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

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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 Geology¹.

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.

Power Plant Area

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.

Electricity Grid Connection

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

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).

Gas Connection Corridor

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 Power Plant Area

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

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.

Electricity Grid Connection Route

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

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

Gas Connection Corridor

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

Power Plant Area

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.

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
made ground and superficial depose because of history minor pollution incidents associate with fuel storage vehicle maintenate activities could be exposed and distributed during construction across the Site, depending on the	contamination in the made ground and superficial deposits, because of historic minor pollution incidents associated with fuel storage and	Dermal contact	Direct contact with contaminated ground soils, soil derived dust, soil leachate and perched water in the made ground/ subsoil.	Construction workers
	vehicle maintenance activities could be exposed and disturbed during construction across the Site, depending on the	Inhalation	Inhalation of made ground derived dust, organic vapours, or ground generated gas.	Construction workers Off-site industrial and residential land users
	depth of excavations.	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	Abstraction via potable water well on site (i.e., the "Hostel Well")	Consumption of potentially impacted groundwater.	Construction workers Operational Staff (potable groundwater supply)
	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.	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	Dermal contact	Direct contact with contaminated ground soils, soil derived dust, soil leachate and perched water in the made ground/ subsoil.	Construction workers
	contamination reported.	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	Dermal contact	Direct contact with contaminated groundwater.	Construction workers
	bedrock) uncontaminated.	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	Dermal contact	Direct contact with contaminated groundwater.	Construction workers
	anticipated	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 assessment² 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 enduse.

Tier 2 Generic Quantitative Risk Assessment Project number: 60699676

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 Leaching of soil contamination into shallow groundwater	Construction workers Off-site industrial and residential land users Surface watercourses Groundwater Known/ unknown water supplies	Effect on human health [Medium] Pollution of groundwater [Medium]	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 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. 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

Tier 2 Generic Quantitative Risk Assessment Project number: 60699676

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	Introduction of new sources of	Construction workers	Effect on human health [Medium]	Unlikely	Low risk	None required
	Asbestos Heavy metals	contamination to subsurface	Surface watercourses	Pollution of surface and groundwater [Medium]	Pollution incidents at off-site sources could result in contamination reaching soil and/ or groundwater in direct contact with Power Station abstraction		
P P S To To	PCBs		Groundwater		well, infrastructure or services.		
	Phenols suite SVOCs Total Sulphate. Total sulphur. VOCs.		Known/ unknown water supplies				
On-site sources	Hydrocarbons PAHs Asbestos Heavy metals	new sources of contamination to subsurface	Construction workers	Effect on human health [Medium]	Unlikely Construction activities with the potential to contaminate soils and groundwater on the Site.	Low risk	Use of PPE
A			Surface watercourses	Pollution of surface and groundwater [Medium]			
	PCBs		Groundwater				
	Phenols suite SVOCs Total Sulphate. Total sulphur. VOCs.		Known/ unknown water supplies				

Tier 2 Generic Quantitative Risk Assessment

Project number: 60699676

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 Leaching of soil contamination into shallow groundwater	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.
			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

Tier 2 Generic Quantitative Risk Assessment Project number: 60699676

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

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.	ingestion/ inhalation of vapours and dust	Construction workers	Effect on human health [Medium]	Low likelihood:	Low risk	None required.
			Off-site industrial and residential land users		No existing contamination in the superficial deposits anticipated.		
		contamination watercourse e. into shallow groundwater Groundwat Known/ unl		Pollution of groundwater [Medium]	Low likelihood:	Low risk	None required
			Groundwater		No existing contamination in the superficial deposits anticipated.		
			Known/ unknown water supplies				
Existing groundwater contamination	Hydrocarbons PAHs Asbestos Heavy metals	potable water workers well on site (i.e., the "Hostel Operational Staff	Effect on human health [Medium]	Low likelihood	Low risk	None required	
			Operational Staff	livicalatili	No existing contamination in the shallow groundwater anticipated	low	

Tier 2 Generic Quantitative Risk Assessment Project number: 60699676

Source	Potential Pollutants	Pathway	Receptor	Classification of consequence	Likelihood of occurrence	Classified risk	Mitigation
	PCBs Phenols suite		groundwater supply)				
SVOCs Total Sulphate. Total sulphur. VOCs.	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

Туре	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 geoenvironmental 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 geoenvironmental 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 I	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 Ireland². 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/CIEH⁴, EIC/AGS/CL:AIRE⁵ GAC and SoBRA Groundwater GAC⁶. 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.

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 microgrammes 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:

Tier 2 Generic Quantitative Risk Assessment

Project number: 60699676

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

Tier 2 Generic Quantitative Risk Assessment

Project number: 60699676

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.		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:

