg/kg	0.002	180,000[f1]	<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bromoform	mg/kg	0.002	3,100[f3]	<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Isopropylbenzene	mg/kg	0.002	7,700[f2]	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1,2,2-tetrachloroethane	mg/kg	0.002	1,100[f5]	<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2,3-trichloropropane	mg/kg	0.002	0.11[f5]	<0.016	<0.32	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016
n-propylbenzene	mg/kg	0.002	11,000[f4]	<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,3,5-trimethylbenzene	mg/kg	0.002	1,500[f5]	<0.008	<0.16	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
tert-butylbenzene	mg/kg	0.002	120,000[f2]	<0.014	<0.28	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014
1,2,4-trimethylbenzene	mg/kg	0.003	220[f5]	<0.009	<0.18	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009
sec-butylbenzene	mg/kg	0.001	120,000[f2]	<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
p-isopropyltoluene	mg/kg	0.002		<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
n-butylbenzene	mg/kg	0.003	58,000[f2]	<0.011	<0.22	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011
1,2-dibromo-3-chloropropane	mg/kg	0.002	0.064[f2]	<0.014	<0.28	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014
Hexachlorobutadiene	mg/kg	0.004	120[f5]	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
PAH																			
Naphthalene	mg/kg	0.008	1,100[f3]	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009
Acenaphthylene	mg/kg	0.012	100,000[f1]	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012
Acenaphthene	mg/kg	0.008	100,000[f1]	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
Fluorene	mg/kg	0.01	71,000[f2]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Phenanthrene	mg/kg	0.015	23,000[f3]	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Anthracene	mg/kg	0.016	540,000[f1]	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016
Fluoranthene	mg/kg	0.017	23,000[f1]	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
Pyrene	mg/kg	0.015	54,000[f1]	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Benz[a]anthracene	mg/kg	0.014	180[f5]	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014
Chrysene	mg/kg	0.01	350[f5]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo[b]pyrene	mg/kg	0.015	36[f5]	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Indeno[1,2,3-c,d]pyrene	mg/kg	0.018	510[f5]	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018
Dibenz[a,h]anthracene	mg/kg	0.023	3.6[f5]	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023
Benzo[g,h,i]perylene	mg/kg	0.024	4,000[f5]	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024
Benzo[b]fluoranthene	mg/kg	0.015	45[f5]	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Benzo[k]fluoranthene	mg/kg	0.014	1,200[f5]	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014
PAH 16 Total	mg/kg	0.118		<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118
SVOC																			
2-methylnaphthalene	mg/kg	0.1	3,000[f2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-bromophenyl phenyl ether	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorophenyl phenyl ether	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Azobenzene	mg/kg	0.1	26[f2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bis(2-chloroethoxy) methane	mg/kg	0.1	2,500[f2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bis(2-chloroethyl)ether	mg/kg	0.1	1[f2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbazole	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzofuran	mg/kg	0.1	1,200[f2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorocyclopentadiene	mg/kg	0.1	7.5[f5]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachloroethane	mg/kg	0.1	130[f5]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenolics																			
2-methylphenol	mg/kg	0.1	Use Cresol Total[f6]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitrophenol	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4-dimethylphenol	mg/kg	0.1	30,000[f2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chloro-3-methylphenol	mg/kg	0.1	82,000[f2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-methylphenol	mg/kg	0.1	Use Cresol Total[f6]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-nitrophenol	mg/kg	0.1		<0.2	<0.2	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1
Phenol	mg/kg	0.01	1,300[f3]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-chloronaphthalene	mg/kg	0.1	2,200[f3]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cresol Total	mg/kg	0.01	180,000[f2]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Total Monohydric Phenols (S) Corrected	mg/kg	0.035		<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
Xylenols	mg/kg	0.015		<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015

Env Stds Comments
#1: LQM/CIEH S4ULs 2015
#2: USEPA RSL (NOV 2021)
#3: Defra C4SL (2014)
#4: BC/AGS/CL:AIRE
#5: Defra C4SL (2021)

GAC: Generic Assessment Criteria
(blank) No assessment criteria available
-: Not analysed

Key
XXX Exceedance of HH Soil. Commercial/Industrial. Sandy Loam. TOC >=3.48%

			Field_ID	TP220	TP301	TP302	TP303	TP304	TP305	TP306	TP307A	TP308	TP309	TP310	TP311	TP312	TP313
			Sample_Depth_Range	1-1.1	0.7-0.8	0.9-1	2.2-2.3	2.3-2.4	0-0.9	1.5-1.6	1-1.1	1.3-1.4	0.3-0.4	3.1-3.2	3.9-4	1.2-1.3	0.5-0.6
			Sampled_Date_Time	04/05/2023	16/05/2023	16/05/2023	16/05/2023	17/05/2023	17/05/2023	17/05/2023	17/05/2023	22/05/2023	22/05/2023	22/05/2023	22/05/2023	30/05/2023	31/05/2023
			Lab_Report_Number														
			GAC_HH_COM/ IND_SLOAM_>3.48%TOC														
ChemName	output unit	EQL															
Sulphate, Total Potential as SO4	g/kg			0.6	0.6	2.06	17	0.78 - 0.783	0.6	0.6	0.6	1.52	0.6	0.6	1.16	1.39	1.17
Perylene-d12	%			85.5	97.4	92.3	87.9	79.7	79.5	90.7	88.4	84.5	80.9	95	87	87.3	88.2
NA																	
Asbestos Actinolite	No units			0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asbestos Anthophyllite	No units			0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asbestos Tremolite	No units			0	0	0	0	0	0	0	0	0	0	0	0	0	0
Petroleum Hydrocarbons																	
>C10-C44 Aliphatics & Aromatics	mg/kg	10		<10	29.4	100 - 111	250 - 300	<10	<10	<10	16.8	53.2	<10	<10	<10	<10	24.7
TPH																	
>C10-C44 Aliphatics	mg/kg	5		<5	5.22	32.3	70.5	<5	<5	<5	<5	14.8	<5	<5	<5	<5	10.1
>EC10-EC44 Aromatics	mg/kg	5		<5	24.2	79.1	179 - 200	<5	<5	<5	11.9	38.4	<5	<5	5.62	<5	14.7
GRO >C5-C10	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
>C5-C6 Aliphatics	mg/kg	0.01	12,000[S1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>C5-C10 Aliphatics	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
>C6-C8 Aliphatics	mg/kg	0.01	40,000[S1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>C8-C10 Aliphatics	mg/kg	0.01	11,000[S1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>C10-C12 Aliphatics	mg/kg	1	47,000[S1]	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>C12-C16 Aliphatics	mg/kg	1	90,000[S1]	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>C16-C21 Aliphatics	mg/kg	1		<1	1.39	1.18	9.06	<1	<1	<1	<1	2.56	<1	<1	<1	<1	1.28
>C21-C35 Aliphatics	mg/kg	1		<1	2.54	24.6	46.7	<1	<1	<1	3.91	8.88	<1	<1	1.1	<1	6.49
>C35-C44 Aliphatics	mg/kg	1	1,800,000[S1]	<1	1.29	6.13	14.8	<1	<1	<1	<1	3.32	<1	<1	<1	<1	2.29
>C5-C10 Aromatics	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
>EC5-EC7 Aromatics	mg/kg	0.01	86,000[S1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>EC7-EC8 Aromatics	mg/kg	0.01	180,000[S1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>EC8-EC10 Aromatics	mg/kg	0.01	17,000[S1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>EC10-EC12 Aromatics	mg/kg	1	34,000[S1]	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>EC12-EC16 Aromatics	mg/kg	1	38,000[S1]	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>EC16-EC21 Aromatics	mg/kg	1	28,000[S1]	<1	4.14	1.1	19.7	<1	<1	<1	1.26	6.72	<1	<1	<1	<1	<1
>EC21-EC35 Aromatics	mg/kg	1	28,000[S1]	<1	17.8	66	100 - 134	1.63	<1	1.23	9.35	23.4	<1	2.25	3.62	<1	11.8
>EC35-EC44 Aromatics	mg/kg	1	28,000[S1]	<1	2.29	12	24.9	<1	<1	<1	<1	8.28	<1	<1	1.46	<1	2.35
>EC40-EC44 Aromatics	mg/kg	1		<1	1.16	<1	6.43	<1	<1	<1	<1	2.2	<1	<1	<1	<1	<1
>C5-C44 Aliphatics & Aromatics	mg/kg	10		<10	29.4	100 - 111	250 - 300	<10	<10	<10	11.9	53.2	<10	<10	<10	<10	24.7
BTEX																	
Benzene	mg/kg	0.001	98[S2]	<0.009	<0.009	<0.009	<0.02	<0.009	<0.009	<0.009	<0.009	<0.001	<0.009	<0.009	<0.009	<0.001	<0.001
Toluene	mg/kg	0.001	180,000[S1]	<0.007	<0.007	<0.007	<0.02	<0.007	<0.007	<0.007	<0.007	<0.001	<0.007	<0.007	<0.007	<0.001	0.00225
Ethylbenzene	mg/kg	0.001	27,000[S1]	<0.004	<0.004	<0.004	<0.02	<0.004	<0.004	<0.004	<0.004	<0.001	<0.004	<0.004	<0.004	<0.001	<0.001
Xylene (m & p)	mg/kg	0.002		<0.01	<0.01	<0.01	<0.04	<0.01	<0.01	<0.01	<0.01	<0.002	<0.01	<0.01	<0.01	<0.002	<0.002
Xylene Total	mg/kg	0.02	30,000[S1]	<0.02	<0.02	<0.02	<0.4	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Xylene (o)	mg/kg	0.002	33,000[S1]	<0.01	<0.01	<0.01	<0.04	<0.01	<0.01	<0.01	<0.01	<0.002	<0.01	<0.01	<0.01	<0.002	<0.002
Total BTEX	mg/kg	0.007		<0.04	<0.04	<0.04	<0.14	<0.04	<0.04	<0.04	<0.04	<0.007	<0.04	<0.04	<0.04	<0.007	<0.007
Oxygenates																	
MTBE	mg/kg	0.0005	24,000[S4]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0005	<0.01	<0.01	<0.01	<0.0005	<0.0005
Terr Amyl Methyl Ether	mg/kg	0.001		<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001
Chlorinated Hydrocarbons																	
Chloromethane	mg/kg	0.002	1.6[S5]	<0.007	<0.007	<0.007	<0.04	<0.007	<0.007	<0.007	<0.007	<0.002	<0.007	<0.007	<0.007	<0.002	<0.002
Vinyl chloride	mg/kg	0.0005	2.2[S5]	<0.006	<0.006	<0.006	<0.01	<0.006	<0.006	<0.006	<0.006	<0.0005	<0.006	<0.006	<0.006	<0.0005	<0.0005
Chloroethane	mg/kg	0.001	2,100[S5]	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001
1,1-dichloroethene	mg/kg	0.0005	92[S5]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0005	<0.01	<0.01	<0.01	<0.0005	<0.0005
Dichloromethane	mg/kg	0.005	560[S5]	<0.01	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01	<0.005	<0.01	<0.01	<0.01	<0.005	<0.005
trans-1,2-dichloroethene	mg/kg	0.001	81[S5]/300[S2]	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001
1,1-dichloroethane	mg/kg	0.0005	850[S5]	<0.008	<0.008	<0.008	<0.01	<0.008	<0.008	<0.008	<0.008	<0.0005	<0.008	<0.008	<0.008	<0.0005	<0.0005
cis-1,2-dichloroethene	mg/kg	0.0005	477[S5]/2300[S2]	<0.006	<0.006	<0.006	<0.01	<0.006	<0.006	<0.006	<0.006	<0.0005	<0.006	<0.006	<0.006	<0.0005	<0.0005
Chloroform	mg/kg	0.003	350[S5]	<0.008	<0.008	<0.008	<0.06	<0.008	<0.008	<0.008	<0.008	<0.003	<0.008	<0.008	<0.008	<0.003	<0.003
1,1,1-trichloroethane	mg/kg	0.0005	3,000[S5]	<0.007	<0.007	<0.007	<0.01	<0.007	<0.007	<0.007	<0.007	<0.0005	<0.007	<0.007	<0.007	<0.0005	<0.0005
Carbon tetrachloride	mg/kg	0.0005	14[S5]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0005	<0.01	<0.01	<0.01	<0.0005	<0.0005
Trichloroethene	mg/kg	0.001	3.4[S5]	<0.009	<0.009	<0.009	<0.02	<0.009	<0.009	<0.009	<0.009	<0.001	<0.009	<0.009	<0.009	<0.001	<0.001
1,1,2-trichloroethane	mg/kg	0.001	400[S5]	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001
Tetrachloroethene	mg/kg	0.002	130[S5]	<0.005	<0.005	<0.005	<0.04	<0.005	<0.005	<0.005	<0.005	<0.002	<0.005	<0.005	<0.005	<0.002	<0.002
VOC																	
2,2-dichloropropane	mg/kg	0.001		<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001
Bromochloromethane	mg/kg	0.002	630[S5]	<0.01	<0.01	<0.01	<0.04	<0.01	<0.01	<0.01	<0.01	<0.002	<0.01	<0.01	<0.01	<0.002	<0.002
1,1-dichloropropene	mg/kg	0.0005		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0005	<0.01	<0.01	<0.01	<0.0005	<0.0005
1,2-dichloroethane	mg/kg	0.001	1.7[S5]	<0.005	<0.005	<0.005	<0.02	<0.005	<0.005	<0.005	<0.005	<0.001	<0.005	<0.005	<0.005	<0.001	<0.001
1,2-dichloropropane	mg/kg	0.0005	12[S5]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0005	<0.01	<0.01	<0.01	<0.0005	<0.0005
Dibromomethane	mg/kg	0.001	99[S5]	<0.009	<0.009	<0.009	<0.02	<0.009	<0.009	<0.009	<0.009	<0.001	<0.009	<0.009	<0.009	<0.001	<0.001
Bromodichloromethane	mg/kg	0.002	1.3[S5]	<0.007	<0.007	<0.007	<0.04	<0.007	<0.007	<0.007	<0.007	<0.002	<0.007	<0.007	<0.007	<0.002	<0.002
cis-1,3-dichloropropene	mg/kg	0.0005		<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0005	<0.01	<0.01	<0.01	<0.0005	<0.0005
trans-1,3-dichloropropene	mg/kg	0.001		<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001
1,3-dichloropropane	mg/kg	0.001	23,000[S2]	<0.007	<0.007	<0.007	<0.02	<0.007	<0.007	<0.007	<0.007	<0.001	<0.007	<0.007	<0.007	<0.001	<0.001
Chlorodibromomethane	mg/kg	0.002	39[S2]	<0.01	<0.01	<0.01	<0.04	<0.01	<0.01	<0.01	<0.01	<0.002	<0.01	<0.01	<0.01	<0.002	<0.002
1,1,1,2-tetrachloroethane	mg/kg	0.001	560[S5]	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001
Styrene	mg/kg	0.002	180,000[S5]	<0.01	<0.01	<0.01	<0.04	<0.01	<0.01	<0.01	<0.01	<0.002	<0.01	<0.01	<0.01	<0.002	<0.002
Bromoform	mg/kg	0.002	3,100[S5]	<0.01	<0.01	<0.01	<0.04	<0.01	<0.01	<0.01	<0.01	<0.002	<0.01	<0.01	<0.01	<0.002	<0.002
Isopropylbenzene	mg/kg	0.002	7,700[S5]	<0.005	<0.005	<0.005	<0.04	<0.005	<0.005	<0.005	<0.005	<0.002	<0.005	<0.005	<0.005	<0.002	<0.002
1,1,2,2-tetrachloroethane	mg/kg	0.002	1,100[S5]	<0.01	<0.01	<0.01	<0.04	<0.01	<0.01	<0.01	<0.01	<0.002	<0.01	<0.01	<0.01	<0.002	<0.002
1,2,3-trichloropropane	mg/kg	0.002	0.11[S5]	<0.016	<0.016	<0.016	<0.04	<0.016	<0.016	<0.016	<0.016	<0.002	<0.016	<0.016	<0.016	<0.002	<0.002
n-propylbenzene	mg/kg	0.002	11,000[S4]	<0.01	<0.01	<0.01	<0.04	<0.01	<0.01	<0.01	<0.01	<0.002	<0.01	<0.01	<0.01	<0.002	<0.002
1,3,5-trimethylbenzene	mg/kg	0.002	1,500[S5]	<0.008	<0.008	<0.008	<0.04	<0.008	<0.008	<0.008	<0.008	<0.002	<0.008	<0.008	<0.008	<0.002	<0.002
tert-butylbenzene	mg/kg	0.002	120,000[S5]	<0.014	<0.014	<0.014	<0.04	<0.014	<0.014	<0.014	<0.014	<0.002	<0.014	<0.014	<0.014	<0.002	<0.002
1,2,4-trimethylbenzene	mg/kg	0.003	220[S5]	<0.009	<0.009	<0.009	<0.06	<0.009	<0.009	<0.009	<0.009	<0.003	<0.009	<0.009	<0.009	<0.003	<0.003
sec-butylbenzene	mg/kg	0.001	120,000[S5]	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001
p-isopropyltoluene	mg/kg	0.002		<0.01	<0.01	<0.01	<0.04	<0.01	<0.01	<0.01	<0.01	<0.002	<0.01	<0.01	<0.01	<0.002	<0.002
n-butylbenzene	mg/kg	0.003	58,000[S2]	<0.011	<0.011	<0.011	<0.06	<0.011	<0.011	<0.011	<0.011	<0.003	<0.011	<0.011	<0.011	<0.003	<0.003
1,2-dibromo-3-chloropropane	mg/kg	0.002	0.064[S5]	<0.014	<0.014	<0.014	<0.04	<0.014	<0.014	<0.014	<0.014	<0.002	<0.014	<0.014	<0.014	<0.002	<0.002
Hexachlorobutadiene	mg/kg	0.004	120[S5]	<0.02	<0.02	<0.02	<0.08	<0.02	<0.02	<0.02	<0.02	<0.004	<0.02	<0.02	<0.02	<0.004	<0.004
PAH																	
Naphthalene	mg/kg	0.008	1,100[S5]	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.008	<0.009	<0.009	<0.009	<0.008	<0.008
Acenaphthylene	mg/kg	0.012	100,000[S5]	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012
Acenaphthene	mg/kg	0.008	100,000[S5]	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
Fluorene	mg/kg	0.01	71,000[S5]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Phenanthrene	mg/kg	0.015	23,000[S5]	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Anthracene	mg/kg	0.016	540,000[S5]	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016
Fluoranthene	mg/kg	0.017	23,000[S5]	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
Pyrene	mg/kg	0.015	54,000[S5]	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Benz(a)anthracene	mg/kg	0.014	180[S5]	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014
Chrysene	mg/kg	0.01	350[S5]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(b)pyrene	mg/kg	0.015	36[S5]	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Indeno(1,2,3-c,d)pyrene	mg/kg	0.018	510[S5]	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018
Dibenz(a,h)anthracene	mg/kg	0.023	3.6[S5]	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023
Benzo(g,h,i)perylene	mg/kg	0.024	4,000[S5]	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024
Benzo(b)fluoranthene	mg/kg	0.015	45[S5]	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Benzo(k)fluoranthene	mg/kg	0.014	1,200[S5]	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014
PAH 16 Total	mg/kg	0.118		<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118
SVOC																	
2-methylnaphthalene	mg/kg	0.1	3,000[S5]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-bromophenyl phenyl ether	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorophenyl phenyl ether	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Azobenzene	mg/kg	0.1	26[S2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bis(2-chloroethoxy) methane	mg/kg	0.1	2,500[S2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bis(2-chloroethyl)ether	mg/kg	0.1	1[S2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbazole	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzofuran	mg/kg	0.1	1,200[S5]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorocyclopentadiene	mg/kg	0.1	7.5[S5]	<0.1	<0.2	<0.2	<0.1	<0.1	<0.1	<0.1	<0.2	<0.2	<0.1	<0.1	<0.2	<0.1	<0.1
Hexachloroethane	mg/kg	0.1	120[S5]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenolics																	
2-methylphenol	mg/kg	0.1	Use Cresol Total[S3]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitrophenol	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4-dimethylphenol	mg/kg	0.1	30,000[S2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chloro-3-methylphenol	mg/kg	0.1	82,000[S2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-methylphenol	mg/kg	0.1	Use Cresol Total[S3]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-nitrophenol	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenol	mg/kg	0.01	1,300[S5]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-chloronaphthalene	mg/kg	0.1	2,200[S5]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cresol Total	mg/kg	0.01	180,000[S2]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Total Monohydric Phenols (S) Corrected	mg/kg	0.035		<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
Xylenols	mg/kg	0.015		<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015

Env Stds Comments
#1: LQM/CIEH S4ULs 2015
#2: USEPA RSL (NOV 2021)
#3: Defra C4SL (2014)
#4: ISC/AGS/CL:AIRE
#5: Defra C4SL (2021)

GAC: Generic Assessment Criteria
(blank) No assessment criteria available
-: Not analysed

Key
XXX Exceedance of HH Soil. Commercial/Industrial. Sandy Loam. TOC >=3.48%

	Field_ID	TP201	TP204	TP205	TP206	TP207	TP209	TP210	TP211	TP212	TP213	TP214	TP215	TP216	TP217	TP218	TP219
	Sample_Depth_Range	2.3-3	0.8-0.85	2.45-2.55	1-1.1	1-1.1	1-1.1	1-1.1	1-1.1	1.1-1.2	1-1.1	1-1.1	1-1.1	1.1-1.2	1.1-1.2	1-1.1	1-1.1
	Sampled_Date_Time	02/05/2023	02/05/2023	03/05/2023	08/05/2023	03/05/2023	03/05/2023	08/05/2023	09/05/2023	09/05/2023	10/05/2023	10/05/2023	10/05/2023	08/05/2023	05/05/2023	04/05/2023	03/05/2023
	Lab_Report_Number																
	GAC_HH_COM/ IND_SLOAM_>3.48%TOC																
ChemName	output unit	EQL															
PCBs																	
Tetrachlorobiphenyl, 3,3,4,4-(PCB77)	mg/kg	0.003	0.16[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Tetrachlorobiphenyl, 3,4,4,5- (PCB81)	mg/kg	0.003	0.048[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.003	0.49[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.003	0.5[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 118	mg/kg	0.003	0.49[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.003	0.49[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.003	0.00015[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.003	0.5[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.003	0.5[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.003	0.51[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.003	0.00051[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.003	0.52[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Total PCB WHO 12	mg/kg	0.036		<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036
PCB 28	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 52	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 101	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 138	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 153	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 180	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Total PCB 7 Congeners	mg/kg	0.021		<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021
Amino Aliphatics																	
N-nitrosodi-n-propylamine	mg/kg	0.1	0.33[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anilines																	
2-nitroaniline	mg/kg	0.1	8.000[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
3-nitroaniline	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chloroaniline	mg/kg	0.1	11[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-nitroaniline	mg/kg	0.1	110[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Explosives																	
2,4-Dinitrotoluene	mg/kg	0.1	3.800[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,6-dinitrotoluene	mg/kg	0.1	1.900[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nitrobenzene	mg/kg	0.1	22[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Halogenated Benzenes																	
1,3,5-Trichlorobenzene	mg/kg	0.007	130[#2]	<0.02	<0.4	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chlorobenzene	mg/kg	0.002	290[#2]	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Bromobenzene	mg/kg	0.002	520[#2]	<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-chlorotoluene	mg/kg	0.003	23,000[#2]	<0.009	<0.18	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009
4-chlorotoluene	mg/kg	0.003	23,000[#2]	<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,3-dichlorobenzene	mg/kg	0.005	170[#2]	<0.008	<0.1	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
1,4-dichlorobenzene	mg/kg	0.005	25,000[#3]	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,2-dichlorobenzene	mg/kg	0.005	11,000[#3]	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2,4-trichlorobenzene	mg/kg	0.007	1,300[#2]	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
1,2,3-trichlorobenzene	mg/kg	0.01	590[#2]	<0.02	<0.4	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Hexachlorobenzene	mg/kg	0.1	120[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Halogenated Hydrocarbons																	
Dichlorodifluoromethane	mg/kg	0.0005	370[#2]	<0.006	<0.12	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Bromomethane	mg/kg	0.001	30[#2]	<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Trichlorofluoromethane	mg/kg	0.0005	350,000[#2]	<0.006	<0.12	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
1,2-dibromoethane	mg/kg	0.001	0.16[#2]	<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Halogenated Phenols																	
2-chlorophenol	mg/kg	0.1	5,800[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4-dichlorophenol	mg/kg	0.1	2,500[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4,5-trichlorophenol	mg/kg	0.1	82,000[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4,6-trichlorophenol	mg/kg	0.1	210[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pentachlorophenol	mg/kg	0.1	400[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phthalates																	
Bis(2-ethylhexyl)phthalate	mg/kg	0.1	86,000[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Butyl benzyl phthalate	mg/kg	0.1	950,000[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Di-n-butyl phthalate	mg/kg	0.1	15,000[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Di-n-octyl phthalate	mg/kg	0.1	89,000[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Diethylphthalate	mg/kg	0.1	290,000[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethyl phthalate	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Solvents																	
Carbon disulfide	mg/kg	0.001	47[#3]	<0.007	<0.14	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
Isophorone	mg/kg	0.1	2,400[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Metals																	
Arsenic	mg/kg	0.6	640[#3]	10.6	5.73	8.56	10	14.2	11.7	10.5	7.11	4.89	2.55	1.17	4.29	7.94	8.36	19.1	5.76
Barium	mg/kg	0.6	22,000[#4]	26.6	61.9	19.1	44.9	28.3	31.3	36.4	23.9	20.9	16.3	14.6	17.5	14	50	18.6	21.8
Beryllium	mg/kg	0.01	12[#3]	0.595	0.295	0.194	0.836	0.832	0.7	2.19	0.669	0.389	0.327	0.0335 - 0.034	0.271	0.375	0.684	0.882	0.417
Cadmium	mg/kg	0.02	410[#3]	1.82	0.776	2.03	1.92	1.86	1.26	4.06	0.816	0.803	1.17	0.311	0.691	1.17	1.51	2.51	0.938
Chromium (III+VI)	mg/kg	0.9	Use either CrIII or CrVI[#5]	15.8	8.4	17.9	9.66	19	11.8	8.24	7.8	5.84	6.75	9.01	4.97	5.08	13.9	5.79	8.3
Copper	mg/kg	1.4	68,000[#3]	12.1	15.3	13.6	13	21.4	17.3	18.5	13.2	11.7	8.15	2.69	9.25	12.2	12.1	14.7	11.7
Lead	mg/kg	0.7	2,330[#3]	17.4	35.2	23.2	16.4	18.5	18.7	11.6	12.7	11	7.69	12.9	7.01	5.05	23.6	9.46	10.4
Mercury	mg/kg	0.1	350[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	0.2	980[#3]	40	19.8	25.3	64.4	51.3	40.6	89.5	48.3	25.7	20.6	12.4	20.5	40	40.7	61.1	30.8
Selenium	mg/kg	1	12,000[#3]	6.77	1.13	3.22	<1	1.07	1.01	<1	<1	<1	<1	<1	<1	<1	<1	1.32	<1
Vanadium	mg/kg	0.2	9,000[#3]	17.4	8.67	13	18.5	19.6	17.8	18.2	14.5	9.77	9.29	9.31	8.65	11.6	23	14.8	13.3
Zinc	mg/kg	1.9	730,000[#3]	105	58.9	70.5	129	94.6	94.7	194	98.9	60.2	44.9	49.1	48.5	68.7	105	135	57.6
Chromium (hexavalent)	mg/kg	0.6	40[#2]	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Chromium (Trivalent)	mg/kg	0.9	8,600[#2]	15.8	8.4	17.9	9.66	19	11.8	8.24	7.8	5.84	6.75	9.18	4.97	5.08	13.9	5.79	8.3
Organics																	
Organic Matter	%	0.35		1.44	14.5	0.965	1.47	0.652	<0.35	<0.35	<0.35	<0.35	<0.35	0.921	<0.35	0.352	2.1	<0.35	<0.35
Inorganics																	
Sulphur	mg/kg	200		739 - 740	590	398 - 400	437 - 440	208 - 210	<200	390	200	206 - 210	368 - 370	240 - 242	310 - 312	370 - 374	299 - 300	236 - 240	210 - 214
Cyanide Total	mg/kg	1	150[#2]	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulphate	mg/kg	48		380 - 384	520 - 523	50 - 52.7	300	48.4 - 50	<48	80 - 83.9	149 - 150	140	208 - 210	80 - 81	180 - 182	165 - 170	210	<48	<48
Moisture	%			20	21	19	18	19	13	15	8.1	12	7.8	19	9.3	6.8	19	11	9.4
Sulphate (soluble)	g/L	0.0002		0.027 - 0.0273	0.02 - 0.0203	0.0207 - 0.021	0.015 - 0.0151	0.011 - 0.0113	0.00866 - 0.009	0.0678 - 0.068	0.00993 - 0.01	0.00867 - 0.009	0.0127 - 0.013	0.015 - 0.0151	0.005 - 0.00541	0.008 - 0.00837	0.02 - 0.0204	0.00875 - 0.009	0.008 - 0.00812
pH (Lab)	pH Units	1		8.16	8.12	5.52	8.32	8.46	8.74	8.86	9.06	8.74	8.89	5.59	9	8.85	7.61	8.98	8.76
Other																	
Bis(2-chloroisopropyl)ether	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos																	
Asbestos Gravimetric Quantification	mass %	0.001		-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos Quantification - PCMEvaluation	%	0.001		-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos Quantification - Total - %	%	0.001		-	<0.001	-	-	-	-	-	-	-	-	-	-	-	-	-	-
Surrogate																	
Toluene-D8	%			91.2	95.7	100	98.2	108	99.9	102	100	100	99.8	97.8	101	99.5	96.9	101	99.6
Chrysene-d12 (surr.)	%			91.9	127	104	97.7	86.5	111	105	100	93.3	81.4	86.8	83	82.7	101	89	115
d10-Acenaphthene (IS)	%			98.2	109	103	88	98	106	92.2	91.9	94.2	88.6	89.2	89	88.8	102	98.9	106
d10-Phenanthrene (IS)	%			93.6	117	111	89.7	99	106	92.4	91.1	97.6	80.2	83.3	81.5	80.9	100	98.8	106
d8-Naphthalene (IS)	%			110	107	108	87	98.9	98.7	89.1	89.3	88.6	95.8	94.7	95.2	95.1	106	99.9	99.8
GRO Surrogate	%			96.2	66.1	104	97.2	106	110	101	105	102	101	91	101	98	92	106	106

EnvStds Comments
#1:LQM/CIEH S4ULs 2015
#2: USEPA RSL (NOV 2021)
#3:Defra C4SL (2014)
#4:SIC/AGS/CL:AIRE
#5:Defra C4SL (2021)

GAC: Generic Assessment Criteria
(blank): No assessment criteria available
- : Not analysed

Key
XXX Exceedance of HH Soil. Commercial/Industrial. Sandy Loam. TOC >=3.48%

			Field_ID	TP220	TP301	TP302	TP303	TP304	TP305	TP306	TP307A	TP308	TP309	TP310	TP311	TP312	TP313
			Sample_Depth_Range	1-1.1	0.7-0.8	0.9-1	2.2-2.3	2.3-2.4	0-0.9	1.5-1.6	1-1.1	1.3-1.4	0.3-0.4	3.1-3.2	3.9-4	1.2-1.3	0.5-0.6
			Sampled_Date_Time	04/05/2023	16/05/2023	16/05/2023	16/05/2023	17/05/2023	17/05/2023	17/05/2023	17/05/2023	22/05/2023	22/05/2023	22/05/2023	22/05/2023	30/05/2023	31/05/2023
			Lab_Report_Number														
			GAC_HH_COM/ IND_SLOAM_>3.48%TOC														
ChemName	output unit	EQL															
PCBs																	
Tetrachlorobiphenyl, 3,3,4,4'-(PCB 77)	mg/kg	0.003	0.16[#3]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.003	0.048[#3]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Pentachlorobiphenyl, 2,3,3,4,4'-(PCB 105)	mg/kg	0.003	0.49[#3]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.003	0.5[#3]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 118	mg/kg	0.003	0.49[#3]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.003	0.49[#3]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.003	0.00015[#3]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.003	0.5[#3]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.003	0.5[#3]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.003	0.51[#3]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.003	0.00051[#3]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg	0.003	0.52[#3]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Total PCB WHO 12	mg/kg	0.036		<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036
PCB 28	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 52	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 101	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 138	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 153	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 180	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Total PCB 7 Congeners	mg/kg	0.021		<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021
Amino Aliphatics																	
N-nitrosodi-n-propylamine	mg/kg	0.1	0.33[#3]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anilines																	
2-nitroaniline	mg/kg	0.1	8,000[#3]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
3-nitroaniline	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chloroaniline	mg/kg	0.1	11[#3]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-nitroaniline	mg/kg	0.1	110[#3]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Explosives																	
2,4-Dinitrotoluene	mg/kg	0.1	3,800[#3]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,6-dinitrotoluene	mg/kg	0.1	1,900[#3]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nitrobenzene	mg/kg	0.1	22[#3]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Halogenated Benzenes																	
1,3,5-Trichlorobenzene	mg/kg	0.007	130[#5]	<0.02	<0.02	<0.02	<0.14	<0.02	<0.02	<0.02	<0.02	<0.007	<0.02	<0.02	<0.02	<0.007	<0.007
Chlorobenzene	mg/kg	0.002	290[#5]	<0.005	<0.005	<0.005	<0.04	<0.005	<0.005	<0.005	<0.005	<0.002	<0.005	<0.005	<0.005	<0.002	<0.002
Bromobenzene	mg/kg	0.002	520[#5]	<0.01	<0.01	<0.01	<0.04	<0.01	<0.01	<0.01	<0.01	<0.002	<0.01	<0.01	<0.01	<0.002	<0.002
2-chlorotoluene	mg/kg	0.003	23,000[#3]	<0.009	<0.009	<0.009	<0.06	<0.009	<0.009	<0.009	<0.009	<0.003	<0.009	<0.009	<0.009	<0.003	<0.003
4-chlorotoluene	mg/kg	0.003	23,000[#3]	<0.01	<0.01	<0.01	<0.06	<0.01	<0.01	<0.01	<0.01	<0.003	<0.01	<0.01	<0.01	<0.003	<0.003
1,3-dichlorobenzene	mg/kg	0.005	170[#5]	<0.008	<0.008	<0.008	<0.1	<0.008	<0.008	<0.008	<0.008	<0.005	<0.008	<0.008	<0.008	<0.005	<0.005
1,4-dichlorobenzene	mg/kg	0.005	25,000[#3]	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,2-dichlorobenzene	mg/kg	0.005	11,000[#3]	<0.01	<0.01	<0.01	<0.1	<0.01	<0.01	<0.01	<0.01	<0.005	<0.01	<0.01	<0.01	<0.005	<0.005
1,2,4-trichlorobenzene	mg/kg	0.007	1,300[#3]	<0.02	<0.02	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.007	<0.02	<0.02	<0.02	<0.007	<0.007
1,2,3-trichlorobenzene	mg/kg	0.01	590[#3]	<0.02	<0.02	<0.02	<0.2	<0.02	<0.02	<0.02	<0.02	<0.01	<0.02	<0.02	<0.02	<0.01	<0.01
Hexachlorobenzene	mg/kg	0.1	120[#5]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Halogenated Hydrocarbons																	
Dichlorodifluoromethane	mg/kg	0.0005	370[#3]	<0.006	<0.006	<0.006	<0.01	<0.006	<0.006	<0.006	<0.006	<0.0005	<0.006	<0.006	<0.006	<0.0005	<0.0005
Bromomethane	mg/kg	0.001	30[#3]	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001
Trichlorofluoromethane	mg/kg	0.0005	350,000[#3]	<0.006	<0.006	<0.006	<0.01	<0.006	<0.006	<0.006	<0.006	<0.0005	<0.006	<0.006	<0.006	<0.0005	<0.0005
1,2-dibromoethane	mg/kg	0.001	0.16[#3]	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001
Halogenated Phenols																	
2-chlorophenol	mg/kg	0.1	5,800[#3]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4-dichlorophenol	mg/kg	0.1	2,500[#3]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4,5-trichlorophenol	mg/kg	0.1	82,000[#3]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4,6-trichlorophenol	mg/kg	0.1	210[#3]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pentachlorophenol	mg/kg	0.1	400[#5]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phthalates																	
Bis(2-ethylhexyl)phthalate	mg/kg	0.1	86,000[#3]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Butyl benzyl phthalate	mg/kg	0.1	950,000[#3]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Di-n-butyl phthalate	mg/kg	0.1	15,000[#3]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Di-n-octyl phthalate	mg/kg	0.1	89,000[#3]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Diethylphthalate	mg/kg	0.1	290,000[#3]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethyl phthalate	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Solvents																	
Carbon disulfide	mg/kg	0.001	47[#3]	<0.007	<0.007	<0.007	0.103	<0.007	<0.007	<0.007	<0.007	0.00638	<0.007	<0.007	0.017	0.00191	0.00122
Isophorone	mg/kg	0.1	2,400[#3]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Metals																	
Arsenic	mg/kg	0.6	640[#5]	5.52	2.78	4.28	7.09	2.41	4.96	13.6	2.25	2.89	2.07	3.81	9.13	3.02	3.02
Barium	mg/kg	0.6	22,000[#3]	22.4	47.1	137	62.7	25.9	130	49	46.4	32.2	22.5	40.3	29.7	29.4	16.1
Beryllium	mg/kg	0.01	12[#3]	0.479	0.48	0.582	0.689	0.289	0.789	0.478	0.456	0.312	0.331	0.765	1.42	0.43	0.206
Cadmium	mg/kg	0.02	410[#5]	1.45	0.569	1.01	2.01	0.483	0.499	0.385	0.444	0.488	0.795	0.728	3.54	0.906	0.358
Chromium (III+VI)	mg/kg	0.9	Use either CrIII or CrVI[#5]	9.17	9.9	31.8	27.1	6.54	27.5	2.96	12.4	6.85	7.43	29.8	15.8	7.08	2.66
Copper	mg/kg	1.4	68,000[#3]	15.2	8.09	3.7	25.5	5.14	5.73	5.22	3.97	8.03	10.4	13.8	14.3	10.5	4.3
Lead	mg/kg	0.7	2,330[#3]	13.6	8.9	25	15.3	6.08	16.2	5.53	8.29	11.4	6.94	19.4	17.8	9.97	4.1
Mercury	mg/kg	0.1	350[#3]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	0.2	980[#3]	32.4	17.9	24.5	43	10.9	34.8	10.9	15.6	14.6	20.7	54	92.7	40.7	11.4
Selenium	mg/kg	1	12,000[#3]	<1	<1	<1	1.89	<1	<1	<1	<1	<1	<1	<1	<1	1.18	<1
Vanadium	mg/kg	0.2	9,000[#3]	14.4	15.3	30.2	22.5	8.24	27.8	11.3	12	8.19	9.72	33.9	15.8	13.3	4.85
Zinc	mg/kg	1.9	730,000[#3]	78.1	33.5	109	117	27	52.9	24.2	29.8	38.8	49.5	127	265	75	28.6
Chromium (hexavalent)	mg/kg	0.6	40[#3]	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Chromium (Trivalent)	mg/kg	0.9	8,600[#3]	9.17	9.9	31.8	27.1	6.54	27.5	2.96	12.4	6.85	7.43	29.8	15.8	7.08	2.66
Organics																	
Organic Matter	%	0.35		<0.35	7.22	10.9	14.5	6.88	1.62	0.755	1.14	3.6	3.22	2.34	2.59	0.802	3.69
Inorganics																	
Sulphur	mg/kg	200		<200	<200	688 - 690	5670	260 - 261	<200	<200	<200	506 - 510	<200	<200	386 - 390	460 - 462	390 - 391
Cyanide Total	mg/kg	1	150[#5]	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulphate	mg/kg	48		100 - 101	259 - 260	428 - 430	2640	280	150 - 152	140 - 142	305 - 310	358 - 360	216 - 220	128 - 130	300	238 - 240	437 - 440
Moisture	%			13	17	52	54	19	23	17	24	28	9.5	25	21	9.6	12
Sulphate (soluble)	g/L	0.0002		0.00757 - 0.008	0.0199 - 0.02	0.065 - 0.0654	0.376	0.0308 - 0.031	0.015	0.014	0.0389 - 0.039	0.0319 - 0.032	0.0118 - 0.012	0.0146 - 0.015	0.033 - 0.0331	0.017 - 0.0171	0.0119 - 0.012
pH (Lab)	pH Units	1		8.86	8.27	5.5	6.19	8.32	8.3	8.25	8.33	8.15	8.88	7.09	7.08	8.4	8.59
Other																	
Bis(2-chloroisopropyl)ether	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Asbestos																	
Asbestos Gravimetric Quantification	mass %	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos Quantification - PCMEvaluation	%	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos Quantification - Total - %	%	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-
Surrogate																	
Toluene-D8	%			97.4	101	92.1	99.4	97.8	95.3	98.8	96.3	95.7	100	94.9	98.9	95.8	93.7
Chrysene-d12 (surr.)	%			90	97.7	94.6	91.1	77.4	84	93.2	91	83	77.4	96.2	92	91	93.1
d10-Acenaphthene (SS)	%			101	96.4	94.5	96.8	91.3	87.1	96.7	94.5	94.4	93.1	95.8	94.1	92.5	92.9
d10-Phenanthrene (SS)	%			93.9	97.8	95.4	88	84.9	87.9	98	94.5	90.2	86.9	90	96.1	88.4	89.5
d8-Naphthalene (SS)	%			106	94.6	92.4	95.3	96.3	88.2	95	93.7	98.1	98.3	101	92.3	90.8	90.5
GRO Surrogate	%			107	103	82.9	70.1	96.8	86.8	96.8	88.3	105	111	88	92.1	117	103