Power Plant Area

- 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

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

Key

XXX

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

			Sample ID Sample Depth Date Sampled Lab Report Number	BH110 1 27/04/2023 230502-30	BH111 1.5 27/04/2023 230510-54	BH112 0.6 12/04/2023 230418-53		BH113 2 25/04/2023 230502-27	BH-114 1 21/04/2023 230426-63	BH-115 3 20/04/2023 230426-63	BH116 7 11/05/2023 230518-59	BH117 4.5 10/05/2023 230515-36	BH118 3.5 12/05/202 230518-59
			GAC_HH_COM/ IND_SLOAM_>3.48%TOC										
hemical Name Sulphate, Total Potential as SO4	Units g/kg	MDL		- 1.00	0.6	0.6	0.918	- 1 45	0.6	0.777	0.6	0.6	0.6
Loss on ignition Perylene-d12 PAH 16 Total + Coronene	% % mg/kg	0.7		1.08 78 <0.318	2.99 99.4 -	2.66 86.2 <0.318	4.23 83.5 <0.318	1.45 84.5 <0.318	0.967 94.2 <0.318	0.878 100 <0.318	93.1	88.1	86.1
PH >C10-C40 Aliphatics IA	mg/kg	5		<5	<5	30.3	16.9	90.2	19.1	8.65	-	-	-
Asbestos Actinolite Asbestos Anthophyllite	No units No units			0	0	0	0	0	0	0	0	0	0
CEN 10:1 - Dissolved solids, Total (meter) WAC	mg/kg mg/kg	100		10	760 10	1410 10	694 10	580 10	573 10	571 10	-	-	-
Asbestos Tremolite etroleum Hydrocarbons >C10-C44 Aliphatics & Aromatics	No units mg/kg	10		<10	<10	83.4	43.2	81.1	16.7	<10	<10	<10	<10
pH	pH_Units			7.91	8.12	8.27	8.6	7.97	8.11	8.19	-	-	-
Electrical Conductivity PH >C10-C44 Aliphatics	μS/cm mg/kg	5		71.3 <5	99.7	76.3	90.8	76.6	75.5	74.6	<5	<5	<5
>EC10-EC44 Aromatics >C5-C40 GRO >C5-C10	mg/kg mg/kg	5 35 0.02		<5 <35 <0.02	<5 - <0.02	7.15 <35 <0.02	32.8 67 <0.02	<5 96.5 <0.02	<5 <35 2.68	<5 <35 0.1	<5 - <0.02	<5 - <0.02	<5 - <0.02
EPH >C10-C40 >C5-C6 Aliphatics	mg/kg mg/kg mg/kg	35 0.01	12,000 ^{#1}	<35 <0.01	<0.02	<35 <0.01	67 <0.01	96.5 <0.01	<35 0.0339	<35 0.0242	<0.02	<0.02	<0.02
>C5-C10 Aliphatics >C6-C8 Aliphatics >C8-C10 Aliphatics	mg/kg mg/kg	0.05 0.01 0.01	40,000*1	<0.05 <0.01 <0.01	<0.05 <0.01 <0.01	<0.05 <0.01 <0.01	<0.05 <0.01 <0.01	<0.05 <0.01 <0.01	1.68 0.147	0.1 0.0403 0.0357	<0.05 <0.01 <0.01	<0.05 <0.01 <0.01	<0.05 <0.01 <0.01
>C10-C12 Aliphatics >C12-C16 Aliphatics	mg/kg mg/kg mg/kg	1	11,000 ^{#1} 47,000 ^{#1} 90,000 ^{#1}	<1 <1	<1 <1	<1	<1 <1	<1 <1	1.5 1.25 5.39	<1 <1	<1	<1 <1	<1
>C16-C21 Aliphatics >C21-C35 Aliphatics	mg/kg mg/kg	1		<1	<1 3.56	<1 63.5	9.48	<1 67	5.36	<1 6.69	<1	<1	<1
>C35-C44 Aliphatics >C5-C10 Aromatics >EC5-EC7 Aromatics	mg/kg mg/kg mg/kg	0.05 0.01	1,800,000 ^{#1} 86,000 ^{#1}	<0.05 <0.01	<0.05 <0.01	12.8 <0.05 <0.01	<0.05 <0.01	10.6 <0.05 <0.01	<1 0.999 <0.01	<1 <0.05 <0.01	<0.05 <0.01	<0.05 <0.01	<0.05 <0.01
>EC7-EC8 Aromatics >EC8-EC10 Aromatics	mg/kg mg/kg	0.01	180,000 ^{#1} 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 0.999	<0.01 0.0242	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01
>EC10-EC12 Aromatics >EC12-EC16 Aromatics >EC16-EC21 Aromatics	mg/kg mg/kg mg/kg	1	34,000 ^{#1} 38,000 ^{#1} 28,000 ^{#1}	<1 <1 <1	<1 <1 <1	<1 <1 <1	<1 <1 1.87	<1 <1 <1	<1 <1 1.7	<1 <1 <1	<1 <1 <1	<1 <1 <1	<1 <1 <1
>EC21-EC35 Aromatics >EC35-EC44 Aromatics	mg/kg mg/kg	1	28,000 ^{#1} 28,000 ^{#1}	<1 <1	1.02 <1	5.99 <1	24.2 6.71	1.79 <1	<1 <1	1.25 <1	<1 <1	<1 <1	<1 <1
>EC40-EC44 Aromatics >C5-C44 Aliphatics & Aromatics EX	mg/kg mg/kg	10		<1 <10	<1 <10	<1 83.4	<1 43.2	<1 77.9	<1 14.5	<1 <10	<1 <10	<1 <10	<1 <10
Benzene Toluene	mg/kg mg/kg	0.009	98 ^{#3} 180,000 ^{#1}	<0.009 <0.007	<0.009 <0.007	<0.09 <0.07	<0.009 <0.007	<0.009 <0.007	<0.009 <0.007	<0.009 <0.007	<0.009 <0.007	<0.009 <0.007	<0.009 <0.007
Ethylbenzene Xylene (m & p) Xylene Total	mg/kg mg/kg mg/kg	0.004 0.01 0.02	27,000 ^{#1} 30,000 ^{#1}	<0.004 <0.01 <0.02	<0.004 <0.01 <0.02	<0.04 <0.1 <0.2	<0.004 <0.01 <0.02	<0.004 <0.01 <0.02	<0.004 <0.01 <0.02	<0.004 <0.01 <0.02	<0.004 <0.01 <0.02	<0.004 <0.01 <0.02	<0.004 <0.01 <0.02
Xylene (o) Total BTEX	mg/kg mg/kg	0.01	33,000 ^{#1}	<0.02 <0.01 <0.04	<0.01 <0.04	<0.1 <0.4	<0.01 <0.04	<0.01 <0.04	<0.02 <0.01 <0.04	<0.02 <0.01 <0.04	<0.01 <0.04	<0.02 <0.01 <0.04	<0.01 <0.04
kygenates MTBE Tert Amyl Methyl Ether	mg/kg mg/kg	0.01	24,000 ^{#4}	<0.01 <0.01	<0.01 <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
llorinated Hydrocarbons Chloromethane	mg/kg	0.007	1.6 ^{#4}	<0.007	<0.007	-	-	<0.007	-	-	<0.007	<0.007	<0.007
Vinyl chloride Chloroethane 1,1-dichloroethene	mg/kg mg/kg mg/kg	0.006 0.01 0.01	2.2 ^{#5} 2,100 ^{#4} 92 ^{#4}	<0.006 <0.01 <0.01	<0.006 <0.01 <0.01	-	-	<0.006 <0.01 <0.01	-	-	<0.006 <0.01 <0.01	<0.006 <0.01 <0.01	<0.006 <0.01 <0.01
Dichloromethane trans-1,2-dichloroethene	mg/kg mg/kg	0.01	560 ^{#4} 81 ^{#4} 300 ^{#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
1,1-dichloroethane cis-1,2-dichloroethene Chloroform	mg/kg mg/kg	0.008 0.006 0.008	850 ^{#4} 47 ^{#4} 2300 ^{#2}	<0.008 <0.006 <0.008	<0.008 <0.006 <0.008	-	-	<0.008 <0.006 <0.008	-	-	<0.008 <0.006 <0.008	<0.008 <0.006 <0.008	<0.008 <0.006 <0.008
1,1,1-trichloroethane Carbon tetrachloride	mg/kg mg/kg mg/kg	0.008	350 ^{#1} 3,000 ^{#1} 14 ^{#1}	<0.007 <0.01	<0.007 <0.01	-	-	<0.007 <0.01	-	-	<0.007 <0.01	<0.008 <0.007 <0.01	<0.007 <0.01
Trichloroethene 1,1,2-trichloroethane Tetrachloroethene	mg/kg mg/kg mg/kg	0.009 0.01 0.005	3.4*5 400*4 130*5	<0.009 <0.01 <0.005	<0.009 <0.01 <0.005	-	-	<0.009 <0.01 <0.005	-	-	<0.009 <0.01 <0.005	<0.009 <0.01 <0.005	<0.009 <0.01 <0.005