Env Stds Comments
#1:LQM/CIEH S4ULs 2015
#2: USEPA RSL (NOV 2021)
#3:Defra C4SL (2014)
#4:SIC/AGS/CL:AIRE
#5:Defra C4SL (2021)

GAC: Generic Assessment Criteria
(blank): No assessment criteria available
- : Not analysed

Key
XXX Exceedance of HH Soil. Commercial/Industrial. Sandy Loam. TOC >=3.48%

			Field_ID	TPBP01	TPBP02	TPBP03	TPBP04	TPBP05	TPBP06	TPBP07	TPBP08	TPC01	TPC02	TPC03	TPC04	TPC05	TPC06	TPC07	TPCC01	TPSS01	TPSS01	TPSS02	TPSS02	TPSS03	TPSS03	TPSS04
			Sample_Depth_Range	1.4-1.5	0.2-0.3	0.2-0.3	0.5-0.6	0.5-0.6	0.2-0.3	0.3-0.4	3.2-3.3	2.6-2.7	2.5-2.6	3.2-3.3	1.6-1.7	0.5-0.6	2.5-2.6	1.4-1.5	2.9-3	1-1.1	3.25-3.35	1.9-2	3.4-3.6	1.1-1.2	2-2.2	2.1-2.2
			Sampled_Date_Time	23/05/2023	23/05/2023	23/05/2023	24/05/2023	23/05/2023	24/05/2023	24/05/2023	24/05/2023	29/05/2023	29/05/2023	30/05/2023	30/05/2023	30/05/2023	30/05/2023	30/05/2023	29/05/2023	11/05/2023	11/05/2023	10/05/2023	10/05/2023	10/05/2023	10/05/2023	11/05/2023
			Lab_Report_Number																							
ChemName	output unit	EQL	GAC_HH_COM/ IND_SLOAM_>3.48%TOC																							
Sulphate, Total Potential as SO4	g/kg			87	9.09	1.38	17.6	2.99	1.91	1.86	1.64	0.92 - 0.921	1.83	4.5	1.4	19.9	5.94	0.807 - 0.81	20.3	1.91	0.966 - 0.97	0.81 - 0.813	0.795 - 0.8	0.6	0.879 - 0.88	1.02
Perylene-d12	%			93.2	96	91.5	87.7	91.5	92.3	93.1	80.2	77.6	93.2	88.9	80.5	82.2	92.2	75.8	98.2	92.3	102	93.9	82.4	94	101	92
NA																										
Asbestos Actinolite	No units			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asbestos Anthophyllite	No units			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asbestos Tremolite	No units			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Petroleum Hydrocarbons																										
>C10-C44 Aliphatics & Aromatics	mg/kg	10		198 - 200	19.2	<10	82.9	<10	<10	<10	<10	<10	<10	<10	100 - 131	383 - 400	17.5	<10	<10	1000 - 1070	<10	15.9	<10	14.5	<10	<10
TPH																										
>C10-C44 Aliphatics	mg/kg	5		56.2	9.48	<5	21	<5	6.27	<5	<5	<5	<5	<5	100 - 109	100 - 111	<5	<5	<5	200 - 228	<5	<5	<5	<5	<5	<5
>EC10-EC44 Aromatics	mg/kg	5		100 - 141	9.7	6.2	61.9	<5	<5	6.17	<5	<5	<5	<5	21.5	272 - 300	15.1	<5	6.09	800 - 845	<5	11.1	<5	12	<5	5.78
GRO >C5-C10	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
>C5-C6 Aliphatics	mg/kg	0.01	12,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>C5-C10 Aliphatics	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
>C6-C8 Aliphatics	mg/kg	0.01	40,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>C8-C10 Aliphatics	mg/kg	0.01	11,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>C10-C12 Aliphatics	mg/kg	1	47,000[#1]	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	8.23	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>C12-C16 Aliphatics	mg/kg	1	90,000[#1]	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	47	<1	<1	<1	<1	1.88	<1	<1	<1	<1	<1	<1
>C16-C21 Aliphatics	mg/kg	1		9.86	<1	<1	3.11	<1	<1	<1	<1	<1	<1	<1	39.2	29.7	<1	<1	<1	10.8	<1	<1	<1	<1	<1	<1
>C21-C35 Aliphatics	mg/kg	1		36.9	8.07	3.19	16.2	<1	5.71	1.06	<1	<1	<1	<1	14.4	69.5	1.56	<1	1.61	158 - 200	<1	3.63	<1	1.79	<1	<1
>C35-C44 Aliphatics	mg/kg	1	1,800,000[#1]	9.43	<1	<1	1.63	<1	<1	<1	<1	<1	<1	<1	<1	12.1	<1	<1	<1	57.1	<1	1	<1	<1	<1	<1
>C5-C10 Aromatics	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
>EC5-EC7 Aromatics	mg/kg	0.01	86,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>EC7-EC8 Aromatics	mg/kg	0.01	180,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>EC8-EC10 Aromatics	mg/kg	0.01	17,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>EC10-EC12 Aromatics	mg/kg	1	34,000[#1]	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>EC12-EC16 Aromatics	mg/kg	1	38,000[#1]	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	7.99	<1	<1	<1	<1	2.11	<1	<1	<1	<1	<1	<1
>EC16-EC21 Aromatics	mg/kg	1	28,000[#1]	16.2	<1	<1	1.96	<1	<1	<1	<1	<1	<1	<1	7.96	13.6	<1	<1	<1	4.57	<1	<1	<1	<1	<1	<1
>EC21-EC35 Aromatics	mg/kg	1	28,000[#1]	90.6	6.57	4.62	36.4	2.2	1.19	4.86	<1	<1	<1	<1	4.19	200 - 227	14	1.76	4.7	656 - 700	<1	9.23	<1	9.87	<1	3.88
>EC35-EC44 Aromatics	mg/kg	1	28,000[#1]	34.2	2.42	<1	23.6	<1	<1	<1	<1	<1	<1	<1	<1	31.4	<1	<1	<1	182 - 200	<1	1.32	<1	<1	<1	<1
>EC40-EC44 Aromatics	mg/kg	1		11.7	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.77	<1	<1	<1	100 - 101	<1	<1	<1	<1	<1	<1
>C5-C44 Aliphatics & Aromatics	mg/kg	10		198 - 200	19.2	<10	82.9	<10	<10	<10	<10	<10	<10	<10	100 - 131	383 - 400	15.1	<10	<10	1000 - 1070	<10	11.1	<10	12	<10	<10
BTEX																										
Benzene	mg/kg	0.001	98[#3]	<0.02	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.18	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009
Toluene	mg/kg	0.001	180,000[#1]	<0.02	<0.001	0.00282	0.00181	<0.02	0.00208	0.00172	0.00659	<0.001	<0.001	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.14	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
Ethylbenzene	mg/kg	0.001	27,000[#1]	<0.02	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.02	0.00182	<0.001	<0.08	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004
Xylene (m & p)	mg/kg	0.002		<0.04	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	0.0025	<0.002	<0.002	<0.002	<0.002	<0.04	<0.04	<0.002	<0.002	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Xylene Total	mg/kg	0.02	30,000[#1]	<0.4	<0.02	<0.02	<0.02	<0.4	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.4	<0.4	<0.02	<0.02	<0.4	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Xylene (o)	mg/kg	0.002	33,000[#1]	<0.04	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.04	<0.04	<0.002	<0.002	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Total BTEX	mg/kg	0.007		<0.14	<0.007	<0.007	<0.007	<0.14	<0.007	<0.007	0.00909	<0.007	<0.007	<0.007	<0.007	<0.14	<0.14	<0.007	<0.007	<0.8	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04
Oxygenates																										
MTBE	mg/kg	0.0005	24,000[#4]	<0.01	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tert Amyl Methyl Ether	mg/kg	0.001		<0.02	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Chlorinated Hydrocarbons																										
Chloromethane	mg/kg	0.002	1.6[#4]	<0.04	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.04	<0.04	<0.002	<0.002	<0.14	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
Vinyl chloride	mg/kg	0.0005	2.2[#5]	<0.01	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.12	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Chloroethane	mg/kg	0.001	2,100[#4]	<0.02	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1-dichloroethene	mg/kg	0.0005	92[#4]	<0.01	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dichloromethane	mg/kg	0.005	560[#4]	<0.1	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.1	<0.005	<0.005	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
trans-1,2-dichloroethene	mg/kg	0.001	81[#4] | 300[#2]	<0.02	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1-dichloroethane	mg/kg	0.0005	850[#4]	<0.01	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.16	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
cis-1,2-dichloroethene	mg/kg	0.0005	47[#4] | 2300[#2]	<0.01	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.12	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Chloroform	mg/kg	0.003	350[#1]	<0.06	<0.003	<0.003	<0.003	<0.06	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.06	<0.06	<0.003	<0.003	<0.16	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
1,1,1-trichloroethane	mg/kg	0.0005	3,000[#1]	<0.01	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.14	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
Carbon tetrachloride	mg/kg	0.0005	14[#1]	<0.01	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Trichloroethene	mg/kg	0.001	3.4[#5]	<0.02	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.18	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009
1,1,2-trichloroethane	mg/kg	0.001	400[#4]	<0.02	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Tetrachloroethene	mg/kg	0.002	130[#5]	<0.04	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.04	<0.04	<0.002	<0.002	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
VOC																										
2,2-dichloropropane	mg/kg	0.001		<0.02	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bromochloromethane	mg/kg	0.002	630[#2]	<0.04	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.04	<0.04	<0.002	<0.002	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1-dichloropropene	mg/kg	0.0005		<0.01	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2-dichloroethane	mg/kg	0.001	1.7[#1]	<0.02	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,2-dichloropropane	mg/kg	0.0005	12[#4]	<0.01	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Dibromomethane	mg/kg	0.001	99[#2]	<0.02	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.18	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009
Bromodichloromethane	mg/kg	0.002	1.3[#2]	<0.04	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.04	<0.04	<0.002	<0.002	<0.14	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
cis-1,3-dichloropropene	mg/kg	0.0005		<0.01	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
trans-1,3-dichloropropene	mg/kg	0.001		<0.02	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,3-dichloropropane	mg/kg	0.001	23,000[#2]	<0.02	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.14	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
Chlorodibromomethane	mg/kg	0.002	39[#2]	<0.04	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.04	<0.04	<0.002	<0.002	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,1,1,2-tetrachloroethane	mg/kg	0.001	560[#1]	<0.02	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Styrene	mg/kg	0.002	180,000[#4]	<0.04	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.04	<0.04	<0.002	<0.002	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Bromoform	mg/kg	0.002	3,100[#4]	<0.04	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.11	<0.1	<0.002	<0.002	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Isopropylbenzene	mg/kg	0.002	7,700[#4]	<0.04	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.04	<0.04	<0.002	<0.002	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,1,2,2-tetrachloroethane	mg/kg	0.002	1,100[#1]	<0.04	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.04	<0.04	<0.002	<0.002	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2,3-trichloropropane	mg/kg	0.002	0.11[#2]	<0.04	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.04	<0.04	<0.002	<0.002	**<0.32**	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016
n-propylbenzene	mg/kg	0.002	11,000[#4]	<0.04	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.04	<0.04	<0.002	<0.002	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,3,5-trimethylbenzene	mg/kg	0.002	1,500[#2]	<0.04	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.04	<0.04	<0.002	<0.002	<0.16	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
tert-butylbenzene	mg/kg	0.002	120,000[#2]	<0.04	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.04	<0.04	<0.002	<0.002	<0.28	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014
1,2,4-trimethylbenzene	mg/kg	0.003	220[#4]	<0.06	<0.003	<0.003	<0.003	<0.06	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.06	<0.06	<0.003	<0.003	<0.18	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009
sec-butylbenzene	mg/kg	0.001	120,000[#2]	<0.02	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
p-isopropyltoluene	mg/kg	0.002		<0.04	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.04	<0.04	<0.002	<0.002	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
n-butylbenzene	mg/kg	0.003	58,000[#2]	<0.06	<0.003	<0.003	<0.003	<0.06	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.06	<0.06	<0.003	<0.003	<0.22	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011
1,2-dibromo-3-chloropropane	mg/kg	0.002	0.064[#2]	<0.04	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.04	<0.04	<0.002	<0.002	**<0.28**	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014
Hexachlorobutadiene	mg/kg	0.004	120[#1]	<0.08	<0.004	<0.004	<0.004	<0.08	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.08	<0.08	<0.004	<0.004	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
PAH																										
Naphthalene	mg/kg	0.008	1,100[#1]	<0.009	<0.008	<0.008	<0.008	<0.009	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.009	<0.009	<0.008	<0.008	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009
Acenaphthylene	mg/kg	0.012	100,000[#1]	<0.012	<0.012	<0.012	<0.06	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.024	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012
Acenaphthene	mg/kg	0.008	100,000[#1]	<0.008	<0.008	<0.008	<0.04	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.016	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
Fluorene	mg/kg	0.01	71,000[#1]	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Phenanthrene	mg/kg	0.015	23,000[#1]	<0.015	<0.015	<0.015	<0.075	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.03	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Anthracene	mg/kg	0.016	540,000[#1]	<0.016	<0.016	<0.016	<0.08	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.032	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016
Fluoranthene	mg/kg	0.017	23,000[#1]	<0.017	<0.017	<0.017	<0.085	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.034	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
Pyrene	mg/kg	0.015	54,000[#1]	<0.015	<0.015	<0.015	<0.075	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.03	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Benz(a)anthracene	mg/kg	0.014	180[#1]	<0.014	<0.014	<0.014	<0.07	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.028	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014
Chrysene	mg/kg	0.01	350[#1]	<0.01	<0.01	<0.01	<0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(a) pyrene	mg/kg	0.015	36[#1]	<0.015	<0.015	<0.015	<0.075	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.03	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Indeno(1,2,3-c,d)pyrene	mg/kg	0.018	510[#1]	<0.018	<0.018	<0.018	<0.09	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.036	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018
Dibenz(a,h)anthracene	mg/kg	0.023	3.6[#1]	<0.023	<0.023	<0.023	<0.115	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.046	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023
Benzo(g,h,i)perylene	mg/kg	0.024	4,000[#1]	<0.024	<0.024	<0.024	<0.12	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.048	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024
Benzo(b)fluoranthene	mg/kg	0.015	45[#1]	<0.015	<0.015	<0.015	<0.075	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.03	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Benzo(k)fluoranthene	mg/kg	0.014	1,200[#1]	<0.014	<0.014	<0.014	<0.07	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.028	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014
PAH 16 Total	mg/kg	0.118		<0.118	<0.118	<0.118	<0.59	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.236	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118
SVOC																										
2-methylnaphthalene	mg/kg	0.1	3,000[#2]	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-bromophenyl phenyl ether	mg/kg	0.1		<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorophenyl phenyl ether	mg/kg	0.1		<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Azobenzene	mg/kg	0.1	26[#2]	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bis(2-chloroethoxy) methane	mg/kg	0.1	2,500[#2]	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bis(2-chloroethyl)ether	mg/kg	0.1	1[#2]	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbazole	mg/kg	0.1		<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzofuran	mg/kg	0.1	1,200[#2]	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorocyclopentadiene	mg/kg	0.1	7.5[#2]	<0.4	<0.2	<0.2	<1	<0.2	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachloroethane	mg/kg	0.1	120[#4]	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenolics																										
2-methylphenol	mg/kg	0.1	Use Cresol Total[#4]	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitrophenol	mg/kg	0.1		<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4-dimethylphenol	mg/kg	0.1	30,000[#4]	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chloro-3-methylphenol	mg/kg	0.1	82,000[#2]	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-methylphenol	mg/kg	0.1	Use Cresol Total[#4]	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-nitrophenol	mg/kg	0.1		<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenol	mg/kg	0.01	1,300[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-chloronaphthalene	mg/kg	0.1	2,200[#4]	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cresol Total	mg/kg	0.01	180,000[#4]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Total Monohydric Phenols (S) Corrected	mg/kg	0.035		<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
Xylenols	mg/kg	0.015		<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015

Env Stds Comments
#1:LQM/CIEH S4ULs 2015
#2:USEPA RSL (NOV 2021)
#3:Defra C4SL (2014)
#4:EIC/AGS/CL:AIRE
#5:Defra C4SL (2021)

GAC: Generic Assessment Criteria
(blank): No assessment criteria available
- : Not analysed