2,2-dichloropropane	mg/kg	0.01		<0.01	<0.01	-	-	<0.01	-	-	<0.01	<0.01	<0.01
Bromochloromethane 1,1-dichloropropene 1,2-dichloroethane	mg/kg mg/kg mg/kg	0.01 0.01 0.005	630 ^{#2}	<0.01 <0.01 <0.005	<0.01 <0.01 <0.005	-	-	<0.01 <0.01 <0.005	-	-	<0.01 <0.01 <0.005	<0.01 <0.01 <0.005	<0.01 <0.01 <0.005
1,2-dichloropropane Dibromomethane	mg/kg mg/kg	0.01	12 ^{#4} 99 ^{#2}	<0.01 <0.009	<0.01	-	-	<0.01	-	-	<0.01	<0.01	<0.01 <0.009
Bromodichloromethane cis-1,3-dichloropropene trans-1,3-dichloropropene	mg/kg mg/kg mg/kg	0.007 0.01 0.01	1.3*2	<0.007 <0.01 <0.01	<0.007 <0.01 <0.01	-	-	<0.007 <0.01 <0.01	-	-	<0.007 <0.01 <0.01	<0.007 <0.01 <0.01	<0.007 <0.01 <0.01
1,3-dichloropropane Chlorodibromomethane	mg/kg mg/kg	0.007 0.01	23,000 ^{#2} 39 ^{#2}	<0.007 <0.01	<0.007 <0.01	-	-	<0.007 <0.01	-	-	<0.007 <0.01 <0.01	<0.007 <0.01 <0.01	<0.007 <0.01
1,1,1,2-tetrachloroethane Styrene Bromoform	mg/kg mg/kg mg/kg	0.01 0.01 0.01	560 ^{#1} 180,000 ^{#4} 3,100 ^{#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
Isopropylbenzene 1,1,2,2-tetrachloroethane	mg/kg mg/kg	0.005	7,700 ^{#4} 1,100 ^{#1}	<0.005 <0.01	<0.005 <0.01	-	-	<0.005 <0.01 <0.016	-	-	<0.005 <0.01	<0.005 <0.01 <0.016	<0.005 <0.01
1,2,3-trichloropropane n-propylbenzene 1,3,5-trimethylbenzene	mg/kg mg/kg mg/kg	0.016 0.01 0.008	0.11 ^{#2} 11,000 ^{#4} 1,500 ^{#2}	<0.016 <0.01 <0.008	<0.016 <0.01 <0.008	-	-	<0.01 <0.008	-	-	<0.016 <0.01 <0.008	<0.01 <0.008	<0.016 <0.01 <0.008
tert-butylbenzene 1,2,4-trimethylbenzene	mg/kg mg/kg	0.014	120,000 ^{#2} 220 ^{#4}	<0.014 <0.009 <0.01	<0.014 <0.009 <0.01	-	-	<0.014 <0.009 <0.01	-	-	<0.014 <0.009 <0.01	<0.014 <0.009 <0.01	<0.014 <0.009 <0.01
sec-butylbenzene p-isopropyltoluene n-butylbenzene	mg/kg mg/kg mg/kg	0.01 0.01 0.011	120,000 ^{#2} 58,000 ^{#2}	<0.01 <0.011	<0.01 <0.011	-	-	<0.01 <0.011	-	-	<0.01 <0.011	<0.01 <0.011	<0.01 <0.011
1,2-dibromo-3-chloropropane Hexachlorobutadiene IH	mg/kg mg/kg	0.014	0.064 ^{#2} 120 ^{#1}	<0.014 <0.02	<0.014 <0.02	<0.1	<0.1	<0.014 <0.02	<0.1	<0.1	<0.014 <0.02	<0.014 <0.02	<0.014 <0.02
Naphthalene Acenaphthylene	mg/kg mg/kg	0.009	1,100 ^{#1} 100,000 ^{#1}	<0.009 <0.012	<0.009 <0.012	<0.009 <0.012	<0.009 <0.012	<0.009 <0.012	<0.009 <0.012	<0.009 <0.012	<0.009 <0.012	<0.009 <0.012	<0.009 <0.012
Acenaphthene Fluorene Phenanthrene	mg/kg mg/kg	0.008 0.01 0.015	100,000 ^{#1} 71,000 ^{#1}	<0.008 <0.01 <0.015	<0.008 <0.01 <0.015	<0.008 <0.01 <0.015	<0.008 <0.01 <0.015	<0.008 <0.01 <0.015	<0.008 <0.01 <0.015	<0.008 <0.01 <0.015	<0.008 <0.01 <0.015	<0.008 <0.01 <0.015	<0.008 <0.01 <0.015
Anthracene Fluoranthene	mg/kg mg/kg mg/kg	0.016 0.017	23,000 ^{#1} 540,000 ^{#1} 23,000 ^{#1}	<0.016 <0.017	<0.016 <0.017	<0.016 <0.017	<0.016 <0.017	<0.016 0.0202	<0.016 <0.017	<0.016 <0.017	<0.016 <0.017	<0.016 <0.017	<0.016 <0.017
Pyrene Benz(a)anthracene	mg/kg mg/kg	0.015 0.014 0.01	54,000 ^{#1} 180 ^{#1}	<0.015 <0.014 <0.01	<0.015 <0.014 <0.01	<0.015 <0.014 <0.01	<0.015 <0.014 <0.01	0.0315 0.0184 0.0189	<0.015 <0.014 <0.01	<0.015 <0.014 <0.01	<0.015 <0.014 <0.01	<0.015 <0.014 <0.01	<0.015 <0.014 <0.01
Chrysene Benzo(a) pyrene Indeno(1,2,3-c,d)pyrene	mg/kg mg/kg mg/kg	0.015 0.018	350 ^{#1} 36 ^{#1} 510 ^{#1}	<0.015 <0.018	<0.015 <0.018	<0.015 <0.018	<0.015 <0.018	<0.015 <0.018	<0.015 <0.018	<0.015 <0.018	<0.015 <0.018	<0.015 <0.018	<0.015 <0.018
Dibenz(a,h)anthracene Benzo(g,h,i)perylene	mg/kg mg/kg	0.023 0.024 0.015	3.6 ^{#1} 4,000 ^{#1}	<0.023 <0.024 <0.015	<0.023 <0.024 <0.015	<0.023 <0.024 <0.015	<0.023 <0.024 <0.015	<0.023 <0.024 0.0204	<0.023 <0.024 <0.015	<0.023 <0.024 <0.015	<0.023 <0.024 <0.015	<0.023 <0.024 <0.015	<0.023 <0.024 <0.015
Benzo(b)fluoranthene Benzo(k)fluoranthene PAH 16 Total	mg/kg mg/kg mg/kg	0.014 0.118	45 ^{#1} 1,200 ^{#1}	<0.014 <0.118	<0.014 <0.118	<0.014 <0.118	<0.014 <0.118	<0.014 <0.118	<0.014 <0.118	<0.014 <0.118	<0.014 <0.118	<0.014 <0.118	<0.015 <0.014 <0.118
PAH 17 Total OC	mg/kg	10		<10	<10	<10	<10	<10	<10	<10	-	-	-
Coronene 2-methylnaphthalene 4-bromophenyl phenyl ether	mg/kg mg/kg mg/kg	0.2 0.1 0.1	3,000*2	<0.1 <0.1	<0.1 <0.1	<0.2 <0.1 <0.1	<0.2 <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
4-chlorophenyl phenyl ether Azobenzene	mg/kg 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 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1
Bis(2-chloroethoxy) methane Bis(2-chloroethyl)ether Carbazole	mg/kg mg/kg mg/kg	0.1 0.1 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 <0.1	<0.1 <0.1 <0.1	<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 Hexachlorocyclopentadiene	mg/kg mg/kg	0.1	1,200 ^{#2} 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 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1
Hexachloroethane enolics 2-methylphenol	mg/kg 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
2-nitrophenol 2,4-dimethylphenol	mg/kg 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 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1
4-chloro-3-methylphenol 4-methylphenol 4-nitrophenol	mg/kg mg/kg mg/kg	0.1 0.1 0.1	82,000 ^{#2} 180,000 ^{#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 <0.1	<0.1 <0.1 <0.1	<0.1 <0.1 <0.1
Phenol 2-chloronaphthalene	mg/kg mg/kg	0.01	1,300 ^{#1} 2,200 ^{#4}	<0.01 <0.1	<0.01 <0.1	0.011 <0.1	<0.01 <0.1	<0.01 <0.1	<0.01 <0.1	<0.01 <0.1	<0.01 <0.1	<0.01 <0.1	<0.01 <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

Key

XXX

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

			Sample ID Sample Depth Date Sampled Lab Report Number	BH101 1 13/04/2023 230418-53	BH102 1 14/04/2023 230421-102	BH103 1.5 14/04/2023 230421-102	BH104 1 18/04/2023 230421-103	BH105 1 18/04/2023 230421-103	BH-106 4 16/04/2023 230426-63	BH107 1.5 25/04/2023 230502-27	BH108 1 25/04/2023 230502-27	BH-109 1 20/04/2023 230426-63
			GAC_HH_COM/ IND_SLOAM_>3.48%TOC									
hemical Name	Units	MDL										
CBs Tetrachlorobiphenyl, 3,3,4,4- (PCB 77) Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg mg/kg	0.003	0.16 ^{#2} 0.048 ^{#2}	-	-	-	-	-	-	<0.003 <0.003	<0.003 <0.003	-
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105) Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.003	0.49#2	-	-	-	-	-	-	<0.003 <0.003 <0.003	<0.003	-
PCB 118 Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg mg/kg	0.003	0.5 ^{#2} 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, 3,3,4,4,5- (PCB 126)	mg/kg mg/kg	0.003	0.49 ^{#2} 0.00015 ^{#2}	-	-	-	-	-	-	<0.003 <0.003 <0.003	<0.003	-
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156) Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg mg/kg	0.003	0.5 ^{#2} 0.5 ^{#2}	-	-	-	-	-	-	< 0.003	< 0.003	-
Hexachlorobiphenyl, 2,3,4,4,5,5- (PCB 167) Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169) Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg mg/kg	0.003	0.51 ^{#2} 0.00051 ^{#2}	-	-	-	-	-	-	<0.003 <0.003	<0.003 <0.003 <0.003	-
Total PCB WHO 12	mg/kg mg/kg	0.003	0.52*2				- 0.002			<0.003	< 0.036	
PCB 28 PCB 52	mg/kg 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 <0.003	<0.003	<0.003
PCB 101 PCB 138	mg/kg 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 PCB 180	mg/kg 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
Total PCB 7 Congeners mino Aliphatics	mg/kg	0.021	#2	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021
N-nitrosodi-n-propylamine nilines	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
2-nitroaniline 3-nitroaniline	mg/kg 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
4-chloroaniline 4-nitroaniline	mg/kg mg/kg	0.1	11 ^{#2} 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	<0.1 <0.1	<0.1 <0.1
xplosives 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 Nitrobenzene	mg/kg mg/kg	0.1	1,900 ^{#4} 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	<0.1 <0.1	<0.1 <0.1
lalogenated Benzenes 1,3,5-Trichlorobenzene	mg/kg	0.02	130#1	-	-	-	-	-	-	<0.02	<0.02	-
Chlorobenzene Bromobenzene	mg/kg mg/kg	0.005 0.01	290 ^{#1} 520 ^{#4}	-	-	-	-	-	-	<0.005 <0.01	<0.005 <0.01	-
2-chlorotoluene 4-chlorotoluene	mg/kg mg/kg	0.009	23,000 ^{#2} 23,000 ^{#2}	-	-	-	-	-	-	<0.009 <0.01	<0.009 <0.01	-
1,3-dichlorobenzene 1,4-dichlorobenzene	mg/kg mg/kg	0.008 0.005	170 ^{#1} 25,000 ^{#1}	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.008 <0.005	<0.008 <0.005	<0.1 <0.1
1,2-dichlorobenzene 1,2,4-trichlorobenzene	mg/kg mg/kg	0.01 0.02	11,000 ^{#1} 1,300 ^{#1}	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.01 <0.02	<0.01 <0.02	<0.1 <0.1
1,2,3-trichlorobenzene Hexachlorobenzene	mg/kg mg/kg	0.02	590 ^{#1} 120 ^{#1}	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.02 <0.1	<0.02 <0.1	<0.1
alogenated Hydrocarbons Dichlorodifluoromethane	mg/kg	0.006	370 ^{#2}	-	-	-	-	-	-	<0.006	<0.006	-
Bromomethane Trichlorofluoromethane	mg/kg mg/kg	0.01 0.006	30 ^{#2} 350,000 ^{#2}	-	-	-	-	-	-	<0.01 <0.006	<0.01 <0.006	-
1,2-dibromoethane alogenated Phenols	mg/kg	0.01	0.16#2	-	-	-	-	-	-	<0.01	<0.01	-
2-chlorophenol 2,4-dichlorophenol	mg/kg mg/kg	0.1	5,800 ^{#2} 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	<0.1 <0.1	<0.1 <0.1
2,4,5-trichlorophenol 2,4,6-trichlorophenol	mg/kg mg/kg	0.1	82,000 ^{#2} 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	<0.1 <0.1	<0.1 <0.1
Pentachlorophenol hthalates	mg/kg	0.1	400 ^{#1}	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Bis(2-ethylhexyl) phthalate Butyl benzyl phthalate	mg/kg mg/kg	0.1	86,000 ^{#4} 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 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1
Di-n-butyl phthalate Di-n-octyl phthalate	mg/kg mg/kg	0.1	15,000 ^{#4} 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	<0.1 <0.1	<0.1 <0.1	<0.1
Diethylphthalate Dimethyl phthalate	mg/kg 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
olvents Carbon disulfide	mg/kg	0.007	47 ^{#1}				_			<0.007	<0.007	
Isophorone POCAS	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
ANC at pH 4 ANC pH_6 dry soil	mol/kg mol/kg	0.03		0.786 0.0445	0.265 <0.03	0.813 0.0574	0.257 <0.03	4.17 0.0842	0.452 0.0551	0.071 - 0.0713 <0.03	0.316 0.0328	<0.03
Metals Antimony	mg/kg	0.03	7,500 ^{#4}	<0.6	0.013	0.0374	4.78	<0.6	<0.6	<0.6	<0.6	<0.6
Arsenic Barium	mg/kg mg/kg	0.6	640 ^{#3} 22,000 ^{#4}	8.08	6.7 54.4	17.6 58.3	9.73 76.5	6.86	13.6	7.98 46.2	13.6	2.01
Beryllium Boron	mg/kg mg/kg	0.01	12 ^{#1} 240,000 ^{#1}	0.452 2.45	0.462 3.18	1.17	0.424 4.85	0.451 3.14	0.724 0.989	0.496 1.99	1.05	0.267
Cadmium Chromium (III+VI)	mg/kg mg/kg	0.02	410 ^{#3} 8,600 ^{#1}	1.24	1.01	5.66 12	1.79	1.22	1.44	1.16	2.9	0.503 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 Magnesium	mg/kg mg/kg	0.7	2,330 ^{#3}	12.5	70.1	15.4	-0.1	16.3	18.3	22.3 1260	23.1 2560	6.33
Mercury Molybdenum	mg/kg mg/kg	0.1	350 ^{#2} 17,000 ^{#4}	<0.1 0.719	<0.1 0.092	<0.1 0.05	<0.1 2.34	<0.1 0.433	<0.1 0.664	<0.1 0.645	<0.1 0.936	<0.1 0.639
Nickel Selenium	mg/kg mg/kg	0.2	980 ^{#1} 12,000 ^{#1}	30.8 1.54	26 <1	139 <1	50.1 1.02	31.2 <1	55.7 <1	36 1.24	69.5 1.34	15.9 2.01
Vanadium Zinc	mg/kg mg/kg	1.9	9,000 ^{#1} 730,000 ^{#1}	13.8 122	16.1 112	19.8 248	15.1 236	14.1 89.3	16.9 153	21.2 83.6	33 164	3.79 49.9
Chromium (hexavalent) Chromium (Trivalent)	mg/kg mg/kg	0.6	49 ^{#3} 8,600 ^{#1}	<0.6 10.5	<0.6 15.6	<0.6 12	<0.6 24.8	<0.6 8.76	<0.6 17.8	<0.6 12	<0.6 17.5	<1.2 3.58
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
Sulphur Cyanide Total	mg/kg mg/kg	200	150 ^{#2}	427	284 <1	<200 <1	389 <1	320 <1	232 <1	<200 <1	227 <1	600 <1
Fluoride Sulphate	mg/kg mg/kg	5 48	47,000*2	<5 -	<5 465	<5 122	<5 -	<5 -	<5	<5 -	<5 -	-
Chloride Nitrate (as NO3-)	mg/kg mg/kg	20 1	1,900,000*2	-	-	-	38	<20	30	20 1.9	24 6.46	-
Moisture Sulphate (soluble) pH (Lab)	% g/L pH_Units	0.0002		15 0.0199 8.44	33 0.0621 7.75	16 0.016 8.5	42 0.0156 8.04	13 0.0113 9.01	16 0.0514 8.45	16 <0.004 8.35	20 0.0118 8.59	84 0.0292 5.54
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 Gravimetric Quantification	mass %	0.001		-	<0.001	-	-	-	-	-	-	-
Asbestos Quantification - PCM Evaluation Asbestos Quantification - Total - %	%	0.001 0.001		-	<0.001 <0.001	-	-	-	-	-	-	-
urrogate Toluene-D8	%			81	95.6	95.6	94.6	95.9	75.2	98.6	97.2	92.8
Chrysene-d12 (surr.) d10-Acenaphthene (SS)	% %			74.9 83.9	92.8 96.4	93.1 89.4	92.6 94.1	96.5 93.5	104 93.9	75.3 90.1	75.9 90.6	104 99
d10-Phenanthrene (SS)	%	1 -		81.8	111	96.6	110	101	97.8	84.5	85.4	106
d8-Naphthalene (SS) % Surrogate Recovery	%			87.8 106	87.1 96.7	92.6 100	85 105	93.9 90.9	96.4 104	94.6 91.7	94.5 96.4	96 94