Key
XXX Exceedance of HH Soil. Commercial/Industrial. Sandy Loam. TOC>=3.48%

ChemName	output unit	EQL	GAC_HH_COM/IND_SLOAM_>3.48%TOC	TPSS04	TPSS05	TPSS05	TPSS06	TPSS06	TPT01	TPT02	TPT03	TPT04	TPT05	TPT06	TPT07	TPT09	TPT10	TPT11	TPT12	TPT13	TPT14	TPT15	TPT16	TPT17	TPT18	TPT8
			Sample_Depth_Range	4.1-4.2	2.6-2.7	3.5-3.7	1.2-1.3	3-3.2	2.4-2.5	2.1-2.2	1.5-1.6	0.1-0.2	1-1.1	0.3-0.4	0.3-0.4	0.5-0.6	0.2-0.3	0.2-0.3	0.3-0.4	0.2-0.3	0.15-0.3	0.4-0.5	0.8-0.9	2.1-2.2	1.3-1.4	0.5-0.8
			Sampled_Date_Time	11/05/2023	11/05/2023	11/05/2023	11/05/2023	11/05/2023	26/05/2023	26/05/2023	26/05/2023	26/05/2023	25/05/2023	25/05/2023	25/05/2023	25/05/2023	25/05/2023	24/05/2023	23/05/2023	16/05/2023	16/05/2023	16/05/2023	15/05/2023	15/05/2023	15/05/2023	13/06/2023
			Lab_Report_Number																							
Sulphate, Total Potential as SO4	g/kg			0.717 - 0.72	1.13	0.96	1.03	4.14	14.9	12.1	1.95	1.15	0.6	0.6	0.609 - 0.61	2.17	0.966 - 0.97	0.6	1.39	0.816 - 0.82	0.6	0.6	2.15	1.06	0.819 - 0.82	1.37
Perylene-d12	%			96.7	95	95.7	87.6	87.6	87.1	88.1	90.4	92.1	88.7	89.4	86.3	87.3	93.8	90.2	89.3	76.3	87.5	86.4	91.4	91.2	81.7	70.7
NA																										
Asbestos Actinolite	No units			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asbestos Anthophyllite	No units			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asbestos Tremolite	No units			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Petroleum Hydrocarbons																										
>C10-C44 Aliphatics & Aromatics	mg/kg	10		<10	<10	<10	500 - 524	<10	45	75.8	<10	58.7	<10	11.2	<10	32.2	<10	<10	<10	12.6	<10	23.8	23.7	<10	<10	<10
TPH																										
>C10-C44 Aliphatics	mg/kg	5		<5	<5	<5	186 - 200	<5	16.1	25.6	<5	7.24	<5	5.02	<5	18.7	<5	<5	5.23	<5	<5	<5	7.34	<5	<5	<5
>EC10-EC44 Aromatics	mg/kg	5		<5	<5	<5	300 - 339	<5	28.9	50.2	<5	51.5	<5	6.17	8.44	13.5	6.35	<5	<5	7.75	<5	20.8	16.4	<5	<5	5.37
GRO >C5-C10	mg/kg	0.02		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
>C5-C6 Aliphatics	mg/kg	0.01	12,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>C5-C10 Aliphatics	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
>C6-C8 Aliphatics	mg/kg	0.01	40,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>C8-C10 Aliphatics	mg/kg	0.01	11,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>C10-C12 Aliphatics	mg/kg	1	47,000[#1]	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>C12-C16 Aliphatics	mg/kg	1	90,000[#1]	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>C16-C21 Aliphatics	mg/kg	1		<1	<1	<1	7.73	<1	3.4	2.5	<1	<1	<1	1.11	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>C21-C35 Aliphatics	mg/kg	1		<1	<1	<1	154 - 200	<1	11.3	21.2	<1	5.74	<1	3.12	1.22	15.2	2.32	<1	4	3.82	<1	2.13	6.05	<1	<1	<1
>C35-C44 Aliphatics	mg/kg	1	1,800,000[#1]	<1	<1	<1	23.7	<1	1.37	<2	<1	1.5	<1	<1	<1	2.71	<1	<1	1.22	<1	<1	<1	1.29	<1	<1	<1
>C5-C10 Aromatics	mg/kg	0.05		<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05
>EC5-EC7 Aromatics	mg/kg	0.01	86,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>EC7-EC8 Aromatics	mg/kg	0.01	180,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>EC8-EC10 Aromatics	mg/kg	0.01	17,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>EC10-EC12 Aromatics	mg/kg	1	34,000[#1]	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>EC12-EC16 Aromatics	mg/kg	1	38,000[#1]	<1	<1	<1	<1	<1	<1	<2	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>EC16-EC21 Aromatics	mg/kg	1	28,000[#1]	<1	<1	<1	26.3	<1	<1	2.28	<1	<1	<1	<1	<1	2.77	<1	<1	<1	1.05	<1	<1	1.65	<1	<1	<1
>EC21-EC35 Aromatics	mg/kg	1	28,000[#1]	<1	1.19	<1	200 - 247	<1	16.8	33.2	<1	47	2.63	4.24	6.5	6.5	3.92	<1	2.31	5.41	1.63	16	9.97	1.07	<1	3.62
>EC35-EC44 Aromatics	mg/kg	1	28,000[#1]	<1	<1	<1	65.6	<1	11.4	14.7	1.08	4.07	<1	<1	<1	4.27	2.21	<1	<1	1.14	<1	4.1	4.77	<1	<1	1.69
>EC40-EC44 Aromatics	mg/kg	1		<1	<1	<1	3.66	<1	<1	2.7	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
>C5-C44 Aliphatics & Aromatics	mg/kg	10		<10	<10	<10	500 - 524	<10	45	75.8	<10	58.7	<10	11.2	<10	32.2	<10	<10	<10	<10	<10	20.8	23.7	<10	<10	<10
BTEX																										
Benzene	mg/kg	0.001	98[#3]	<0.009	<0.009	<0.009	<0.18	<0.009	<0.001	<0.02	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.001
Toluene	mg/kg	0.001	180,000[#1]	<0.007	<0.007	<0.007	<0.14	<0.007	<0.001	<0.02	<0.01	<0.001	<0.001	0.00383	<0.001	0.00373	<0.001	0.00127	0.00221	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.001
Ethylbenzene	mg/kg	0.001	27,000[#1]	<0.004	<0.004	<0.004	<0.08	<0.004	<0.001	<0.02	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.001
Xylene (m & p)	mg/kg	0.002		<0.01	<0.01	<0.01	<0.2	<0.01	<0.002	<0.04	<0.02	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002
Xylene Total	mg/kg	0.02	30,000[#1]	<0.02	<0.02	<0.02	<0.4	<0.02	<0.02	<0.4	<0.2	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Xylene (o)	mg/kg	0.002	33,000[#1]	<0.01	<0.01	<0.01	<0.2	<0.01	<0.002	<0.04	<0.02	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002
Total BTEX	mg/kg	0.007		<0.04	<0.04	<0.04	<0.8	<0.04	<0.007	<0.14	<0.07	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.007
Oxygenates																										
MTBE	mg/kg	0.0005	24,000[#4]	<0.01	<0.01	<0.01	<0.2	<0.01	<0.0005	<0.01	<0.005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0005
Tert Amyl Methyl Ether	mg/kg	0.001		<0.01	<0.01	<0.01	<0.2	<0.01	<0.001	<0.02	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.001
Chlorinated Hydrocarbons																										
Chloromethane	mg/kg	0.002	1.6[#4]	<0.007	<0.007	<0.007	<0.14	<0.007	<0.002	<0.04	<0.02	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.002
Vinyl chloride	mg/kg	0.0005	2.2[#5]	<0.006	<0.006	<0.006	<0.12	<0.006	<0.0005	<0.01	<0.005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.0005
Chloroethane	mg/kg	0.001	2,100[#4]	<0.01	<0.01	<0.01	<0.2	<0.01	<0.001	<0.02	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.001
1,1-dichloroethene	mg/kg	0.0005	92[#4]	<0.01	<0.01	<0.01	<0.2	<0.01	<0.0005	<0.01	<0.005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0005
Dichloromethane	mg/kg	0.005	560[#4]	<0.01	<0.01	<0.01	<0.2	<0.01	<0.005	<0.1	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005
trans-1,2-dichloroethene	mg/kg	0.001	81[#4] | 300[#2]	<0.01	<0.01	<0.01	<0.2	<0.01	<0.001	<0.02	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.001
1,1-dichloroethane	mg/kg	0.0005	850[#4]	<0.008	<0.008	<0.008	<0.16	<0.008	<0.0005	<0.01	<0.005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.0005
cis-1,2-dichloroethene	mg/kg	0.0005	47[#4] | 2300[#2]	<0.006	<0.006	<0.006	<0.12	<0.006	<0.0005	<0.01	<0.005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.0005
Chloroform	mg/kg	0.003	350[#1]	<0.008	<0.008	<0.008	<0.16	<0.008	<0.003	<0.06	<0.03	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.003
1,1,1-trichloroethane	mg/kg	0.0005	3,000[#1]	<0.007	<0.007	<0.007	<0.14	<0.007	<0.0005	<0.01	<0.005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.0005
Carbon tetrachloride	mg/kg	0.0005	14[#1]	<0.01	<0.01	<0.01	<0.2	<0.01	<0.0005	<0.01	<0.005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0005
Trichloroethene	mg/kg	0.001	3.4[#5]	<0.009	<0.009	<0.009	<0.18	<0.009	<0.001	<0.02	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.001
1,1,2-trichloroethane	mg/kg	0.001	400[#4]	<0.01	<0.01	<0.01	<0.2	<0.01	<0.001	<0.02	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.001
Tetrachloroethene	mg/kg	0.002	130[#5]	<0.005	<0.005	<0.005	<0.1	<0.005	<0.002	<0.04	<0.02	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.002
VOC																										
2,2-dichloropropane	mg/kg	0.001		<0.01	<0.01	<0.01	<0.2	<0.01	<0.001	<0.02	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.001
Bromochloromethane	mg/kg	0.002	630[#2]	<0.01	<0.01	<0.01	<0.2	<0.01	<0.002	<0.04	<0.02	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002
1,1-dichloropropene	mg/kg	0.0005		<0.01	<0.01	<0.01	<0.2	<0.01	<0.0005	<0.01	<0.005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0005
1,2-dichloroethane	mg/kg	0.001	1.7[#1]	<0.005	<0.005	<0.005	<0.1	<0.005	<0.001	<0.02	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.001
1,2-dichloropropane	mg/kg	0.0005	12[#4]	<0.01	<0.01	<0.01	<0.2	<0.01	<0.0005	<0.01	<0.005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0005
Dibromomethane	mg/kg	0.001	99[#2]	<0.009	<0.009	<0.009	<0.18	<0.009	<0.001	<0.02	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.001
Bromodichloromethane	mg/kg	0.002	1.3[#2]	<0.007	<0.007	<0.007	<0.14	<0.007	<0.002	<0.04	<0.02	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.002
cis-1,3-dichloropropene	mg/kg	0.0005		<0.01	<0.01	<0.01	<0.2	<0.01	<0.0005	<0.01	<0.005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0005
trans-1,3-dichloropropene	mg/kg	0.001		<0.01	<0.01	<0.01	<0.2	<0.01	<0.001	<0.02	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.001
1,3-dichloropropane	mg/kg	0.001	23,000[#2]	<0.007	<0.007	<0.007	<0.14	<0.007	<0.001	<0.02	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.001
Chlorodibromomethane	mg/kg	0.002	39[#2]	<0.01	<0.01	<0.01	<0.2	<0.01	<0.002	<0.04	<0.02	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002
1,1,1,2-tetrachloroethane	mg/kg	0.001	560[#1]	<0.01	<0.01	<0.01	<0.2	<0.01	<0.001	<0.02	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.001
Styrene	mg/kg	0.002	180,000[#4]	<0.01	<0.01	<0.01	<0.2	<0.01	<0.002	<0.04	<0.02	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002
Bromoform	mg/kg	0.002	3,100[#4]	<0.01	<0.01	<0.01	<0.2	<0.01	<0.002	<0.04	<0.02	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.006
Isopropylbenzene	mg/kg	0.002	7,700[#4]	<0.005	<0.005	<0.005	<0.1	<0.005	<0.002	<0.04	<0.02	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.002
1,1,2,2-tetrachloroethane	mg/kg	0.002	1,100[#1]	<0.01	<0.01	<0.01	<0.2	<0.01	<0.002	<0.04	<0.02	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002
1,2,3-trichloropropane	mg/kg	0.002	0.11[#2]	<0.016	<0.016	<0.016	<0.32	<0.016	<0.002	<0.04	<0.02	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.002
n-propylbenzene	mg/kg	0.002	11,000[#4]	<0.01	<0.01	<0.01	<0.2	<0.01	<0.002	<0.04	<0.02	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002
1,3,5-trimethylbenzene	mg/kg	0.002	1,500[#2]	<0.008	<0.008	<0.008	<0.16	<0.008	<0.002	<0.04	<0.02	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.002
tert-butylbenzene	mg/kg	0.002	120,000[#2]	<0.014	<0.014	<0.014	<0.28	<0.014	<0.002	<0.04	<0.02	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.002
1,2,4-trimethylbenzene	mg/kg	0.003	220[#4]	<0.009	<0.009	<0.009	<0.18	<0.009	<0.003	<0.06	<0.03	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.003
sec-butylbenzene	mg/kg	0.001	120,000[#2]	<0.01	<0.01	<0.01	<0.2	<0.01	<0.001	<0.02	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.001
p-isopropyltoluene	mg/kg	0.002		<0.01	<0.01	<0.01	<0.2	<0.01	<0.002	<0.04	<0.02	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002
n-butylbenzene	mg/kg	0.003	58,000[#2]	<0.011	<0.011	<0.011	<0.22	<0.011	<0.003	<0.06	<0.03	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.011	<0.011	<0.011	<0.011	<0.011	<0.011	<0.003
1,2-dibromo-3-chloropropane	mg/kg	0.002	0.064[#2]	<0.014	<0.014	<0.014	<0.28	<0.014	<0.002	<0.04	<0.02	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.002
Hexachlorobutadiene	mg/kg	0.004	120[#1]	<0.02	<0.02	<0.02	<0.1	<0.02	<0.004	<0.08	<0.04	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.004	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.004
PAH																										
Naphthalene	mg/kg	0.008	1,100[#1]	<0.009	<0.009	<0.009	<0.009	<0.009	<0.008	<0.018	<0.009	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.008
Acenaphthylene	mg/kg	0.012	100,000[#1]	<0.012	<0.012	<0.012	<0.012	<0.012	<0.06	<0.024	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012
Acenaphthene	mg/kg	0.008	100,000[#1]	<0.008	<0.008	<0.008	<0.008	<0.008	<0.04	<0.016	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
Fluorene	mg/kg	0.01	71,000[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Phenanthrene	mg/kg	0.015	23,000[#1]	<0.015	<0.015	<0.015	<0.015	<0.015	<0.075	<0.03	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Anthracene	mg/kg	0.016	540,000[#1]	<0.016	<0.016	<0.016	<0.016	<0.016	<0.08	<0.032	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016
Fluoranthene	mg/kg	0.017	23,000[#1]	<0.017	<0.017	<0.017	<0.017	<0.017	<0.085	<0.034	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017	<0.017
Pyrene	mg/kg	0.015	54,000[#1]	<0.015	<0.015	<0.015	<0.015	<0.015	<0.075	<0.03	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Benz(a)anthracene	mg/kg	0.014	180[#1]	<0.014	<0.014	<0.014	<0.014	<0.014	<0.07	<0.028	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014
Chrysene	mg/kg	0.01	350[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.05	<0.02	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Benzo(a) pyrene	mg/kg	0.015	36[#1]	<0.015	<0.015	<0.015	<0.015	<0.015	<0.075	<0.03	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Indeno(1,2,3-c,d)pyrene	mg/kg	0.018	510[#1]	<0.018	<0.018	<0.018	<0.018	<0.018	<0.09	<0.036	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018	<0.018
Dibenz(a,h)anthracene	mg/kg	0.023	3.6[#1]	<0.023	<0.023	<0.023	<0.023	<0.023	<0.115	<0.046	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023	<0.023
Benzo(g,h,i)perylene	mg/kg	0.024	4,000[#1]	<0.024	<0.024	<0.024	<0.024	<0.024	<0.12	<0.048	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024	<0.024
Benzo(b)fluoranthene	mg/kg	0.015	45[#1]	<0.015	<0.015	<0.015	<0.015	<0.015	<0.075	<0.03	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015
Benzo(k)fluoranthene	mg/kg	0.014	1,200[#1]	<0.014	<0.014	<0.014	<0.014	<0.014	<0.07	<0.028	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014	<0.014
PAH 16 Total	mg/kg	0.118		<0.118	<0.118	<0.118	<0.118	<0.118	<0.59	<0.236	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118	<0.118
SVOC																										
2-methylnaphthalene	mg/kg	0.1	3,000[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-bromophenyl phenyl ether	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chlorophenyl phenyl ether	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Azobenzene	mg/kg	0.1	26[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bis(2-chloroethoxy) methane	mg/kg	0.1	2,500[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bis(2-chloroethyl)ether	mg/kg	0.1	1[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbazole	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dibenzofuran	mg/kg	0.1	1,200[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachlorocyclopentadiene	mg/kg	0.1	7.5[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.4	<0.1	<0.1	<0.2	<0.2	<0.2	<0.4	<0.2	<0.2	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Hexachloroethane	mg/kg	0.1	120[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenolics																										
2-methylphenol	mg/kg	0.1	Use Cresol Total[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-nitrophenol	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4-dimethylphenol	mg/kg	0.1	30,000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chloro-3-methylphenol	mg/kg	0.1	82,000[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-methylphenol	mg/kg	0.1	Use Cresol Total[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-nitrophenol	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phenol	mg/kg	0.01	1,300[#1]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.1 - 0.017	<0.01	<0.01	<0.01
2-chloronaphthalene	mg/kg	0.1	2,200[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Cresol Total	mg/kg	0.01	180,000[#4]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.013 - 0.0134	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Total Monohydric Phenols (S) Corrected	mg/kg	0.035		<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	0.093	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035
Xylenols	mg/kg	0.015		<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	0.093	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015

Env Stds Comments
#1:LQM/CIEH S4ULs 2015
#2:USEPA RSL (NOV 2021)
#3:Defra C4SL (2014)
#4:EIC/AGS/CL:AIRE
#5:Defra C4SL (2021)

GAC: Generic Assessment Criteria
(blank): No assessment criteria available
 - : Not analysed

Key
XXX Exceedance of HH Soil. Commercial/Industrial. Sandy Loam. TOC>=3.48%

ChemName	output unit	EQL	Field_ID	TPBP01	TPBP02	TPBP03	TPBP04	TPBP05	TPBP06	TPBP07	TPBP08	TPC01	TPC02	TPC03	TPC04	TPC05	TPC06	TPC07	TPCC01	TPSS01	TPSS01	TPSS02	TPSS02	TPSS03	TPSS03	TPSS04
			Sample_Depth_Range	1.4-1.5	0.2-0.3	0.2-0.3	0.5-0.6	0.5-0.6	0.2-0.3	0.3-0.4	3.2-3.3	2.6-2.7	2.5-2.6	3.2-3.3	1.6-1.7	0.5-0.6	2.5-2.6	1.4-1.5	2.9-3	1-1.1	3.25-3.35	1.9-2	3.4-3.6	1.1-1.2	2-2.2	2.1-2.2
			Sampled_Date_Time	23/05/2023	23/05/2023	23/05/2023	24/05/2023	23/05/2023	24/05/2023	24/05/2023	24/05/2023	29/05/2023	29/05/2023	30/05/2023	30/05/2023	30/05/2023	30/05/2023	30/05/2023	29/05/2023	11/05/2023	11/05/2023	10/05/2023	10/05/2023	10/05/2023	10/05/2023	11/05/2023
			Lab_Report_Number																							
			GAC_HH_COM/ IND_SLOAM_>3.48%TOC																							
PCBs																										
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.003	0.16[#2]	<0.003	<0.003	<0.003	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.006	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.003	0.048[#2]	<0.003	<0.003	<0.003	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.006	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.003	0.49[#2]	<0.003	<0.003	<0.003	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.006	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.003	0.5[#2]	<0.003	<0.003	<0.003	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.006	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 118	mg/kg	0.003	0.49[#2]	<0.003	<0.003	<0.003	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.006	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.003	0.49[#2]	<0.003	<0.003	<0.003	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.006	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.003	0.00015[#2]	<0.003	<0.003	<0.003	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.006	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.003	0.5[#2]	<0.003	<0.003	<0.003	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.006	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.003	0.5[#2]	<0.003	<0.003	<0.003	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.006	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.003	0.51[#2]	<0.003	<0.003	<0.003	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.006	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.003	0.00051[#2]	<0.003	<0.003	<0.003	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.006	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB	mg/kg	0.003	0.52[#2]	<0.003	<0.003	<0.003	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.006	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Total PCB WHO 12	mg/kg	0.036		<0.036	<0.036	<0.036	<0.18	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.072	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036
PCB 28	mg/kg	0.003		<0.003	<0.003	<0.003	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.006	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 52	mg/kg	0.003		<0.003	<0.003	<0.003	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.006	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 101	mg/kg	0.003		<0.003	<0.003	<0.003	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.006	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 138	mg/kg	0.003		<0.003	<0.003	<0.003	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.006	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 153	mg/kg	0.003		<0.003	<0.003	<0.003	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.006	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 180	mg/kg	0.003		<0.003	<0.003	<0.003	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.006	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Total PCB 7 Congeners	mg/kg	0.021		<0.021	<0.021	<0.021	<0.105	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.042	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021
Amino Aliphatics																										
N-nitrosodi-n-propylamine	mg/kg	0.1	0.33[#2]	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anilines																										
2-nitroaniline	mg/kg	0.1	8,000[#2]	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
3-nitroaniline	mg/kg	0.1		<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chloroaniline	mg/kg	0.1	11[#2]	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-nitroaniline	mg/kg	0.1	110[#2]	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Explosives																										
2,4-Dinitrotoluene	mg/kg	0.1	3,800[#4]	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,6-dinitrotoluene	mg/kg	0.1	1,900[#4]	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nitrobenzene	mg/kg	0.1	22[#2]	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Halogenated Benzenes																										
1,3,5-Trichlorobenzene	mg/kg	0.007	130[#1]	<0.14	<0.007	<0.007	<0.007	<0.14	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.14	<0.14	<0.007	<0.007	<0.4	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Chlorobenzene	mg/kg	0.002	290[#1]	<0.04	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.04	<0.04	<0.002	<0.002	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
Bromobenzene	mg/kg	0.002	520[#4]	<0.04	<0.002	<0.002	<0.002	<0.04	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.04	<0.04	<0.002	<0.002	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
2-chlorotoluene	mg/kg	0.003	23,000[#2]	<0.06	<0.003	<0.003	<0.003	<0.06	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.06	<0.06	<0.003	<0.003	<0.18	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009
4-chlorotoluene	mg/kg	0.003	23,000[#2]	<0.06	<0.003	<0.003	<0.003	<0.06	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.06	<0.06	<0.003	<0.003	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,3-dichlorobenzene	mg/kg	0.005	170[#1]	<0.1	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.1	<0.005	<0.005	<0.1	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008
1,4-dichlorobenzene	mg/kg	0.005	25,000[#1]	<0.1	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.1	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,2-dichlorobenzene	mg/kg	0.005	11,000[#1]	<0.1	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.1	<0.1	<0.005	<0.005	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,2,4-trichlorobenzene	mg/kg	0.007	1,300[#1]	<0.14	<0.007	<0.007	<0.007	<0.1	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.1	<0.1	<0.007	<0.007	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.1
1,2,3-trichlorobenzene	mg/kg	0.01	590[#1]	<0.2	<0.01	<0.01	<0.01	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.2	<0.2	<0.01	<0.01	<0.4	<0.02	<0.02	<0.02	<0.02	<0.02	<0.2
Hexachlorobenzene	mg/kg	0.1	120[#1]	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Halogenated Hydrocarbons																										
Dichlorodifluoromethane	mg/kg	0.0005	370[#2]	<0.01	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.12	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
Bromomethane	mg/kg	0.001	30[#2]	<0.02	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Trichlorofluoromethane	mg/kg	0.0005	350,000[#2]	<0.01	<0.0005	<0.0005	<0.0005	<0.01	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.01	<0.01	<0.0005	<0.0005	<0.12	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006
1,2-dibromoethane	mg/kg	0.001	0.16[#2]	<0.02	<0.001	<0.001	<0.001	<0.02	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.02	<0.02	<0.001	<0.001	<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
Halogenated Phenols																										
2-chlorophenol	mg/kg	0.1	5,800[#2]	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4-dichlorophenol	mg/kg	0.1	2,500[#2]	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4,5-trichlorophenol	mg/kg	0.1	82,000[#2]	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4,6-trichlorophenol	mg/kg	0.1	210[#2]	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pentachlorophenol	mg/kg	0.1	400[#1]	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phthalates																										
Bis(2-ethylhexyl) phthalate	mg/kg	0.1	86,000[#4]	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Butyl benzyl phthalate	mg/kg	0.1	950,000[#4]	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Di-n-butyl phthalate	mg/kg	0.1	15,000[#4]	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Di-n-octyl phthalate	mg/kg	0.1	89,000[#4]	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Diethylphthalate	mg/kg	0.1	290,000[#4]	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethyl phthalate	mg/kg	0.1		<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Solvents																										
Carbon disulfide	mg/kg	0.001	47[#1]	1.57	0.00295	<0.001	<0.001	<0.02	<0.001	<0.001	0.00289	0.00135	<0.001	0.00387	0.0143	<0.02	<0.02	0.00346	0.00487	<0.14	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007
Isophorone	mg/kg	0.1	2,400[#2]	<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Metals																										
Arsenic	mg/kg	0.6	640[#3]	51.8	2.56	3.14	14.7	3.91	2.15	8.89	1.56	4.14	6.46	5.85	4.88	6.3	5.93	5.3	9.52	<0.6	3.43	1.49	1.24	1.99	1.44	1.28
Barium	mg/kg	0.6	22,000[#4]	99.6	183	11.2	20	55	34.4	61.9	39	22.6	85.7	71.2	86.4	137	276	146	213	4.22	17.6	26.4	23.9	15.1	21.1	12
Beryllium	mg/kg	0.01	12[#1]	0.681	0.18	0.158	0.428	0.28	0.152	0.667	0.32	0.356	0.979	0.567	0.463	0.043	0.817	1.03	0.327	<0.01	0.352	0.182	0.265	0.125	0.321	0.0749 - 0.075
Cadmium	mg/kg	0.02	410[#3]	2.14	0.354	0.285	1.65	0.395	0.356	0.791	0.778	0.591	0.689	0.516	0.458	0.0488 - 0.049	0.523	0.995	0.271	<0.02	0.548	0.557	0.625	0.374	0.708	0.33
Chromium (III+VI)	mg/kg	0.9	Use either CrIII or CrVI[#1]	13.9	0.931	3.1	6.1	5.54	2.57	14.3	5.79	17.9	32.1	25.7	47.8	<0.9	21.6	53.8	2.98	<0.9	7.97	13.7	4.73	10.4	5.53	8.18
Copper	mg/kg	1.4	68,000[#1]	20.9	3.47	2.63	23.7	5.08	2.23	8.52	8.36	7.38	19.9	13.7	9.13	2.56	25.4	15.8	3.18	<1.4	7.64	4.7	8.74	4.3	9.57	3.17
Lead	mg/kg	0.7	2,330[#3]	20.8	2.38	2.2	6.82	4.69	2.18	12.8	5.82	7.36	19.5	9.65	18.6	1.87	37	20.3	1.62	<0.7	10.4	20.5	7.29	18.9	8.24	10.4
Mercury	mg/kg	0.1	350[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	0.2	980[#1]	54.7	7	6.45	29.4	14	4.94	30.5	15.9	28.2	72.8	48.9	60.3	9.06	44.3	71.6	8.4	0.498	21.5	14.5	17.7	17	18.4	9.41
Selenium	mg/kg	1	12,000[#1]	24.1	1.25	<1	8.47	<1	<1	<1	<1	<1	<1	<1	<1	1.61	4.73	<1	2.01	<1	<1	<1	<1	<1	<1	<1
Vanadium	mg/kg	0.2	9,000[#1]	22.5	3.93	3.74	9.96	7.04	5.09	18.1	8.81	14.9	38	29.1	37.8	1.37	19.3	57.7	7.7	0.591	10.3	15.5	8.99	11.5	9.12	8.98
Zinc	mg/kg	1.9	730,000[#1]	165	24.9	13.4	71.6	31.1	17.6	72.4	41	46	85.8	57.4	97.1	6.39	81.1	102	20.7	4.66	42.3	58	50.6	72.4	53.8	30.9
Chromium (hexavalent)	mg/kg	0.6	49[#3]	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Chromium (Trivalent)	mg/kg	0.9	8,600[#1]	13.9	0.931	3.1	6.1	5.54	2.57	14.3	5.79	17.9	32.1	25.7	47.8	<0.9	21.6	53.8	2.98	<0.9	7.97	13.7	4.73	10.4	5.53	8.18
Organics																										
Organic Matter	%	0.35		27.9	15.4	7.36	9.76	6.95	0.638	2.5	5.17	0.731	1.19	2.81	1.51	78.4	3.91	1.93	11.8	47.8	<0.35	3.24	<0.35	0.631	<0.35	5.72
Inorganics																										
Sulphur	mg/kg	200		29,000	3030	459 - 460	5880	995 - 1000	637 - 640	620	545 - 550	307 - 310	610	1500	466 - 470	6630	1980	269 - 270	6760	636 - 640	320 - 322	270 - 271	265 - 270	<200	290 - 293	340 - 341
Cyanide Total	mg/kg	1	150[#2]	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulphate	mg/kg	48		8660	-	330 - 332	1430	587 - 590	576 - 580	339 - 340	318 - 320	410 - 412	217 - 220	365 - 370	285 - 290	1550	430 - 432	80 - 82	1570	410 - 412	460 - 461	147 - 150	190 - 191	100 - 101	219 - 220	206 - 210
Moisture	%			61	25	4	38	22	1.8	25	7.5	20	20	14	21	85	29	28	51	87	19	29	8.9	15	10	29
Sulphate (soluble)	g/L	0.0002		0.735	0.344	0.0115 - 0.012	0.378	0.0498 - 0.05	0.0146 - 0.015	0.0219 - 0.022	0.0119 - 0.012	0.02	0.0228 - 0.023	0.0265 - 0.027	0.0347 - 0.035	-	0.066	0.0147 - 0.015	0.35	-	0.0277 - 0.028	0.014 - 0.0143	0.0129 - 0.013	0.0245 - 0.025	0.0179 - 0.018	0.025 - 0.0252
pH (Lab)	pH_Units	1		5.56	8.2	8.79	7.75	9.03	9.02	8.4	9.07	8.48	7.9	8.36	6.68	5.36	7.75	7.74	7.89	4.4	8.63	6.05	8.49	5.77	8.86	5.97
Other																										
Bis(2-chloroisopropyl)ether	mg/kg	0.1		<0.2	<0.2	<0.1	<0.5	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate																										
Toluene-D8	%			97.2	82	97.2	98.7	98.6	98.7	84.7	97.1	97.2	95.9	96.3	91.6	99.4	102	90.5	95.8	96.1	99.5	95.3	101	97.1	100	89.2
Chrysene-d12 (surr.)	%			106	109	103	105	106	102	106	92.7	78.4	95.8	92.7	80.8	86.4	97	77.8	101	111	112	95.5	82.1	94.7	102	98.8
d10-Acenaphthene (SS)	%			97.1	94.6	92.4	88.3	92.4	93.8	93.2	92.3	91.9	94.1	91.9	95.3	97.1	94.4	92.3	99.1	102	98.8	89.7	87.7	86.1	90.3	90.8
d10-Phenanthrene (SS)	%			104	96.4	92.3	89.5	93.3	93.3	93.8	88.7	82.4	92.1	89.8	86.6	92.8	92.5	82.2	95.3	114	103	92.1	80.6	86.3	92.6	93
d8-Naphthalene (SS)	%			86.4	88.7	86.8	82.9	87.3	87.8	86.9	86.8	93.2	91.5	89.5	95.5	94.6	91.4	93.7	94.8	94.4	96.4	92.1	94.7	92.4	87.6	93.4
GRO Surrogate	%			60.5	80.8	91.8	93	78.6	95.9	100	99.2	104	101	108	98.8	66	99.5	89.7	98.9	67.2	148	88.4	105	93.7	99.3	142

Env Stds Comments
#1:LQM/CIEH S4ULs 2015
#2:USEPA RSL (NOV 2021)
#3:Defra C4SL (2014)
#4:EIC/AGS/CL:AIRE
#5:Defra C4SL (2021)

GAC: Generic Assessment Criteria
(blank): No assessment criteria available
- : Not analysed

Key
XXX Exceedance of HH Soil. Commercial/Industrial. Sandy Loam. TOC >=3.48%

ChemName	output unit	EQL	GAC_HH_COM/IND_SLOAM_>3.48%TOC	TPSS04	TPSS05	TPSS05	TPSS06	TPSS06	TPT01	TPT02	TPT03	TPT04	TPT05	TPT06	TPT07	TPT09	TPT10	TPT11	TPT12	TPT13	TPT14	TPT15	TPT16	TPT17	TPT18	TPT8
			Sample_Depth_Range	4.1-4.2	2.6-2.7	3.5-3.7	1.2-1.3	3-3.2	2.4-2.5	2.1-2.2	1.5-1.6	0.1-0.2	1-1.1	0.3-0.4	0.3-0.4	0.5-0.6	0.2-0.3	0.2-0.3	0.3-0.4	0.2-0.3	0.15-0.3	0.4-0.5	0.8-0.9	2.1-2.2	1.3-1.4	0.5-0.8
			Sampled_Date_Time	11/05/2023	11/05/2023	11/05/2023	11/05/2023	11/05/2023	26/05/2023	26/05/2023	26/05/2023	26/05/2023	25/05/2023	25/05/2023	25/05/2023	25/05/2023	25/05/2023	24/05/2023	23/05/2023	16/05/2023	16/05/2023	16/05/2023	15/05/2023	15/05/2023	15/05/2023	13/06/2023
			Lab_Report_Number																							
PCBs																										
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.003	0.16[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.015	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg	0.003	0.048[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.015	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.003	0.49[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.015	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.003	0.5[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.015	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 118	mg/kg	0.003	0.49[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.015	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg	0.003	0.49[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.015	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.003	0.00015[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.015	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156)	mg/kg	0.003	0.5[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.015	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg	0.003	0.5[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.015	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167)	mg/kg	0.003	0.51[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.015	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg	0.003	0.00051[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.015	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB	mg/kg	0.003	0.52[#2]	<0.003	<0.003	<0.003	<0.003	<0.003	<0.015	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Total PCB WHO 12	mg/kg	0.036		<0.036	<0.036	<0.036	<0.036	<0.036	<0.18	<0.18	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036	<0.036
PCB 28	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.015	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 52	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.015	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 101	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.015	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 138	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.015	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 153	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.015	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 180	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.003	<0.015	<0.015	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Total PCB 7 Congeners	mg/kg	0.021		<0.021	<0.021	<0.021	<0.021	<0.021	<0.105	<0.105	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021
Amino Aliphatics																										
N-nitrosodi-n-propylamine	mg/kg	0.1	0.33[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Anilines																										
2-nitroaniline	mg/kg	0.1	8,000[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
3-nitroaniline	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-chloroaniline	mg/kg	0.1	11[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-nitroaniline	mg/kg	0.1	110[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Explosives																										
2,4-Dinitrotoluene	mg/kg	0.1	3,800[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,6-dinitrotoluene	mg/kg	0.1	1,900[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nitrobenzene	mg/kg	0.1	22[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Halogenated Benzenes																										
1,3,5-Trichlorobenzene	mg/kg	0.007	130[#1]	<0.02	<0.02	<0.02	<0.4	<0.02	<0.007	<0.14	<0.07	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.007
Chlorobenzene	mg/kg	0.002	290[#1]	<0.005	<0.005	<0.005	<0.1	<0.005	<0.002	<0.04	<0.02	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.002
Bromobenzene	mg/kg	0.002	520[#4]	<0.01	<0.01	<0.01	<0.2	<0.01	<0.002	<0.04	<0.02	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.002
2-chlorotoluene	mg/kg	0.003	23,000[#2]	<0.009	<0.009	<0.009	<0.18	<0.009	<0.003	<0.06	<0.03	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.003
4-chlorotoluene	mg/kg	0.003	23,000[#2]	<0.01	<0.01	<0.01	<0.2	<0.01	<0.003	<0.06	<0.03	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.003
1,3-dichlorobenzene	mg/kg	0.005	170[#1]	<0.008	<0.008	<0.008	<0.1	<0.008	<0.005	<0.1	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.005
1,4-dichlorobenzene	mg/kg	0.005	25,000[#1]	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.1	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005
1,2-dichlorobenzene	mg/kg	0.005	11,000[#1]	<0.01	<0.01	<0.01	<0.1	<0.01	<0.005	<0.1	<0.05	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.005	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.005
1,2,4-trichlorobenzene	mg/kg	0.007	1,300[#1]	<0.02	<0.02	<0.02	<0.1	<0.02	<0.007	<0.1	<0.07	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.007
1,2,3-trichlorobenzene	mg/kg	0.01	590[#1]	<0.02	<0.02	<0.02	<0.4	<0.02	<0.01	<0.2	<0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.01
Hexachlorobenzene	mg/kg	0.1	120[#1]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Halogenated Hydrocarbons																										
Dichlorodifluoromethane	mg/kg	0.0005	370[#2]	<0.006	<0.006	<0.006	<0.12	<0.006	<0.0005	<0.01	<0.005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.0005
Bromomethane	mg/kg	0.001	30[#2]	<0.01	<0.01	<0.01	<0.2	<0.01	<0.001	<0.02	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.001
Trichlorofluoromethane	mg/kg	0.0005	350,000[#2]	<0.006	<0.006	<0.006	<0.12	<0.006	<0.0005	<0.01	<0.005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.0005	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.0005
1,2-dibromoethane	mg/kg	0.001	0.16[#2]	<0.01	<0.01	<0.01	<0.2	<0.01	<0.001	<0.02	<0.01	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.001
Halogenated Phenols																										
2-chlorophenol	mg/kg	0.1	5,800[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4-dichlorophenol	mg/kg	0.1	2,500[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4,5-trichlorophenol	mg/kg	0.1	82,000[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4,6-trichlorophenol	mg/kg	0.1	210[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Pentachlorophenol	mg/kg	0.1	400[#1]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phthalates																										
Bis(2-ethylhexyl) phthalate	mg/kg	0.1	86,000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Butyl benzyl phthalate	mg/kg	0.1	950,000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Di-n-butyl phthalate	mg/kg	0.1	15,000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Di-n-octyl phthalate	mg/kg	0.1	89,000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Diethylphthalate	mg/kg	0.1	290,000[#4]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dimethyl phthalate	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Solvents																										
Carbon disulfide	mg/kg	0.001	47[#1]	<0.007	<0.007	<0.007	<0.14	<0.007	0.109	0.0389	0.0312	<0.001	0.00481	0.00463	<0.001	0.0112	<0.001	<0.001	<0.001	<0.007	<0.007	<0.007	<0.007	<0.007	<0.007	<0.001
Isophorone	mg/kg	0.1	2,400[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Metals																										
Arsenic	mg/kg	0.6	640[#3]	1.18	4.69	1.44	8.36	14.1	6.57	8	3.55	3.07	3.38	3.87	3.82	2.31	2.04	2.26	4.72	2.31	2.44	1.12	4.47	2.89	4.11	3.37
Barium	mg/kg	0.6	22,000[#4]	19	35.8	27.6	21.1	7.61	338	69.5	8.24	30	14.9	49.9	190	43.4	22.1	23.3	89.7	19.6	41.4	23.4	41.1	13.6	58.5	41.3
Beryllium	mg/kg	0.01	12[#1]	0.259	0.647	0.38	0.0436 - 0.044	0.0457 - 0.046	0.188	0.97	0.197	0.496	0.312	0.582	0.787	0.288	0.216	0.317	0.909	0.242	0.442	0.3	0.529	0.132	0.496	0.56
Cadmium	mg/kg	0.02	410[#3]	0.653	0.769	0.922	0.239	2.76	0.107	1.67	0.546	1.47	0.644	0.681	0.257	0.482	0.571	0.436	0.644	0.483	0.567	0.382	0.93	0.379	0.85	0.486
Chromium (III+VI)	mg/kg	0.9	Use either CrIII or CrVI[#1]	4.73	17.6	14.2	<0.9	100	<0.9	36.1	5.73	34.7	5.72	11.6	51.6	8.37	5.05	5.29	21.5	4.57	9.74	6.17	15.1	2.57	14.7	14
Copper	mg/kg	1.4	68,000[#1]	9.28	10.2	13.9	5.04	27.5	<1.4	23.3	3.14	11.1	8.88	11.9	2.46	5.72	3.71	6.22	11.7	3.71	6.63	4.86	11.5	3.53	6.47	7.46
Lead	mg/kg	0.7	2,330[#3]	7.31	17.8	7.12	1.65	45.1	<0.7	18.3	4.06	21.2	9.71	11.5	27.6	5.6	4.04	5.55	17.1	4.19	7.18	5.34	17.9	4.46	16.5	12.3
Mercury	mg/kg	0.1	350[#2]	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nickel	mg/kg	0.2	980[#1]	17.6	35.9	34	3.99	8.6	1.95	57.8	9.91	42.8	21.9	23.4	32.1	14.2	10.2	12.5	33.3	8.85	16.9	10.5	27.3	7.81	32.1	20.3
Selenium	mg/kg	1	12,000[#1]	<1	<1	<1	<1	4.82	1.09	1.61	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Vanadium	mg/kg	0.2	9,000[#1]	8.54	22	18.5	1.22	158	6.13	35.4	6.2	17.5	7.95	15.4	36.6	7.74	5.87	8.22	29.8	6.44	12.9	7.85	18.9	3.94	19.7	17.1
Zinc	mg/kg	1.9	730,000[#1]	47.2	105	59.5	3.35	33	6.39	129	24.9	74.6	48.9	53	91.6	35.1	21.2	32.5	48.6	26.1	32.3	25	51.5	24.3	83	36.8
Chromium (hexavalent)	mg/kg	0.6	49[#3]	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Chromium (Trivalent)	mg/kg	0.9	8,600[#1]	4.73	17.6	14.2	<0.9	104	<0.9	36.1	5.73	34.7	5.72	11.6	51.6	8.37	5.05	5.29	21.5	4.57	9.74	6.17	15.1	2.57	14.7	14
Organics																										
Organic Matter	%	0.35		<0.35	0.969	<0.35	70	1.17	3.12	9.65	0.945	2.88	2.95	1.18	2.93	1.74	1.5	1.51	2.9	3.09	1.59	3.74	6.84	<0.35	1.2	1.52
Inorganics																										
Sulphur	mg/kg	200		239 - 240	378 - 380	320	340 - 343	1380	4950	4020	650 - 651	380 - 384	<200	<200	200 - 203	720 - 724	320 - 322	<200	460 - 463	270 - 272	<200	<200	715 - 720	350 - 354	270 - 273	456 - 460
Cyanide Total	mg/kg	1	150[#2]	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1
Sulphate	mg/kg	48		267 - 270	390 - 391	375 - 380	516 - 520	67.4 - 70	-	1360	367 - 370	150 - 152	216 - 220	348 - 350	205 - 210	688 - 690	256 - 260	155 - 160	225 - 230	245 - 250	228 - 230	277 - 280	505 - 510	420	100 - 101	290 - 293
Moisture	%			11	22	10	79	13	47	46	22	26	26	16	35	18	17	8.1	28	14	15	23	41	18	27	22
Sulphate (soluble)	g/L	0.0002		0.0145 - 0.015	0.025 - 0.0251	0.0218 - 0.022	-	0.015 - 0.0151	0.0896 - 0.09	0.199	0.08 - 0.0804	0.0125 - 0.013	0.027 - 0.0272	0.049 - 0.0493	0.026 - 0.0262	0.0677 - 0.068	0.012 - 0.0124	0.0125 - 0.013	0.0187 - 0.019	0.013	0.0135 - 0.014	0.0217 - 0.022	0.0587 - 0.059	0.0217 - 0.022	0.021	0.028 - 0.0284
pH (Lab)	pH_Units	1		8.82	7.78	8.58	4.93	7.62	8.07	7.19	8.46	7.15	8.36	8.11	4.87	8.49	8.45	9.01	7.73	8.57	8.55	8.45	6.82	8.46	7.62	8.26
Other																										
Bis(2-chloroisopropyl)ether	mg/kg	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Surrogate																										
Toluene-D8	%			100	99.3	100	95.4	93.1	94.7	97.4	100	85.6	101	98.1	92.7	106	92.6	98.4	91.4	97	98.3	97.5	95.8	99.5	98.9	98.5
Chrysene-d12 (surr.)	%			100	87.8	99.2	109	80.2	97	103	102	109	99.1	98.6	97.2	98.1	103	101	100	74.9	91	93.1	106	101	76.7	83.3
d10-Acenaphthene (SS)	%			94.3	94.8	94.7	98.3	91.9	91	91.8	93.2	97.2	93.7	92.4	93.4	93.4	92.3	92.9	93	91.8	94.3	97.9	94.9	94.2	91.3	90.7
d10-Phenanthrene (SS)	%			94	91.4	91.1	104	86.5	87.5	90.7	91.3	101	92	92.1	89.6	91.2	91.2	90.9	90.5	86.4	95	99.6	98.9	94.7	86	89
d8-Naphthalene (SS)	%			93.2	93.7	91.3	93.3	93.1	85.9	85.8	88.1	89.5	89.1	87.5	87.8	87.8	88.3	88.2	88.1	96.8	93.8	94.4	91.9	92.3	93.3	88.7
GRO Surrogate	%			133	103	103	61.3	95.4	89.7	78.3	91.7	87.3	137	93.5	103	108	89.2	95.5	89	91.7	97.3	109	88.7	105	106	97.4