(blank): No assessment criteria available
- : Not analysed

Key

XXX

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

			Sample ID Sample Depth Date Sampled Lab Report Number		BH111 1.5 27/04/2023 230510-54	BH112 0.6 12/04/2023 230418-53	BH112 1.6 12/04/2023 230418-53	BH113 2 25/04/2023 230502-27	BH-114 1 21/04/2023 230426-63	BH-115 3 20/04/2023 230426-63	BH116 7 11/05/2023 230518-59	BH117 4.5 10/05/2023 230515-36	BH118 3.5 12/05/202 230518-5
			GAC_HH_COM/ IND_SLOAM_>3.48%TOC										
nemical Name	Units	MDL											
Tetrachlorobiphenyl, 3,3,4,4- (PCB 77) Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg 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
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg	0.003	0.048 ^{#2} 0.49 ^{#2}	< 0.003	< 0.003	-	-	< 0.003	-	-	< 0.003	< 0.003	< 0.003
Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114) PCB 118	mg/kg mg/kg	0.003	0.5 ^{#2} 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) Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg mg/kg	0.003	0.49 ^{#2} 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
Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 156) Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg mg/kg	0.003	0.5 ^{#2} 0.5 ^{#2}	<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) Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	mg/kg mg/kg	0.003	0.51 ^{#2} 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
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189) Total PCB WHO 12	mg/kg mg/kg	0.003	0.52#2	<0.003 <0.036	<0.003 <0.036	-	-	<0.003 <0.036	-	-	<0.003 <0.036	<0.003 <0.036	<0.003
PCB 28 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 <0.003 <0.003	<0.003
PCB 101	mg/kg 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 PCB 153	mg/kg 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	<0.003	<0.003 <0.003	<0.003
PCB 180 Total PCB 7 Congeners	mg/kg mg/kg	0.003		<0.003 <0.021	<0.003 <0.021	<0.003 <0.021	<0.003 <0.021	<0.003 <0.021	<0.003 <0.021	<0.003 <0.021	<0.003 <0.021	<0.003 <0.021	<0.003
nino 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
nilines 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 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 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
cplosives 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 Nitrobenzene	mg/kg mg/kg	0.1	1,900 ^{#4} 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	<0.1	<0.1 <0.1	<0.1 <0.1
alogenated Benzenes 1,3,5-Trichlorobenzene	mg/kg	0.02	130#1	<0.02	<0.02	-	-	<0.02	-	-	<0.02	<0.02	<0.02
Chlorobenzene Bromobenzene	mg/kg mg/kg	0.005	290 ^{#1} 520 ^{#4}	<0.005 <0.01	<0.005 <0.01	-	-	<0.005 <0.01	-	-	<0.005 <0.01	<0.005 <0.01	<0.005
2-chlorotoluene 4-chlorotoluene	mg/kg mg/kg	0.009	23,000 ^{#2} 23,000 ^{#2}	<0.009	<0.009 <0.01	-	=	<0.009 <0.01	-	-	<0.009	<0.009 <0.01	<0.009
1,3-dichlorobenzene 1,4-dichlorobenzene	mg/kg mg/kg	0.008	170 ^{#1}	<0.008	<0.008 <0.005	<0.1	<0.1	<0.008 <0.005	<0.1 <0.1	<0.1	<0.008	<0.008 <0.005	<0.008
1,2-dichlorobenzene	mg/kg	0.01	25,000 ^{#1} 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 1,2,3-trichlorobenzene	mg/kg mg/kg	0.02	1,300 ^{#1} 590 ^{#1}	<0.02 <0.02	<0.02 <0.02	<0.1	<0.1	<0.02 <0.02	<0.1	<0.1	<0.02 <0.02	<0.02 <0.02	<0.02 <0.02
Hexachlorobenzene alogenated Hydrocarbons	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
Dichlorodifluoromethane Bromomethane	mg/kg mg/kg	0.006	370 ^{#2} 30 ^{#2}	<0.006 <0.01	<0.006 <0.01	-	-	<0.006 <0.01	-	-	<0.006 <0.01	<0.006 <0.01	<0.006
Trichlorofluoromethane 1,2-dibromoethane	mg/kg mg/kg	0.006	350,000 ^{#2} 0.16 ^{#2}	<0.006 <0.01	<0.006 <0.01	-	-	<0.006 <0.01	-	-	<0.006 <0.01	<0.006 <0.01	<0.006
alogenated Phenois [2-chlorophenoi	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-dichlorophenol	mg/kg	0.1	5,800 ^{#2} 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 2,4,6-trichlorophenol	mg/kg mg/kg	0.1	82,000 ^{#2} 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	<0.1 <0.1	<0.1
Pentachlorophenol hthalates	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
Bis(2-ethylhexyl) phthalate Butyl benzyl phthalate	mg/kg mg/kg	0.1	86,000 ^{#4} 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	<0.1	<0.1 <0.1	<0.1 <0.1	<0.1
Di-n-butyl phthalate Di-n-octyl phthalate	mg/kg mg/kg	0.1	15,000 ^{#4} 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 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1
Diethylphthalate Dimethyl phthalate	mg/kg 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
plvents			, =#1	<0.007		×0.1	10.1		×0.1	30.1			
Carbon disulfide Isophorone	mg/kg mg/kg	0.007	47 ^{#1} 2,400 ^{#2}	<0.007	<0.007 <0.1	<0.1	<0.1	<0.007 <0.1	<0.1	<0.1	<0.007 <0.1	<0.007 <0.1	<0.007 <0.1
POCAS 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 etals	mol/kg	0.03		0.088	<0.03	0.072	0.0371	0.048	0.0513	0.0584	-	-	-
Antimony Arsenic	mg/kg mg/kg	0.01	7,500 ^{#4} 640 ^{#3}	<0.6 5.03	<0.01 13.9	<0.6 3.21	<0.6 6.15	0.945 18.2	<0.6 9.39	<0.6	2.62	1.2	13.3
Barium Beryllium	mg/kg mg/kg	0.6	22,000 ^{#4} 12 ^{#1}	23.2 0.256	44.8 0.887	35.2 0.429	34.2 0.413	20.5 0.512	28.7 1.41	13.4 0.327	26.4 0.91	49.7 1.18	13.7 1.61
Boron Cadmium	mg/kg mg/kg	0.7	240,000*1	2.46 0.961	2.74	3.95 1.19	3.05	<0.7 1.53	2.34	1.23	0.425	0.853	3.44
Chromium (III+VI)	mg/kg	0.9	410 ^{#3} 8,600 ^{#1}	6.68	19.2	10.2	10.3	26.4	8.35	14	35.9	9.62	17.1
Copper Lead	mg/kg mg/kg	0.7	68,000 ^{#1} 2,330 ^{#3}	12.3 9.72	22 27.4	15 11.4	11.4 13.6	20.4 32.8	15.9 16	11.8 48	23.4	7.15 9.65	46.1 84.4
Magnesium Mercury	mg/kg mg/kg	0.1	350 ^{#2}	2910 <0.1	- <1	<0.1	<0.1	329 <0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Molybdenum Nickel	mg/kg mg/kg	0.03	17,000 ^{#4} 980 ^{#1}	0.401 26.6	<0.03 75.4	0.403 30.8	0.5 28.5	1.23 84.8	0.586 85.2	0.592 29.4	10.5	7.95	124
Selenium Vanadium	mg/kg mg/kg	1 0.2	12,000 ^{#1} 9,000 ^{#1}	<1 11.1	<10 29.7	1.03	<1 18.8	<1 26.2	<1 17	<1 12.2	<1 16.9	<1 4.87	<1 19.6
Zinc Chromium (hexavalent)	mg/kg	1.9	730,000#1	61.2	157 <0.6	72.1	72.7	20.2 181 <0.6	180	94.6	20.4	24.2	328
Chromium (Trivalent)	mg/kg mg/kg	0.6	49 ^{#3} 8,600 ^{#1}	-	<0.6 19.2	<0.6 10.2	<0.6 10.3	<0.6 26.4	<0.6 8.35	<0.6 14	<0.6 35.9	<0.6 9.62	<0.6 16.3
ganics Organic Matter TOC	%	0.35		<0.35 <0.2	0.517 0.3	<0.35 <0.2	1.81 1.05	<0.35 <0.2	<0.35 <0.2	<0.35 <0.2	<0.35	<0.35	<0.35
organics											-		
Sulphur Cyanide Total	mg/kg mg/kg	200	150 ^{#2}	366 <1	<200 <1	<200	306 <1	256 <1	<200 <1	259 <1	<200	<200 <1	<200
Fluoride Sulphate	mg/kg mg/kg	5 48	47,000*2	<5 -	<5 <48	<5 -	<5 -	<5 -	<5	<5	<48	50.4	51.4
Chloride Nitrate (as NO3-)	mg/kg mg/kg	20	1,900,000*2	<20 4.2	<20	-	-	<20 <1	<20	<20	-	-	+==
Moisture Sulphate (soluble)	% g/L	0.0002	.,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	12 0.0114	15 0.0158	9.4 0.032	19 <0.004	7.7 0.0126	14 0.0165	13 0.0295	19 0.013	13 0.0167	18 0.019
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
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 Gravimetric Quantification	mass %	0.001		-	-	-	-	-	-	-	-	-	-
Asbestos Quantification - PCM Evaluation Asbestos Quantification - Total - %	%	0.001		-	-	-	-	-	-	-	-	-	-
rrogate Toluene-D8	%			100	106	109	84.9	97.9	96.2	91.5	101	100	99.9
Chrysene-d12 (surr.) d10-Acenaphthene (SS)	%			74.5 87.4	97.7 100	79.9 82.2	78.6 83.4	80.6 94.1	89 87.1	95.5 90.6	101 94	92.8 91.4	79.3 91.4
		1		83.4	95.1	81.8	82.7	88.4	90	93.5	93.5	85	86.3
d10-Phenanthrene (SS) d8-Naphthalene (SS)	%			90.1	107	85.8	86.8	99.3	89	92.9	93.2	96	93.3