Env Stds Comments
#1:LQM/CIEH S4ULs 2015
#2:USEPA RSL (NOV 2021)
#3:Defra C4SL (2014)
#4:EIC/AGS/CL:AIRE
#5:Defra C4SL (2021)

GAC: Generic Assessment Criteria
(blank): No assessment criteria available
- : Not analysed

Key
XXX Exceedance of HH Soil. Commercial/Industrial. Sandy Loam. TOC >=3.48%

			Field_ID	BH101	BH102	BH103	BH104	BH105	BH-106	BH107	BH108	BH110	BH111	BH112	BH112	BH113	BH-114	BH-115	BH-301	BHSS04	BHSS05
			Sample_Depth_Range	1	1	1.5	1	1	4	1.5	1	1	1.5	0.6	1.6	2	1	3	1	3.5	2.5
			Sampled_Date_Time	13/04/2023	14/04/2023	14/04/2023	18/04/2023	18/04/2023	16/04/2023	25/04/2023	25/04/2023	27/04/2023	27/04/2023	12/04/2023	12/04/2023	25/04/2023	21/04/2023	20/04/2023	16/04/2023	03/05/2023	03/05/2023
			Lab_Report_Number																		
			GAC_WTV_IE_GTV																		
ChemName	output	EQL																			
NA																					
CEN 10:1 - Conductivity @ 20 deg.C (diss.filt)	mg/l			1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	-	1	1
Field																					
pH	pH_Units			8.69	8.3	8.43	8.28	8.46	7.99	7.95	8.1	7.91	8.12	8.27	8.6	7.97	8.11	8.19	-	8.28	8.22
Electrical Conductivity	µS/cm			97.2	230	129	292	67	89.7	93.2	116	71.3	99.7	189	90.8	76.6	75.5	74.6	-	180	130
Phenolics																					
Total Monohydric Phenols (S) Corrected	µg/L	16		<16	<16	<16	<16	<16	<16	<16	<16	<16	<16	<16	<16	<16	<16	<16	<16	<16	<16
Metals																					
Antimony	µg/L	1	5[#5]	<1	1.27	1.51	5.31	<1	<1	<1	<1	<1	<1	1.31	8.43	<1	<1	<1	<1	5.34	7.43
Arsenic	µg/L	0.5	7.5[#2]	1.65	1.59	4.1	<0.5	<0.5	0.55	<0.5	<0.5	<0.5	<0.5	3.31	1.76	<0.5	<0.5	<0.5	3.8	3.15	3.68
Barium	µg/L	0.2	100[#3]	5.26	15.8	18.6	40.5	1.26	4.05	1.66	1.88	1.72	0.844	11	6.31	1.6	1.1	1.14	0.691	5.51	4.09
Cadmium	µg/L	0.08	3.75[#4]	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08	<0.08
Chromium (III+VI)	µg/L	1	37.5[#2]	1.29	<1	<1	3.21	<1	<1	<1	1.02	<1	<1	<1	2.09	<1	<1	<1	2.33	<1	<1
Copper	µg/L	0.3	1500[#4]	0.978	1.67	1.5	5.22	0.589	<0.3	0.987	0.567	0.822	<0.3	3.79	3.86	0.401	0.574	0.42	1.5	<0.3	1.54
Lead	µg/L	0.2	7.5[#2]	<0.2	0.353	<0.2	0.719	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	0.313	1.39	<0.2	<0.2	0.334	<0.2	0.201	1.11
Mercury	µg/L	0.01	0.75[#2]	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.0136	<0.01	<0.01	<0.01	<0.01	<0.01
Molybdenum	µg/L	3	70[#5]	3.62	9.19	5.03	5.21	<3	<3	<3	<3	<3	<3	4.76	3.85	<3	<3	<3	<3	8.11	10
Nickel	µg/L	0.4	15[#4]	0.794	1.13	4.96	1.75	<0.4	0.554	0.756	0.666	0.651	0.93	3.13	0.898	<0.4	0.758	0.477	1.59	0.743	2
Selenium	µg/L	1	10[#1]	<1	<1	<1	<1	<1	<1	<1	<1	<1	1.25	<1	<1	<1	<1	<1	<1	<1	<1
Zinc	µg/L	1	75[#2]	1.82	9.31	2.14	3.99	1.3	2.7	1.47	3.4	<1	<1	2.38	3.09	3.53	1.33	<1	5.11	<1	2.55
Organics																					
Dissolved Organic Carbon	mg/L	3		<3	10.7	5.53	13.7	3.86	3.09	5.44	4.54	3.9	6.69	15.6	5.91	<3	3.75	3.82	17.7	9.05	10.4
Inorganics																					
Fluoride	mg/L	0.5	0.8[#1]	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5
Chloride	mg/L	2	999000000.000075[#2]	<2	<2	<2	3.8	<2	3	2	2.4	<2	<2	3.8	<2	<2	<2	<2	3	<2	<2
Soluble Sulphate 2:1 extract as SO4 BRE	g/L	0.002		<0.002	0.0058	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002	<0.002
pH (Lab)	pH_Units	1		8.69	8.3	8.43	8.28	8.46	7.78	7.95	8.1	7.91	8.12	8.27	8.6	7.97	8.11	8.19	-	8.28	8.22
TDS	mg/L	10		-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	18.3	-	-

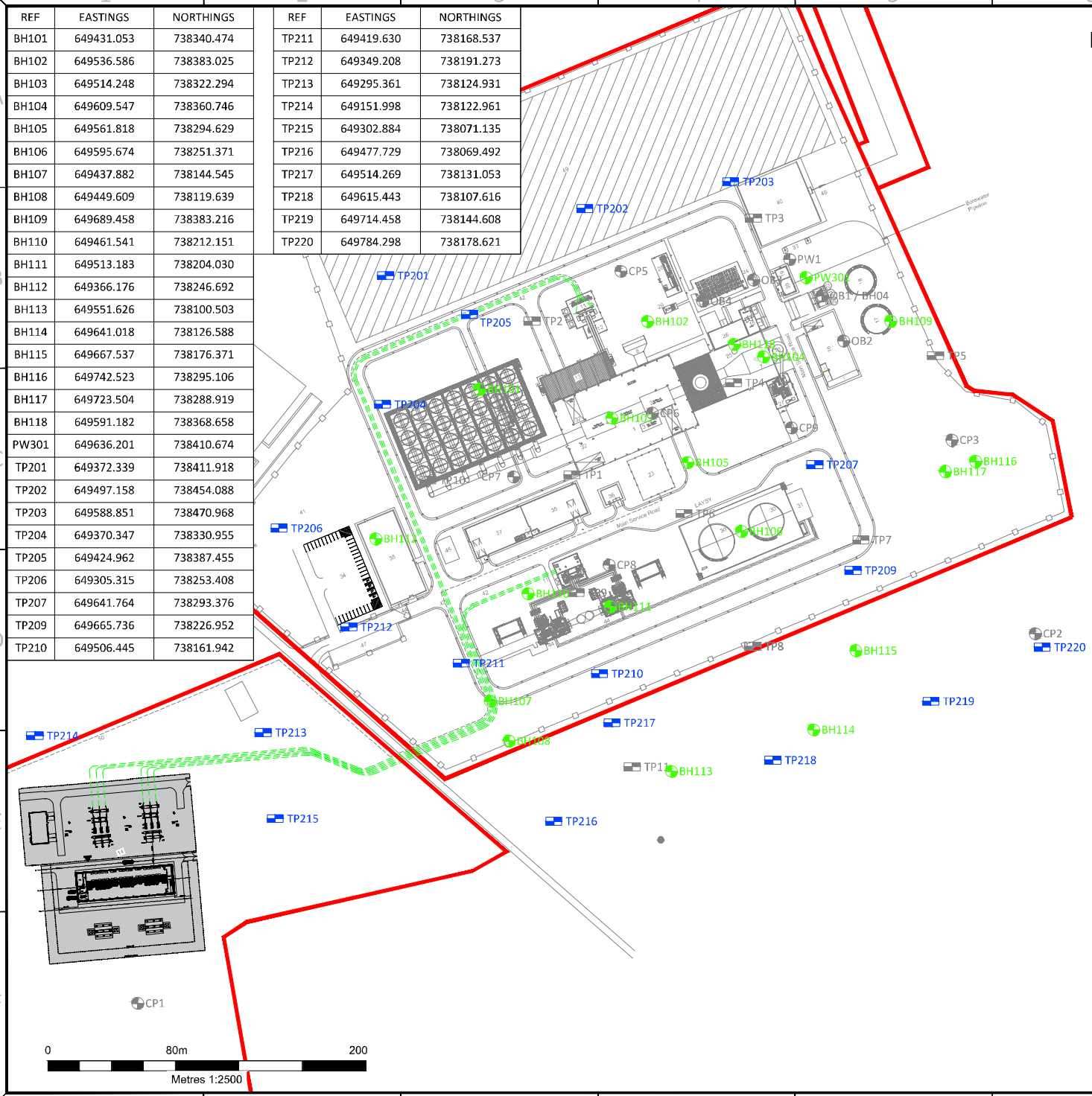
Env Stds Comments
#1:DWS Ireland 2014
#2:Ireland GTVs 2016
#3:IGV Ireland 2003
#4:Ireland GTVs 2010
#5:WHO DWG 2017

(Monitoring_Round = 'SI 2023' AND
Field_ID In('BH101', 'BH102', 'BH103', 'BH104', 'BH105', 'BH-106', 'BH107', 'BH108', 'BH110', 'BH111', 'BH112', 'BH113', 'BH-114', 'BH-115', 'BH-301', 'BHSS04', 'BHSS05'))

Appendix B – IDL Report Investigation Locations

REF	EASTINGS	NORTHINGS
BH101	649431.053	738340.474
BH102	649536.586	738383.025
BH103	649514.248	738322.294
BH104	649609.547	738360.746
BH105	649561.818	738294.629
BH106	649595.674	738251.371
BH107	649437.882	738144.545
BH108	649449.609	738119.639
BH109	649689.458	738383.216
BH110	649461.541	738212.151
BH111	649513.183	738204.030
BH112	649366.176	738246.692
BH113	649551.626	738100.503
BH114	649641.018	738126.588
BH115	649667.537	738176.371
BH116	649742.523	738295.106
BH117	649723.504	738288.919
BH118	649591.182	738368.658
PW301	649636.201	738410.674
TP201	649372.339	738411.918
TP202	649497.158	738454.088
TP203	649588.851	738470.968
TP204	649370.347	738330.955
TP205	649424.962	738387.455
TP206	649305.315	738253.408
TP207	649641.764	738293.376
TP209	649665.736	738226.952
TP210	649506.445	738161.942

REF	EASTINGS	NORTHINGS
TP211	649419.630	738168.537
TP212	649349.208	738191.273
TP213	649295.361	738124.931
TP214	649151.998	738122.961
TP215	649302.884	738071.135
TP216	649477.729	738069.492
TP217	649514.269	738131.053
TP218	649615.443	738107.616
TP219	649714.458	738144.608
TP220	649784.298	738178.621



ALL INFORMATION ON THIS DRAWING IS INDICATIVE ONLY, AND MAY BE SUBJECT TO FURTHER DESIGN DEVELOPMENT.

DO NOT SCALE

NOTES:

1. DRAWING TO BE READ IN CONJUNCTION WITH FICHTNER SPECIFICATION REFERENCE S7060-0030-0001.

Previous SI location (2008) Legend
CP - Cable Percussive Borehole positions
OB - Observation Well Postions
TP - Trial Pit Postions
PW1 - Pumping Well Position

Proposed SI exploratory locations
BH - Borehole
TP - Trial Pit
PW - Pumping Well

EXISTING TRIAL PIT
EXISTING BOREHOLE
PROPOSED TRIAL PIT
PROPOSED BOREHOLE

REV.	DETAILS OF REVISION	DRAWN	CHKD	APR	DATE
R4.0	BOREHOLES ADDED	DTW	ONL	BJN	04.05.23
R3.0	BOREHOLES UPDATED	DTW	ONL	BJN	20.04.23
R2.0	UPDATED	DTW	MAP	BJN	09.02.23
R1.0	PRELIMINARY	DTW	MAP	BJN	31.01.23

FICHTNER
CONSULTING ENGINEERS LIMITED
92 George's Street Lower
Dun Laoghaire
Co Dublin, A96 VR66
Tel: +353 (1)506 0632
Website: www.fichtner.ie

CLIENT:
BORD NA MÓNA POWERGEN LIMITED

SITE:
MAIN AND SUBSTATION SITE

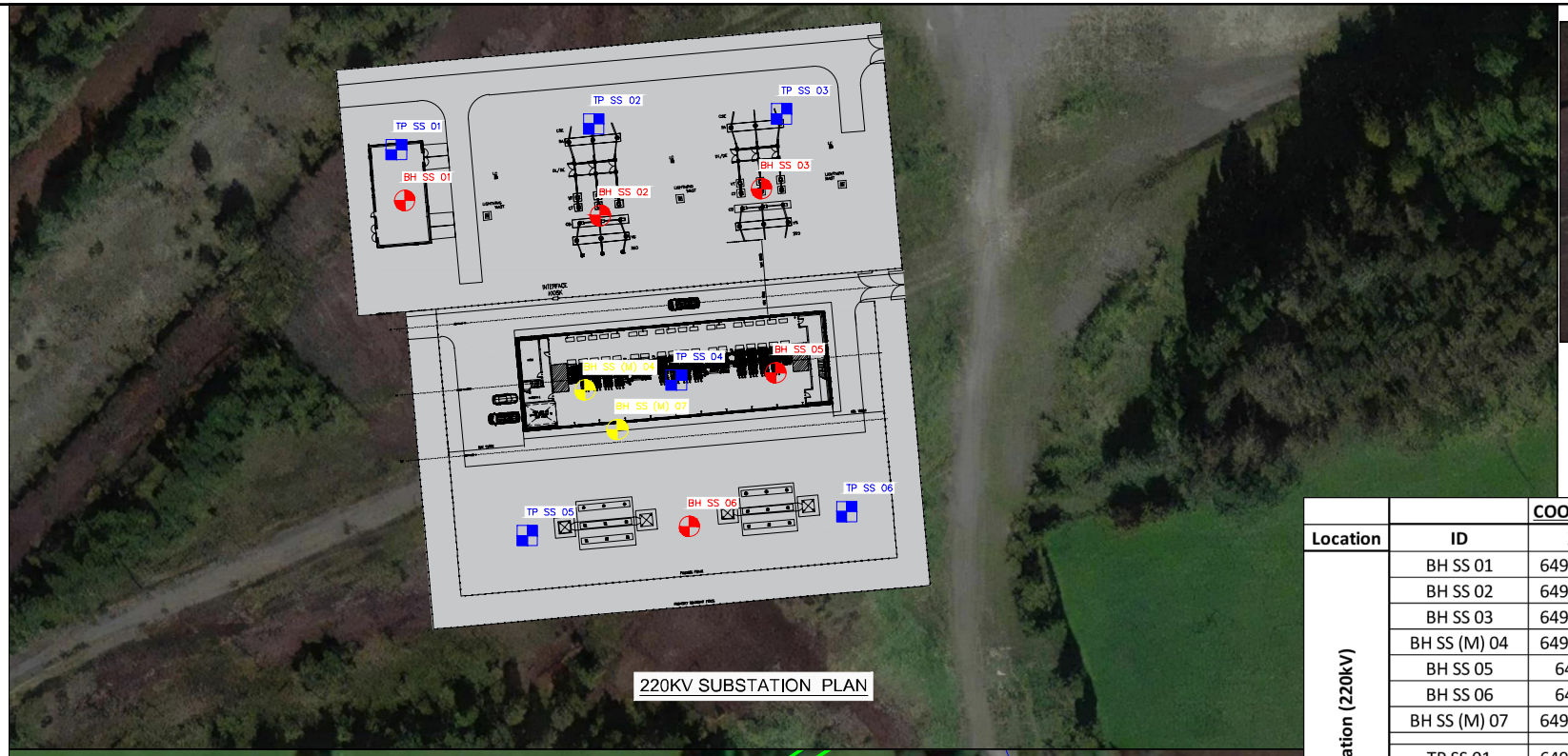
PROJECT:
DERRYGREENAGH THERMAL POWER PLANT

TITLE:
SITE INVESTIGATION -
EXISTING & PROPOSED BOREHOLE LOCATIONS & TRIALPIT LOCATIONS ON PROPOSED SITE PLAN

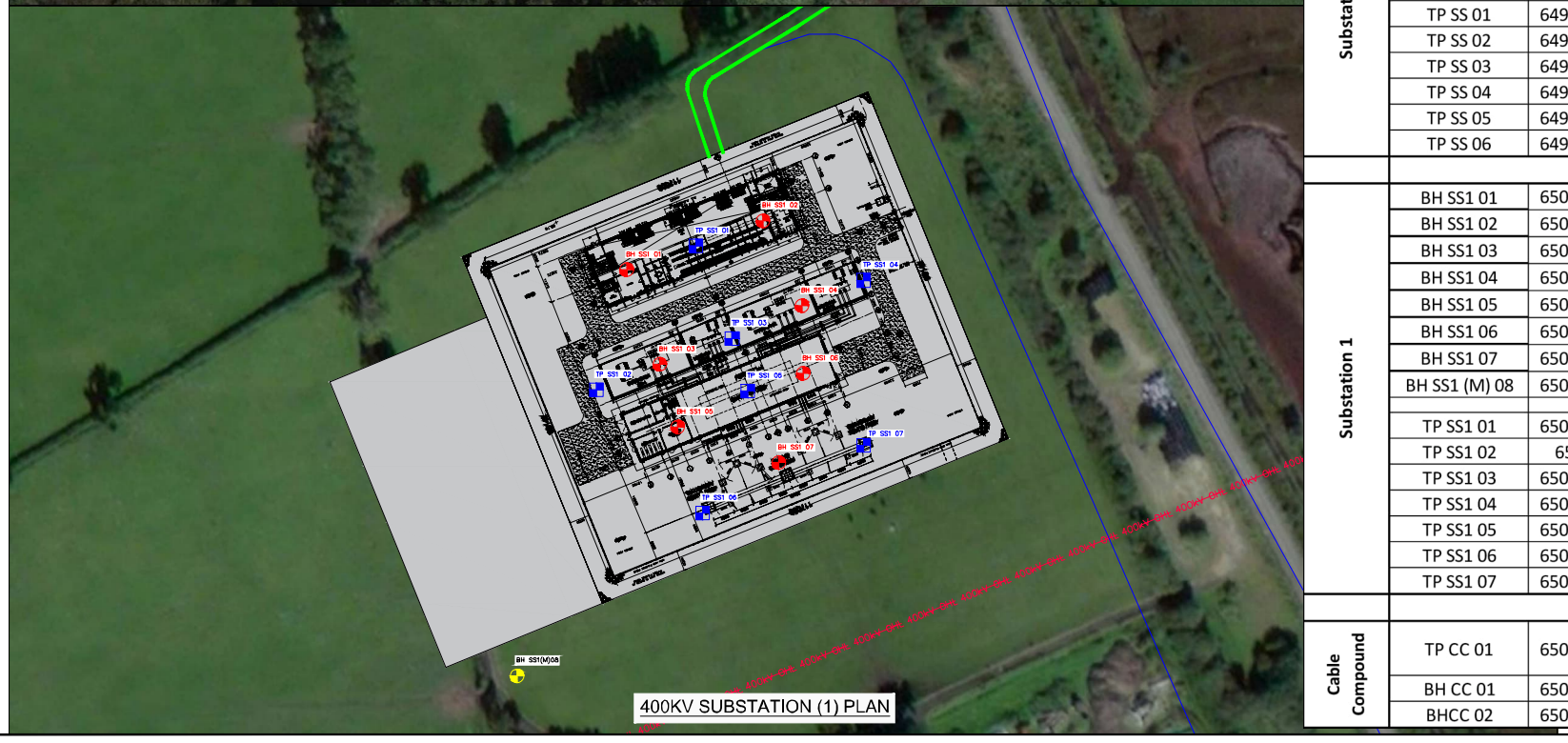
DRAWING STATUS:	PRELIMINARY	
DRAWN BY:	DTW	DATE: 24.01.23
CHECKED BY:	MAP	DATE: 24.01.23
APPROVED BY:	BJN	DATE: 24.01.23
FILENAME:	S7060-8600-0002DW PROPOSED SITE SI PLAN R4.0	
OFFICE OF ISSUE:	DUBLIN	
SHEET SIZE:	A3	SCALE: 1:2500

DRAWING No.: S7060-8600-0002 Sheet 1 Of 1

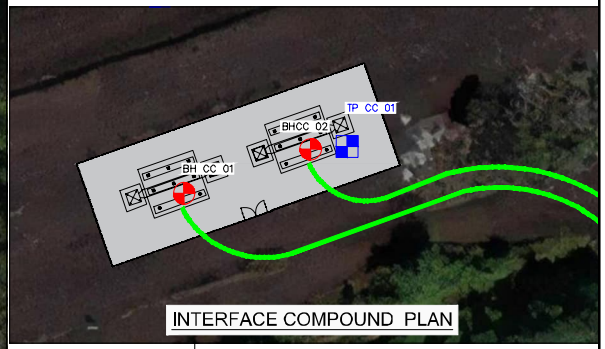
REVISION: R4.0



220KV SUBSTATION PLAN



400KV SUBSTATION (1) PLAN



INTERFACE COMPOUND PLAN

		COORDINATES (ITM)	
Location	ID	X	Y
Substation (220kV)	BH SS 01	649164.1	738060.9
	BH SS 02	649202.6	738058
	BH SS 03	649234.2	738063.3
	BH SS (M) 04	649199.6	738023.8
	BH SS 05	649237	738027.2
	BH SS 06	649220	737996.9
	BH SS (M) 07	649205.9	738016
	TP SS 01	649162.5	738071
	TP SS 02	649201.3	738076.1
	TP SS 03	649238.2	738078
	TP SS 04	649217.4	738025.7
	TP SS 05	649188.2	737995.1
	TP SS 06	649250.9	737999.8
Substation 1	BH SS1 01	650536.8	731313.9
	BH SS1 02	650576.9	731328.4
	BH SS1 03	650546.5	731286.2
	BH SS1 04	650588.5	731303.3
	BH SS1 05	650551.9	731267.7
	BH SS1 06	650588.9	731283.5
	BH SS1 07	650581.6	731257.2
	BH SS1 (M) 08	650504.5	731194.3
	TP SS1 01	650557.2	731320.9
	TP SS1 02	650528	731278.7
	TP SS1 03	650567.9	731293.8
	TP SS1 04	650606.7	731310.8
	TP SS1 05	650572.5	731278.3
	TP SS1 06	650559.1	731242.3
	TP SS1 07	650606.7	731262.3
Cable Compound	TP CC 01	650558.9	733370.9
	BH CC 01	650528.5	733362.1
	BHCC 02	650552.1	733370.4

LEDGEND:

- PROPOSED TRIAL PIT
- PROPOSED BOREHOLE
- PROPOSED GROUNDWATER MONITORING BOREHOLE

Rev.	DESCRIPTION	DATE
P02		11/05/23
P01	First Draft	19/04/23

Bord na Móna

Main St, Newbridge, Co. Kildare
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Project
DERRYGREENAGH THERMAL POWER PLANT

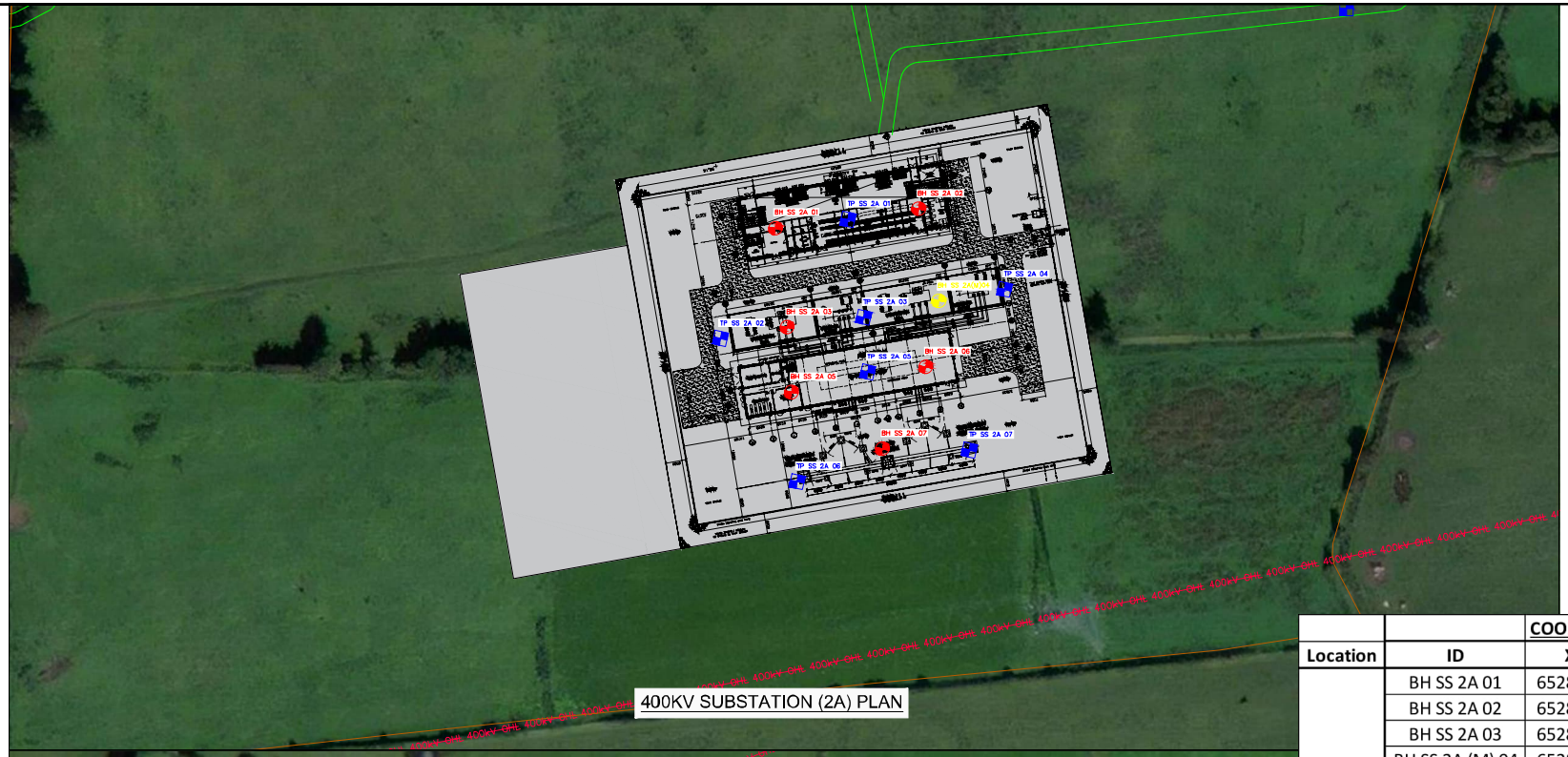
Client

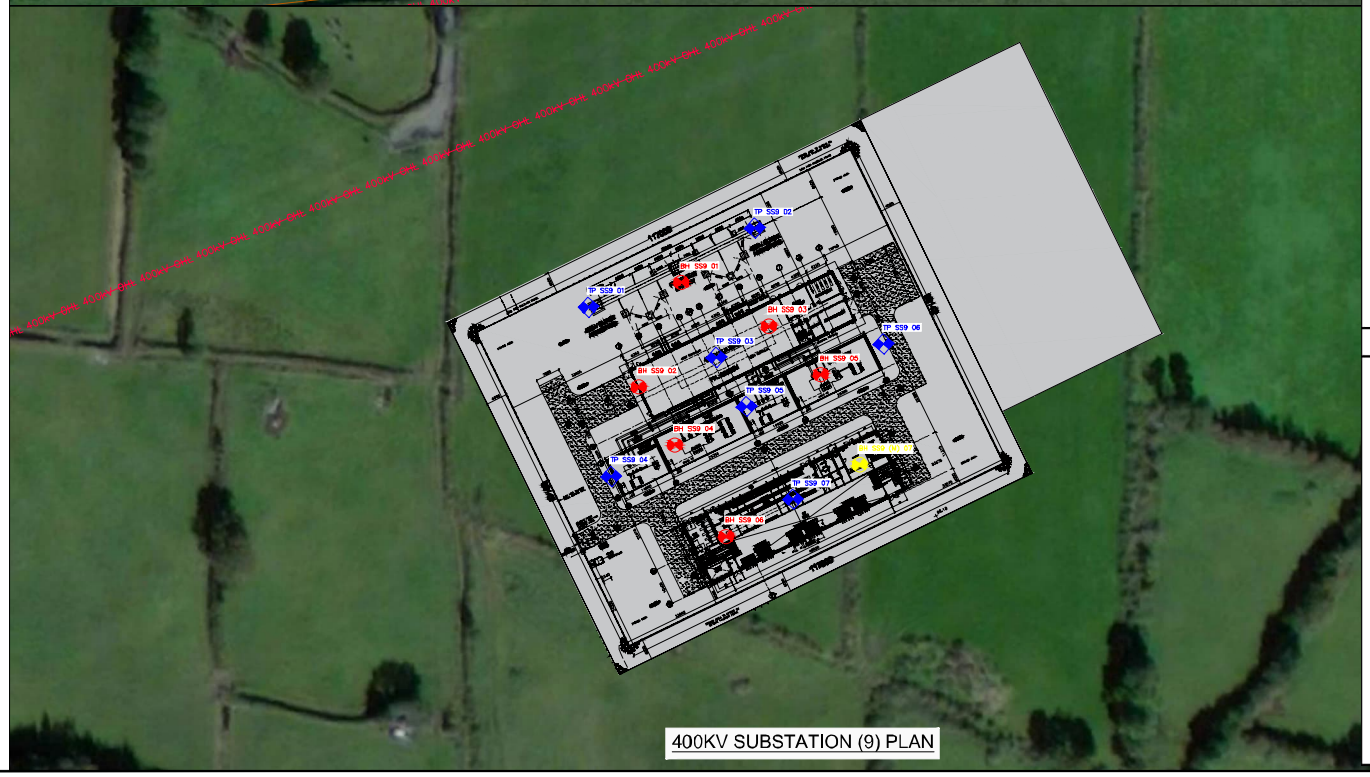
Drawing Title
PROPOSED SITE INVESTIGATION AT PROPOSED SUBSTATIONS

Date	Scale (A1)	Drawn by	Checked by	Approved by
11/05/23	NTS	HO	PC	PS

Status
PLANNING ☐ FOR APPROVAL ☐
TENDER ☐ FOR CONSTRUCTION ☐
AS BUILT ☐

Dwg. No.





		COORDINATES (ITM)	
Location	ID	X	Y
Substation 2A	BH SS 2A 01	652806.6	732034
	BH SS 2A 02	652848.9	732039.6
	BH SS 2A 03	652810.1	732004.8
	BH SS 2A (M) 04	652854.8	732012.6
	BH SS 2A 05	652811.4	731985.7
	BH SS 2A 06	652850.9	731993.1
	BH SS 2A 07	652838.2	731969
	TP SS 2A 01	652828	732036.5
	TP SS 2A 02	652790.4	732001.5
	TP SS 2A 03	652832.6	732007.7
	TP SS 2A 04	652874.2	732016
	TP SS 2A 05	652833.8	731991.6
	TP SS 2A 06	652813	731959.3
	TP SS 2A 07	652863.8	731968.6
Substation 9	BH SS9 01	650010.6	730896.6
	BH SS9 02	649998.6	730867.3
	BH SS9 03	650035.1	730884.4
	BH SS9 04	650008.8	730851.1
	BH SS9 05	650049.6	730870.9
	BH SS9 06	650023	730825.4
	BH SS9 (M) 07	650060.6	730845.6
	TP SS9 01	649984.6	730889.7
	TP SS9 02	650031.1	730911.9
	TP SS9 03	650020.3	730875.7
	TP SS9 04	649990.8	730842.3
	TP SS9 05	650028.8	730861.9
	TP SS9 06	650067.3	730879.5
	TP SS9 07	650041.8	730835.7

LEDGEND:

- PROPOSED TRIAL PIT
- PROPOSED BOREHOLE
- PROPOSED GROUNDWATER MONITORING BOREHOLE

Rev.	DESCRIPTION	DATE
P02		11/05/23
P01	First Draft	19/04/23

Bord na Móna

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Project
DERRYGREENAGH THERMAL POWER PLANT

Client

Drawing Title
PROPOSED SITE INVESTIGATION AT PROPOSED SUBSTATIONS

Date	Scale (A1)	Drawn by	Checked by	Approved by
11/05/23	NTS	HO	PC	PS

Status
PLANNING ☐ FOR APPROVAL ☐
TENDER ☐ FOR CONSTRUCTION ☐
AS BUILT ☐

Dwg. No.

PYLONE SITE INVESTIGATION PLAN

Location	ID	COORDINATES (ITM) X	Y
Tower	BHT 01	650528.6	733399.3
	BHT 02	650446.8	733630.3
	BHT 03	650354.7	733890.3
	BHT 04	650257.3	734165.4
	BHT 05	650155.8	734451.8
	BHT 06	650052.8	734742.8
	BHT 07	649947	735041.4
	BHT 08	649847.8	735321.5
	BHT 09	649751.1	735594.5
	BHT 10	649664.8	735837.2
	BHT 11	649582.7	736070
	BHT 12	649690.9	736316.7
	BHT 13	649800.8	736567.1
	BHT 14	649744.1	736825.7
	BHT 15	649574.1	737093.8
	BHT 16	649404.4	737361.4
	BHT 17	649238	737623.9
	BHT 18	649217.6	737855.3
	TPT 01	650528.6	733399.3
	TPT 02	650446.8	733630.3
	TPT 03	650354.7	733890.3
	TPT 04	650257.3	734165.4
	TPT 05	650155.8	734451.8
	TPT 06	650052.8	734742.8
	TPT 07	649947	735041.4
	TPT 08	649847.8	735321.5
	TPT 09	649751.1	735594.5
	TPT 10	649664.8	735837.2
	TPT 11	649582.7	736070
	TPT 12	649690.9	736316.7
	TPT 13	649800.8	736567.1
	TPT 14	649744.1	736825.7
	TPT 15	649574.1	737093.8
	TPT 16	649404.4	737361.4
	TPT 17	649238	737623.9
	TPT 18	649217.6	737855.3

LEDGEND:

- PROPOSED TRIAL PIT
- PROPOSED BOREHOLE

Rev.	DESCRIPTION	DATE
P02		11/05/23
P01	First Draft	19/04/23

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Project
DERRYGREENAGH THERMAL POWER PLANT

Client

Drawing Title
PROPOSED SITE INVESTIGATION AT PROPOSED PYLONS

Date	Scale (A1)	Drawn by	Checked by	Approved by
11/05/23	NTS	HO	PC	PS

Status
PLANNING ☐ FOR APPROVAL ☐
TENDER ☐ FOR CONSTRUCTION ☐
AS BUILT ☐

Dwg. No.

		COORDINATES (ITM)	
Location	ID	X	Y
Underground Cable	TP C 01	650458	733035.7
	TP C 02	650472.1	732735.1
	TP C 03	650603.4	732450.1
	TP C 04	650823.7	731974.5
	TP C 05	650720.1	731692.6
	TP C 06	650620.3	731408.9
	TP C 07	650772.4	731150.2
	TP C 08	650809.8	730982.1
	TP C 09	650662.6	731271.4
	TP C 10	651844.8	732285.6
	TP C 11	652047.1	732097.4
	TP C 12	652351.9	732168.8
	TP C 13	652650.2	732132.4
	TP C 14	652979.4	732098.9
	TP C 15	652970.6	732336.8
	TP C 16	652686.5	732351.4
	TP C 17	652373.7	732363.8
	TP C 18	652104	732495.4
	ST C 01	650732.3	732223.4
	ST C 02	651455	732219.6
	ST C 03	652077.9	732493.3

LEDGEND:

PROPOSED TRIAL PIT

PROPOSED SLIT TRENCH

Rev.	DESCRIPTION	DATE
P02		11/05/23
P01	First Draft	19/04/23

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DERRYGREENAGH THERMAL POWER PLANT

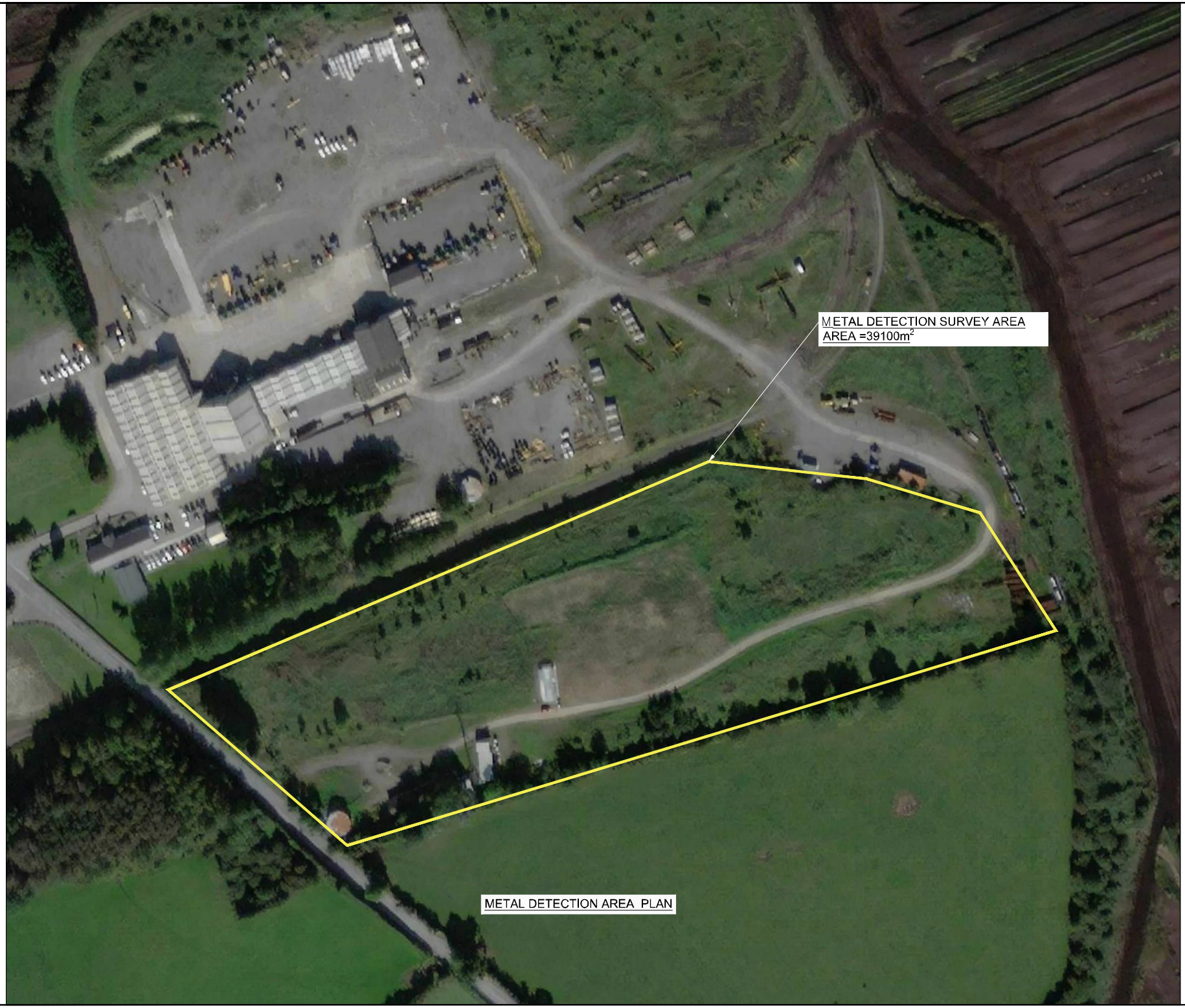
Client

Drawing Title
PROPOSED SITE INVESTIGATION
UNDERGROUND CABLE ROUTE

Date	Scale (A1)	Drawn by	Checked by	Approved by
11/05/23	NTS	HO	PC	PS

Status
PLANNING ☐ FOR APPROVAL ☐
TENDER ☐ FOR CONSTRUCTION ☐
AS BUILT ☐

Dwg. No.