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

			Field_ID Sample_Depth_Range Sampled_Date_Time Lab_Report_Number	BH-301 1 16/04/2023	8HSS01 7.5 16/05/2023	BHSS02 8 05/05/2023	BHSS03 4 10/05/2023	8HSS04 3.5 03/05/2023	BHSS05 2.5 03/05/2023	BHT05 5 01/06/2023	BHT07 5.5 31/05/2023	BHT09 6 29/05/2023	BHT1 5 13/06/2023	BHT10 5.5 25/05/20
			GAC_HH_COM/IND_SLOAM_>3.48%TOC											
Sulphate, Total Potential as SO4	output unit g/kg	EQL		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 Perylene d12 PAH 16 Total + Coronene	% % mg/kg	0.7		91.5 -0.318	83.7	78.6	77.5	2.99 94.8	1.26 110	74.5	91.1	76.3	84.5	80.9
PH	mg/kg	5		255				-6	-5					
A Asbestos Actinolite Asbestos Anthophyllite	No units No units			0	0	0	0	0	0	0	0	0	0	0
CEN 10:1 - Dissolved solids, Total (meter) WAC	mg/kg mg/kg	100		. 10				1380 10	988 10					
Asbestos Tremolite etroleum Hydrocarbons >C10-C44 Miphatics & Aromatics	No units mg/kg	10		986 - 1000	26.3	13.2	<10	<10	<10	<10	<10	<10	0 <10	0
pH	pH_Units	10		780 - 1000		13.2		8.28	8.22					
Electrical Conductivity PH >C10-C44 Miphatics	µS/cm mg/kg			700 - 749	23.3	10.6		180	130					
>EC10-EC44 Aromatics >C5-C40	mg/kg mg/kg	5		200 - 238 1040	- 5	- 6	- 6	- 6	- 5	- 5	-5	- 5	-5	- 6
GRO >C5-C10 EPH >C10-C40 >C5-C6 Aliphatics	mg/kg mg/kg mg/kg	0.02 35 0.01		<0.02 1040 <0.01	<0.02 <0.01	<0.02	<0.02 <0.01	<0.02	<0.02	<0.02	<0.02	<0.02 - <0.01	<0.02 - <0.01	<0.02
>C5-C10 Aliphatics >C6-C8 Aliphatics	mg/kg mg/kg	0.05	12,000 ^{r1}	<0.05 <0.01	<0.05 <0.01	<0.05	<0.05 <0.01	<0.05 <0.01	<0.05 <0.01	<0.05 <0.01	<0.05 <0.01	<0.05 <0.01	<0.05 <0.01	<0.05
>C8-C10 Aliphatics >C10-C12 Aliphatics	mg/kg mg/kg	0.01	11,000 ^{e1} 47,000 ^{e1}	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>C12-C16 Miphatics >C16-C21 Miphatics >C21-C35 Miphatics	mg/kg mg/kg mg/kg	1	90.000 ⁴¹	14.2 580 - 600	<1 <1 20	<1 <1 10.2	d d	- d - d	d d	3.63	- d - d - d	<1 <1 3.95	d d	- d - d
>C35-C44 Aliphatics >C5-C10 Aromatics	mg/kg mg/kg	0.05	1,800,000*1	154 - 200 <0.05	3.23 <0.05	<1 <0.05	<1 <0.05	<1 <0.05	<1 <0.05	<0.05	<1 <0.05	<0.05	<1 <0.05	<1 <0.05
>EC5-EC7 Aromatics >EC7-EC8 Aromatics >EC8-EC10 Aromatics	mg/kg mg/kg mg/kg	0.01 0.01 0.01	86,000 ^{r1} 180,000 ^{r1} 17,000 ^{r1}	<0.01 <0.01 <0.01	<0.01 <0.01 <0.01	<0.01 <0.01 <0.01	<0.01 <0.01 <0.01	<0.01 <0.01 <0.01	<0.01 <0.01 <0.01	<0.01 <0.01 <0.01	<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 >EC12-EC16 Aromatics	mg/kg mg/kg	1	34.000 ^{e1} 38.000 ^{e1}	<1 <1	<1	- d - d	4	4	- 4		<1 <1	- d - d	4	<1
>EC16-EC21 Aromatics >EC21-EC35 Aromatics >EC35-EC44 Aromatics	mg/kg mg/kg mg/kg	1	28.000 ^{rt} 28.000 ^{rt} 28.000 ^{rt}	9.05 200 - 206 22.5	1.65	1.53	4	1.41	1.04	1.73	d d	<1 1.03 <1	d d	d d
>EC40-EC44 Aromatics	mg/kg mg/kg	1 10		<1 986 - 1000	23.3	10.6	<10	<1 <10	<1 <10	<1 <10	<10	<10	<1 <10	<1 <10
Benzene Toluene	mg/kg mg/kg	0.001	98 ^{rs} 180.000 ^{r1}	<0.18 <0.14	<0.009	<1.8	<0.009	<0.009	<0.009 <0.007	<0.01	<0.001 0.00121	<0.02 <0.02	<0.001	<0.01
Ethylbenzene Xylene (m & p)	mg/kg mg/kg	0.001	27.000 ^{#1}	<0.08 <0.2	<0.004 <0.01	<0.8 <2	<0.004 <0.01	<0.004 <0.01	<0.004 <0.01	<0.01 <0.02	<0.001 <0.002	<0.02 <0.04	<0.001	<0.01
Xylene Total Xylene (o) Total BTEX	mg/kg mg/kg mg/kg	0.02 0.002 0.007	30,000 ^{e1}	<0.4 <0.2 <0.8	<0.02 <0.01 <0.04	- 04 2 8	<0.02 <0.01 <0.04	<0.02 <0.01 <0.04	<0.02 <0.01 <0.04	<0.2 <0.02 <0.07	<0.02 <0.002 <0.007	<0.4 <0.04 <0.14	<0.02 <0.002 <0.007	<0.2 <0.02 <0.07
kygenates MTBE	mg/kg	0.0005	24,000 ⁴⁴	<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 hlorinated Hydrocarbons Chloromethane	mg/kg mg/kg	0.001	1.6**		<0.01	<1.4	<0.01	<0.01	<0.01	<0.01	<0.001	<0.02	<0.001	<0.01
Vinyl chloride Chloroethane	mg/kg mg/kg	0.0005	2.2 th		<0.006 <0.01	<1.2	<0.006	<0.006	<0.006 <0.01	<0.005	<0.0005 <0.001	<0.01 <0.02	<0.0005	<0.005
1,1-dichloroethene Dichloromethane trans-1,2-dichloroethene	mg/kg mg/kg mg/kq	0.0005 0.005 0.001	92 ^M 560 ^M	-	<0.01 <0.01 <0.01	- 2	<0.01 <0.01 <0.01	<0.01 <0.01 <0.01	<0.01 <0.01 <0.01	<0.005 <0.05 <0.01	<0.0005 <0.005 <0.001	<0.01 <0.1 <0.02	<0.0005 <0.005 <0.001	<0.005 <0.05 <0.01
1,1-dichloroethane cis-1,2-dichloroethene	mg/kg mg/kg	0.0005	81 ⁴⁴ 300 ⁴² 850 ⁴⁴ 47 ⁴⁴ 2300 ⁴²		<0.008 <0.006	<1.6	<0.008	<0.008 <0.006	<0.008 <0.006	<0.005 <0.005	<0.0005 <0.0005	<0.01 <0.01	<0.0005 <0.0005	<0.005
Chloroform 1,1,1-trichloroethane Carbon tetrachloride	mg/kg mg/kg	0.003 0.0005 0.0005	350 ^{e1} 3.000 ^{e1}	- :	<0.008 <0.007 <0.01	<1.6	<0.008 <0.007 <0.01	<0.008 <0.007 <0.01	<0.008 <0.007 <0.01	<0.005 <0.005	<0.003 <0.0005 <0.0005	<0.06 <0.01 <0.01	<0.003 <0.0005 <0.0005	<0.03 <0.005 <0.005
Trichloroethene 1,1,2-trichloroethane	mg/kg mg/kg mg/kg	0.001	14 ⁴⁷ 3.4 ⁴⁵ 400 ⁴⁴		<0.009	<1.8	<0.009	<0.009	<0.009 <0.01	<0.01	<0.001 <0.001	<0.02	<0.001 <0.001	<0.01
Tetrachloroethene IOC 2,2-dichloropropane	mg/kg mg/kg	0.002	130 ^{rs}		<0.005 <0.01	4	<0.005	<0.005	<0.005 <0.01	<0.02	<0.002	<0.04	<0.002	<0.02
Bromochloromethane 1,1-dichloropropene	mg/kg mg/kg	0.002	630*2		<0.01 <0.01	2	<0.01 <0.01	<0.01	<0.01 <0.01	<0.02 <0.005	<0.002 <0.0005	<0.04 <0.01	<0.002 <0.0005	<0.02 <0.005
1.2-dichloroethane 1.2-dichloropropane Dibromomethane	mg/kg mg/kg mg/kg	0.001 0.0005 0.001	1.7" 12" 99°2	-	<0.005 <0.01 <0.009	<1 <2 <1.8	<0.005 <0.01	<0.005 <0.01 <0.009	<0.005 <0.01 <0.009	<0.01 <0.005 <0.01	<0.001 <0.0005 <0.001	<0.02 <0.01 <0.02	<0.001 <0.0005 <0.001	<0.01 <0.005 <0.01
Bromodichloromethane cis-1,3-dichloropropene	mg/kg mg/kg	0.002	1.312		<0.007 <0.01	<1.4	<0.007	<0.007	<0.007 <0.01	<0.02 <0.005	<0.002 <0.0005	<0.04 <0.01	<0.002 <0.0005	<0.02