Rev.	DESCRIPTION	DATE
P02		11/05/23
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DERRYGREENAGH THERMAL POWER PLANT

Client

Drawing Title
PROPOSED SITE INVESTIGATION
METAL DETECTION SURVEY AREA

Date	Scale (A1)	Drawn by	Checked by	Approved by
11/05/23	NTS	HO	PS	PS

Status
PLANNING ☐ FOR APPROVAL ☐
TENDER ☐ FOR CONSTRUCTION ☐
AS BUILT ☐

Dwg. No.

		COORDINATES (ITM)	
Location	ID	X	Y
Borrow Pit	TP BP 01	649545.3	736145.8
	TP BP 02	649630.8	736220.9
	TP BP 03	649712.7	736254.6
	TP BP 04	649616.4	736022.5
	TP BP 05	649703.8	736126
	TP BP 06	649768	736167.2
	TP BP 07	649756.7	735992.2
	TP BP 08	649827.1	736103.5

LEDGEND:

PROPOSED TRIAL PIT

Rev.	DESCRIPTION	DATE
P02	First Draft	11/05/23
P01		19/04/23

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Project
DERRYGREENAGH THERMAL POWER PLANT

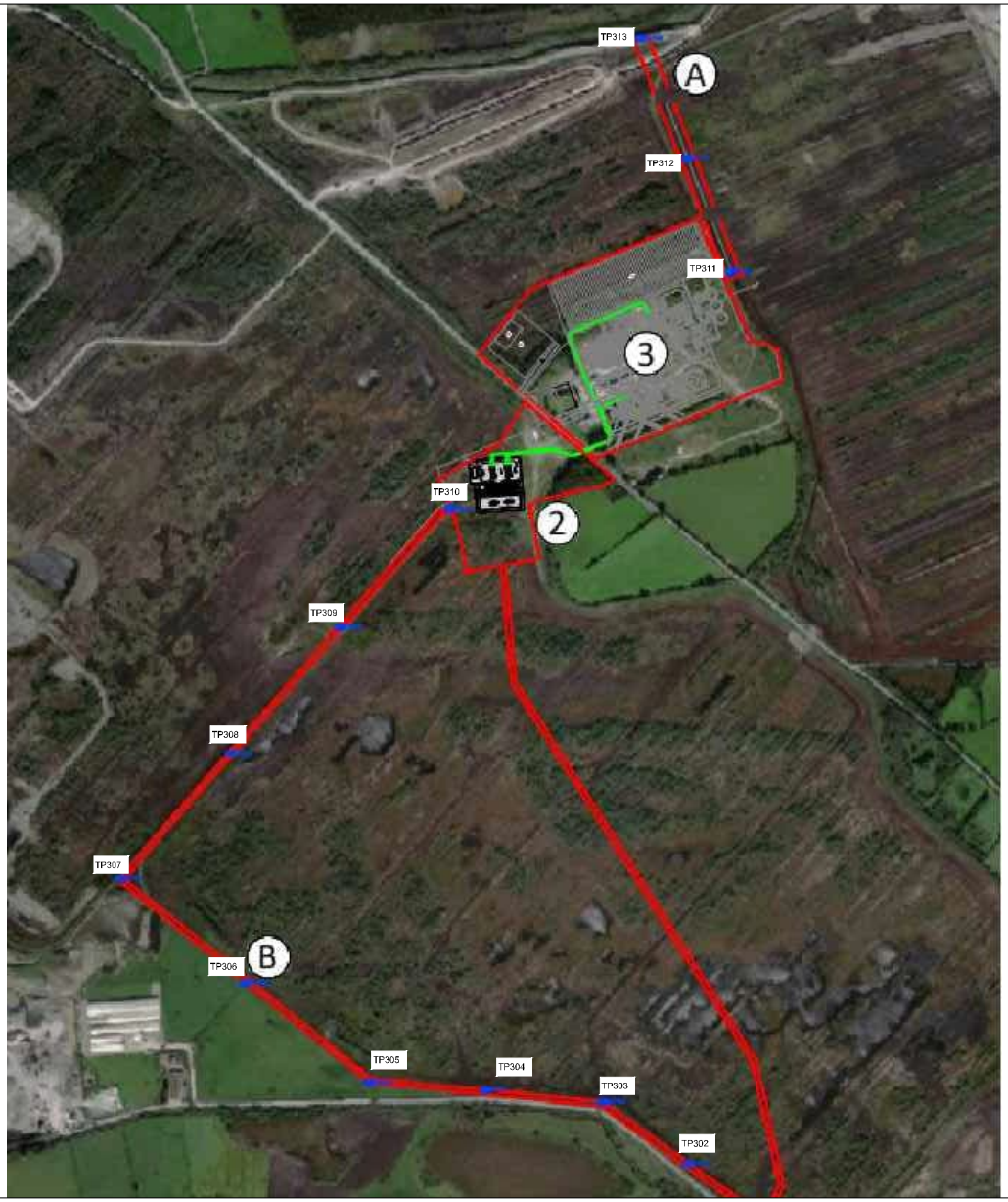
Client

Drawing Title
PROPOSED SITE INVESTIGATION
BORROW PIT AREA

Date	Scale (A1)	Drawn by	Checked by	Approved by
11/05/23	NTS	HO	PS	PS

Status
PLANNING ☐ FOR APPROVAL ☐
TENDER ☐ FOR CONSTRUCTION ☐
AS BUILT ☐

Dwg. No.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A
TP312
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TP306
TP305
TP304
TP303
TP302

LEGEND:

- TRIAL PIT LOCATION
- BOREHOLE LOCATION
- INFILTRATION TEST LOCATION
- CONE PENETRATION TEST LOCATION
- PUMP WELL DRILLED (2008)
- MONITORING WELL DRILLED (2008)
- PERCOLATION TEST AREA

Rev.	DESCRIPTION	DATE
P01	First Draft	19/09/23

IRISH DRILLING LIMITED
OLD GALWAY ROAD, LOUGHREA, CO.GALWAY
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Project
DERRYGREENAGH THERMAL POWER PLANT

Client

Drawing Title
IDL (AS BUILT) SITE INVESTIGATION
MAIN SITE AREA

Date	Scale (A1)	Drawn by	Checked by	Approved by
13/04/23	NTS	MM	RK	RK

Status
PLANNING ☐ FOR APPROVAL ☐
TENDER ☐ FOR CONSTRUCTION ☐
AS BUILT ☒

Dwg. No.

LEGEND:

- TRIAL PIT LOCATION
- BOREHOLE LOCATION
- INFILTRATION TEST LOCATION
- CONE PENETRATION TEST LOCATION
- PUMP WELL DRILLED (2008)
- MONITORING WELL DRILLED (2008)
- PERCOLATION TEST AREA

Rev.	DESCRIPTION	DATE
P01	First Draft	19/09/23

IRISH DRILLING LIMITED
OLD GALWAY ROAD, LOUGHREA, CO.GALWAY
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Phone : 091841274

Project
DERRYGREENAGH THERMAL POWER PLANT

Client

Drawing Title
IDL (AS BUILT) SITE INVESTIGATION
MAIN SITE AREA

Date	Scale (A1)	Drawn by	Checked by	Approved by
13/04/23	NTS	MM	RK	RK

Status
PLANNING ☐ FOR APPROVAL ☐
TENDER ☐ FOR CONSTRUCTION ☐
AS BUILT ☒

Dwg. No.

LEGEND:

- TRIAL PIT LOCATION
- BOREHOLE LOCATION
- INFILTRATION TEST LOCATION
- CONE PENETRATION TEST LOCATION
- PERCOLATION TEST AREA

Rev.	DESCRIPTION	DATE
P01	First Draft	19/09/23

IRISH DRILLING LIMITED
OLD GALWAY ROAD, LOUGHREA, CO.GALWAY
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Project
DERRYGREENAGH THERMAL POWER PLANT

Client

Drawing Title
IDL (AS BUILT) SITE INVESTIGATION
MAIN SITE AREA

Date	Scale (A1)	Drawn by	Checked by	Approved by
13/04/23	NTS	MM	RK	RK

Status
PLANNING ☐ FOR APPROVAL ☐
TENDER ☐ FOR CONSTRUCTION ☐
AS BUILT ☒

Dwg. No.

LEGEND:

- TRIAL PIT LOCATION
- BOREHOLE LOCATION
- INFILTRATION TEST LOCATION
- CONE PENETRATION TEST LOCATION

Rev.	DESCRIPTION	DATE
P01	First Draft	19/09/23

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Phone : 091841274

Project
DERRYGREENAGH THERMAL POWER PLANT

Client

Drawing Title
IDL (AS BUILT) SITE INVESTIGATION
SOUTH SITE AREA

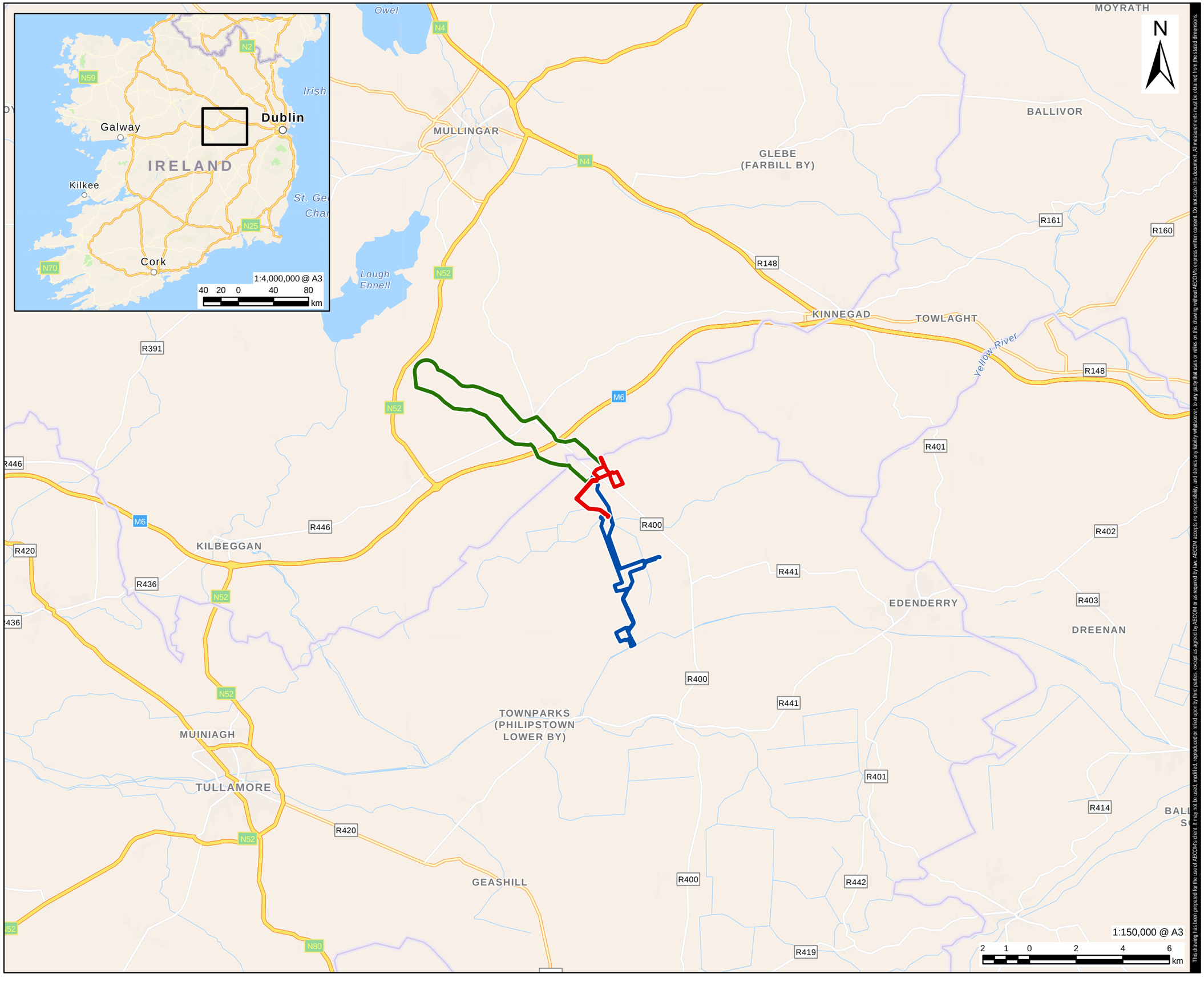
Date	Scale (A1)	Drawn by	Checked by	Approved by
13/04/23	NTS	MM	RK	RK

Status
PLANNING ☐ FOR APPROVAL ☐
TENDER ☐ FOR CONSTRUCTION ☐
AS BUILT ☒

Dwg. No.

Appendix C – Figures

Revision: P01 Drawn: JB Checked: AB Approved: POC Date: 2024-01-16



AECOM

PROJECT

Proposed Derrygreenagh Power Project

CLIENT

Bord na Móna

CONSULTANT

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10th Floor The Clarence West Building
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LEGEND

- Power Plant Area Boundary
- Electricity Grid Connection Boundary
- Gas Connection Corridor Boundary

NOTES

ISSUE PURPOSE

FOR ISSUE

PROJECT NUMBER

60699676

FIGURE TITLE

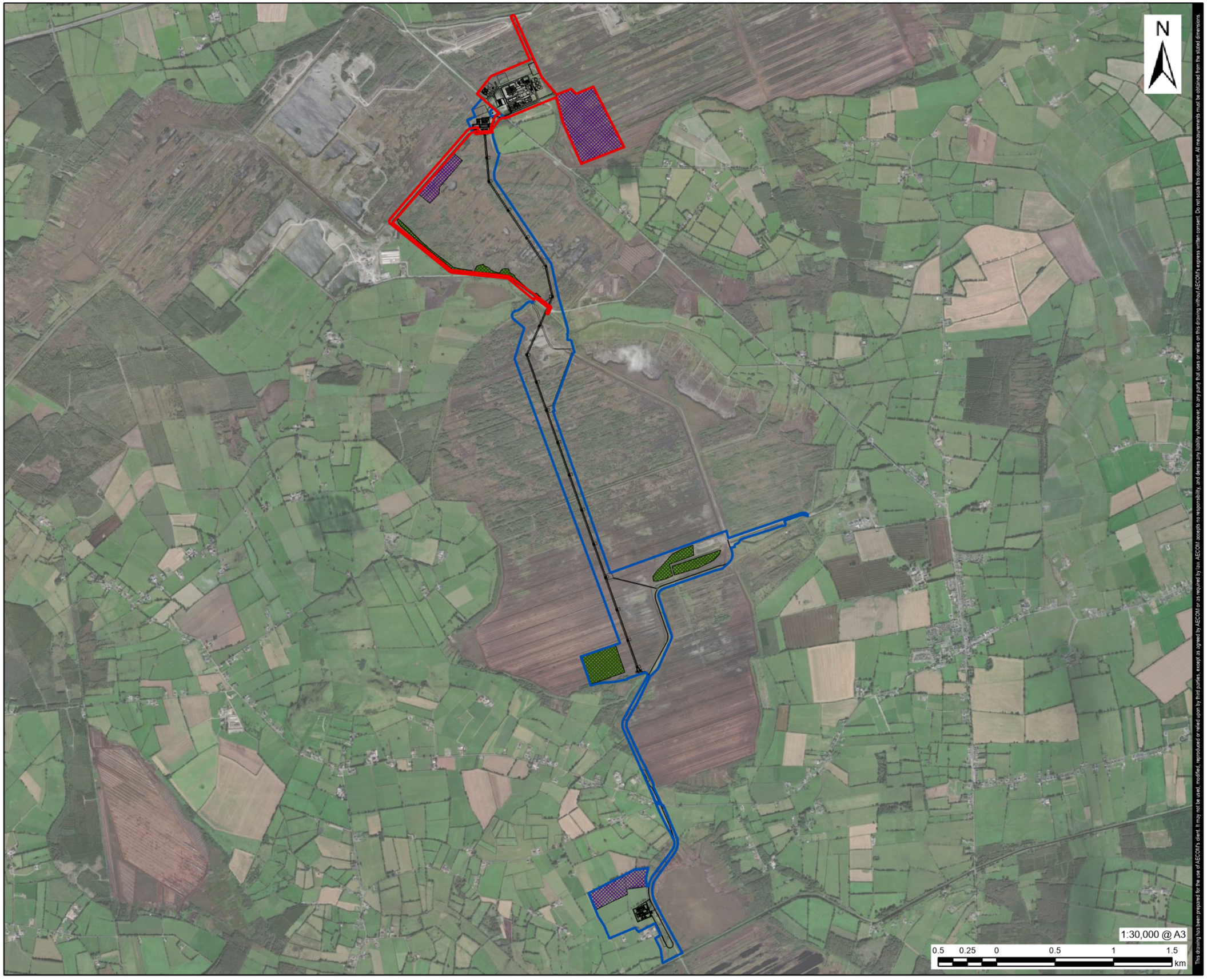
Site Location

FIGURE NUMBER

Figure 1.1

Filename: C:\Users\Barn1\Desktop\Work_Local\60699676_Derrygreenagh\02_Maps\IntoChapters\IntoFigures.aprx

Revision: P01 Drawn: JB Checked: AB Approved: POC Date: 2024-01-16



AECOM

PROJECT

Proposed Derrygreenagh Power Project

CLIENT

Bord na Móna

CONSULTANT

AECOM Limited
10th Floor The Clarence West Building
2 Clarence St W, Belfast
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LEGEND

- Power Plant Area Boundary
- Electricity Grid Connection Boundary

Project Elements

- Project Layout
- Tree Replanting Area
- Peat Deposition Area

NOTES

ISSUE PURPOSE

FOR ISSUE

PROJECT NUMBER

60699676

FIGURE TITLE

Proposed Development and Overall Project Layout

FIGURE NUMBER

Figure 5.1

Filename: C:\Users\BarrJ1\Desktop\Work_Local\60699676_Derrygreenagh\02_Maps\IntoChapters\IntoFigures.aprx

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