trans-1,3-dichloropropene 1,3-dichloropropane Chlorodibromomethane	mg/kg mg/kg mg/kg	0.001 0.001 0.002	23,000*2		<0.01 <0.007 <0.01	<1.4	<0.01 <0.007 <0.01	<0.01 <0.007 <0.01	<0.01 <0.007 <0.01	<0.01 <0.01 <0.02	<0.001 <0.001 <0.002	<0.02 <0.02 <0.04	<0.001 <0.001 <0.002	<0.01 <0.01 <0.02
1,1,1,2-tetrachloroethane Styrene	mg/kg mg/kg	0.001	39 ¹² 560 ¹¹ 180.000 ⁴⁴		<0.01 <0.01	2	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.002 <0.001 <0.002	<0.02 <0.04	<0.001	<0.01
Bromoform Isopropylbenzene 1,1,2,2-tetrachloroethane	mg/kg mg/kg mg/kq	0.002 0.002 0.002	3,100 ⁴⁴ 7,700 ⁴⁴ 1,100 ⁴¹	-	<0.01 <0.005 <0.01	4	<0.01 <0.005 <0.01	<0.01 <0.005 <0.01	<0.01 <0.005 <0.01	<0.055 <0.02 <0.02	<0.0055 <0.002 <0.002	<0.11 <0.04 <0.04	<0.002 <0.002 <0.002	<0.02 <0.02 <0.02
1,2,3-trichloropropane n-propylbenzene	mg/kg mg/kg	0.002	0.11 ² 11.000 ⁴⁴		<0.016 <0.01	<3.2	<0.016 <0.01	<0.016 <0.01	<0.016 <0.01	<0.02 <0.02	<0.002 <0.002	<0.04 <0.04	<0.002 <0.002	<0.02 <0.02
1,3,5-trimethylbenzene tert-butylbenzene 1,2,4-trimethylbenzene	mg/kg mg/kg mg/kg	0.002 0.002 0.003	1.500 ^{f2} 120.000 ^{f2}	- :	<0.008 <0.014 <0.009	<1.6 <2.8 <1.8	<0.008 <0.014 <0.009	<0.008 <0.014 <0.009	<0.008 <0.014 <0.009	<0.02 <0.02 <0.03	<0.002 <0.002 <0.003	<0.04 <0.04 <0.06	<0.002 <0.002 <0.003	<0.02 <0.02 <0.03
p-isopropyltoluene	mg/kg mg/kg	0.001	220 ^{F4} 120.000 ^{F2}		<0.01 <0.01	-2	<0.01	<0.01	<0.01 <0.01	<0.01	<0.001	<0.02	<0.001	<0.01
n-butylbenzene 1,2-dibromo-3-chloropropane Hexachlorobutadiene	mg/kg mg/kg	0.003 0.002 0.004	58,000 ⁶² 0.064 ⁶²	- 0.1	<0.011 <0.014 <0.02	<2.2 <2.8 <0.1	<0.011 <0.014 <0.02	<0.011 <0.014 <0.02	<0.011 <0.014 <0.02	<0.03 <0.02 <0.04	<0.003 <0.002 <0.004	<0.06 <0.04 <0.08	<0.003 <0.002 <0.004	<0.03 <0.02 <0.04
AH Naphthalene	mg/kg mg/kg	0.008	1.100 ⁴¹	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009	<0.008	<0.009	<0.008	<0.009
Acenaphthylene Acenaphthene Fluorene	mg/kg mg/kg mg/kq	0.012 0.008 0.01	100.000 ⁶¹ 100.000 ⁶¹	<0.012 <0.008 <0.01	<0.012 <0.008 <0.01	<0.012 <0.008 <0.01	<0.012 <0.008 <0.01	<0.012 <0.008 <0.01	<0.012 <0.008	<0.012 <0.008 <0.01	<0.012 <0.008 <0.01	<0.012 <0.008	<0.012 <0.008 <0.01	<0.012 <0.008 <0.01
Phenanthrene Anthracene	mg/kg mg/kg	0.015	71,000 ^{e1} 23,000 ^{e1} 540,000 ^{e1}	<0.015 <0.016	<0.015 <0.016	<0.015 <0.016	<0.015	<0.015 <0.016	<0.01 <0.015 <0.016	<0.015 <0.016	<0.015 <0.016	<0.01 <0.015 <0.016	<0.015 <0.016	<0.015
Fluoranthene Pyrene Benz(a)anthracene	mg/kg mg/kg mg/kg	0.017 0.015 0.014	23,000 ⁴¹ 54,000 ⁴¹	<0.017 <0.015 <0.014	<0.017 <0.015 <0.014	<0.017 <0.015 <0.014	<0.017 <0.015 <0.014	<0.017 <0.015 <0.014	<0.017 <0.015 <0.014	<0.017 <0.015 <0.014	<0.017 <0.015 <0.014	<0.017 <0.015 <0.014	<0.017 <0.015 <0.014	<0.017 <0.015 <0.014
Chrysene Benzo(a) pyrene	mg/kg mg/kg	0.01	180" 350" 36"	<0.01 <0.015	<0.01 <0.015	<0.01 <0.015	<0.01	<0.01 <0.015	<0.01 <0.015	<0.01 <0.015	<0.01 <0.015	<0.01 <0.015	<0.01	<0.01
Indeno(1,2,3-c,d)pyrene Dibenz(a,h)anthracene Benzo(g,h,i)perylene	mg/kg mg/kg mg/kq	0.018 0.023 0.024	510 ⁶¹ 3.6 ⁶¹	<0.018 <0.023 <0.024	<0.018 <0.023 <0.024	<0.018 <0.023 <0.024	<0.018 <0.023 <0.024	<0.018 <0.023 <0.024	<0.018 <0.023 <0.024	<0.018 <0.023 <0.024	<0.018 <0.023 <0.024	<0.018 <0.023 <0.024	<0.018 <0.023 <0.024	<0.018 <0.023 <0.024
Benzo(b)fluoranthene Benzo(k)fluoranthene	mg/kg mg/kg	0.015	4,000 ⁴¹ 45 ⁴¹ 1,200 ⁴¹	<0.015 <0.014	<0.015 <0.014	<0.015 <0.014	<0.015 <0.014	<0.015 <0.014	<0.015 <0.014	<0.015 <0.014	<0.015 <0.014	<0.015 <0.014	<0.015 <0.014	<0.015
PAH 16 Total PAH 17 Total VOC	mg/kg mg/kg	0.118 10		<0.118 <10	<0.118	<0.118	<0.118	<0.118 <10	<0.118 <10	<0.118	<0.118	<0.118	<0.118	<0.118
Coronene	mg/kg mg/kg mg/kg	0.2	3.000 12	<0.2 <0.1 <0.1	- -(0.1	<0.1	<0.1	<0.2 <0.1	<0.2 <0.1 <0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-bromophenyl phenyl ether 4-chlorophenyl phenyl ether Azobenzene	mg/kg	0.1 0.1 0.1	26'2	<0.1 <0.1 <0.1	-0.1 -0.1 -0.1	<0.1 <0.1 <0.1	40.1 40.1 40.1	<0.1 <0.1 <0.1	<0.1 <0.1 <0.1	-0.1 -0.1 -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 Bis (2-chloroethyl)ether	mg/kg mg/kg mg/kg	0.1	2,500 ⁶² 1, ⁶²	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<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 Dibenzofuran Hexachlorocyclopentadiene	mg/kg 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 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1
Hexachloroethane henolics	mg/kg mg/kg	0.1	7.5°2 120°4	<0.1 <0.1	<0.1 <0.1	<0.1	<0.1 <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-methylphenol 2-nitrophenol 2.4 dimethylphenol	mg/kg mg/kg	0.1	Use Cresol Total ⁶⁴	<0.1 <0.1	<0.1 <0.1	<0.1	<0.1 <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 4-chloro-3-methylphenol 4-methylphenol	mg/kg mg/kg mg/kg	0.1 0.1 0.1	30.000 ⁶⁴ 82.000 ⁶² Use Cresol Total ⁶⁴	<0.1 <0.1 <0.1	-0.1 -0.1 -0.1	<0.1 <0.1 <0.1	<0.1 <0.1 <0.1	<0.1 <0.1 <0.1	<0.1 <0.1 <0.1	-0.1 -0.1 -0.1	<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 Phenol	mg/kg mg/kg	0.1	1.300*1	<0.1 <0.01	<0.1 <0.01	<0.1	<0.1 <0.01	<0.2 <0.01	<0.2 <0.01	<0.1 <0.01	<0.1	<0.1 <0.01	<0.1 <0.01	<0.1
2-chloronaphthalene Cresol Total Total Monohydric Phenois (S) Corrected	mg/kg mg/kg mg/kg	0.1 0.01 0.035	2,200 ^{r4} 180,000 ^{r4}	<0.1 <0.01 <0.035	<0.1 <0.01 <0.035	<0.1 <0.01 <0.035	<0.1 <0.01 <0.035	<0.1 <0.01 <0.035	<0.1 <0.01 <0.035	<0.1 <0.01 <0.035	<0.1 <0.01 <0.035	<0.1 <0.01 <0.035	<0.1 <0.01 <0.035	<0.1 <0.01 <0.035
	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

ETV SIGS COMMENTS
#1.CDM/CIEH SAULS 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 availabl
-: Not analysed

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

			Field_ID Sample_Depth_Range Sampled_Date_Time Lab_Report_Number	BHT11 5 24/05/2023	8HT12 6 24/05/2023	BHT13 3 24/05/2023	BHT14 1.5 19/05/2023	8HT15 7 19/05/2023	5.5 17/05/2023	6 08/06/2023	5.5 07/06/2023	BHT4 4 06/06/2023	BHT6 5.5 02/06/20
			GAC_HH_COM/IND_SLOAM_>3.48%TOC										
emName Sulphate, Total Potential as SO4	output unit g/kg	EQL		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 Perylene-d12	%	0.7		78.6	86.8	89	88.3	76.3	80.2	85.3	75.5	80.1	72.6
PAH 16 Total + Coronene H	mg/kg	0.318		-	-					-			-
>C10-C40 Miphatics Asbestos Actinolite	mg/kg No units	Ь											-
Asbestos Anthophyllite	No units	100		0	0	0	0	0	0	0	0	0	0
CEN 10:1 - Dissolved solids, Total (meter) WAC	mg/kg mg/kg	100											-
Asbestos Tremolite troleum Hydrocarbons	No units	10		<10	<10	<10	<10	<10	<10	86.9	<10	<10	<10
>C10-C44 Aliphatics & Aromatics	mg/kg pH_Units	110		<10	KIU	<10	<10	<10	<10	80.9	<10	<10	<10
pH Electrical Conductivity H	µS/cm					- :		- :		- :		-	- :
>C10-C44 Aliphatics >EC10-EC44 Aromatics	mg/kg mg/kg	5		<5 <5	- 6	<5	5.39	<5 <5	-5	60.5 26.4	<5	- 6	<5
>C5-C40 GRO >C5-C10	mg/kg mg/kg	35		<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
EPH >C10-C40 >C5-C6 Aliphatics	mg/kg mg/kg	35 0.01	12,000 ^{e1}	<0.01	<0.01	<0.01	<0.01	<0.01	- - - - -	<0.01	<0.01	<0.01	<0.01
>C5-C10 Aliphatics >C6-C8 Aliphatics	mg/kg mg/kg	0.05	40,000 ^{e1}	<0.05	<0.05 <0.01	<0.05	<0.05 <0.01	<0.05	<0.05 <0.01	<0.05 <0.01	<0.05	<0.05	<0.05
>C8-C10 Aliphatics >C10-C12 Aliphatics	mg/kg mg/kg	0.01	11,000″	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
>C12-C16 Aliphatics >C16-C21 Aliphatics	mg/kg mg/kg	1	47.000 ^{r1} 90.000 ^{r1}	4	4	- 1	- 4	- 4	4	- 4	4		- 1
>C21-C35 Aliphatics >C35-C44 Aliphatics	mq/kq	1	1 200 0005	4	2.66	- 1	2.14	- 4	4	52.1 8.02		- 4	- 4
>C5-C10 Aromatics >EC5-EC7 Aromatics	mg/kg mg/kg mg/kg	0.05	1,800,000 ^{p1} 86,000 ^{p1}	<0.05	<0.05 <0.01	<0.05 <0.01	<0.05 <0.01	<0.05	<0.05	<0.05 <0.01	<0.05	<0.05	<0.05
>EC7-EC8 Aromatics >EC8-EC10 Aromatics	mg/kg mg/kg	0.01	180,000 ⁴¹ 17,000 ⁴¹	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.0
>EC10-EC12 Aromatics >EC12-EC16 Aromatics	mg/kg mg/kg	1	34,000 ^{e1} 38,000 ^{e1}	- 4	- 4	d d	- 4	<1	- 4	- 4	- 4	- 4	<1
>EC16-EC21 Aromatics >EC21-EC35 Aromatics	mg/kg mg/kg	1	28.000 ^{rt} 28.000 ^{rt}	4	- 4	d	4.11	<1	- 4	20.5	- 4	4	<1
EC35-EC44 Aromatics EC40-EC44 Aromatics	mg/kg mg/kg	1	28,000 ^e	4	- d - d	d	- d - d	-d -d	- d - d	5.23 1.49	4	d d	- 4
>C5-C44 Aliphatics & Aromatics	mg/kg	10		<10	<10	<10	<10	<10	<10	86.9	<10	<10	<10
Benzene Toluene	mg/kg mg/kg	0.001	98 ^{rs} 180.000 ^{r1}	<0.001 0.00414	<0.001 0.01	<0.001	<0.001	<0.02	<0.009 <0.007	<0.001 0.0146	<0.02 <0.02	<0.001	<0.03
Ethylbenzene Xvlene (m & p)	mg/kg mg/kg	0.001	27.000 ^{e1}	<0.001 <0.002	0.00154 0.00411	<0.001	<0.001	<0.02 <0.04	<0.004 <0.01	0.00333 0.00872	<0.02 <0.04	0.0011	<0.00
Xylene Total Xylene (o)	mg/kg mg/kg	0.002	30,000 ^{e1}	<0.02 <0.002	<0.02	<0.02 <0.002	<0.02 <0.002	<0.04	<0.02 <0.01	<0.02	<0.4 <0.04	<0.02	<0.0
Total BTEX ygenates	mg/kg	0.007		<0.007	0.0157	<0.007	< 0.007	<0.14	<0.04	0.0266	<0.14	0.0115	<0.1
MTBE Tert Amyl Methyl Ether	mg/kg mg/kg	0.0005	24,000*4	<0.0005 <0.001	<0.0005 <0.001	<0.0005	<0.0005	<0.01	<0.01 <0.01	<0.0005 <0.001	<0.01	<0.0005 <0.001	<0.0
orinated Hydrocarbons Chloromethane	mg/kg	0.002	1.6 ^{rt}	<0.002	<0.002	<0.002	<0.002	<0.04	<0.007	<0.002	<0.04	<0.002	<0.0
Vinyl chloride Chloroethane	mg/kg mg/kg	0.0005	2.2 ⁶⁵ 2.100 ⁶⁴	<0.0005 <0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.006 <0.01	<0.0005 <0.001	<0.01	<0.0005 <0.001	<0.0
1,1-dichloroethene Dichloromethane	mg/kg mg/kg	0.0005	92 ⁴⁴ 560 ⁴⁴	<0.0005 <0.005	<0.0005 <0.005	<0.0005 0.0231	<0.0005 0.0313	<0.01 <0.1	<0.01 <0.01	<0.0005 <0.005	<0.01 <0.1	<0.0005 <0.005	<0.01
trans-1,2-dichloroethene 1,1-dichloroethane	mg/kg mg/kg	0.001	81 ^{r4} 300 ^{r2} 850 ^{r4}	<0.001 <0.0005	<0.001 <0.0005	<0.001 <0.0005	<0.001 <0.0005	<0.02	<0.01 <0.008	<0.001 <0.0005	<0.02 <0.01	<0.001 <0.0005	<0.02
cis-1,2-dichloroethene Chloroform	mg/kg mg/kg	0.0005	47 ⁶⁴ 2300 ⁶² 350 ⁶¹	<0.0005 <0.003	<0.0005 <0.003	<0.0005 <0.003	<0.0005	<0.01	<0.006	<0.0005	<0.01	<0.0005 <0.003	<0.01
1,1,1-trichloroethane Carbon tetrachloride	mg/kg mg/kg	0.0005	3.000 ^{r1} 14 ^{r1}	<0.0005 <0.0005	<0.0005 <0.0005	<0.0005 <0.0005	<0.0005 <0.0005	<0.01	<0.007 <0.01	<0.0005 <0.0005	<0.01 <0.01	<0.0005 <0.0005	<0.01
Trichloroethene 1,1,2-trichloroethane	mg/kg mg/kg	0.001	3.4 ⁶⁵ 400 ⁶⁴	<0.001 <0.001	<0.001 <0.001	<0.001 <0.001	<0.001 <0.001	<0.02 <0.02	<0.009 <0.01	<0.001 <0.001	<0.02 <0.02	<0.001	<0.02
Tetrachloroethene IC	mg/kg	0.002	130 ^{r5}	<0.002	<0.002	<0.002	<0.002	<0.04	<0.005	<0.002	<0.04	<0.002	<0.04
2,2-dichloropropane Bromochloromethane	mg/kg mg/kg	0.001	630 ⁴²	<0.001 <0.002	<0.001 <0.002	<0.001 <0.002	<0.001	<0.02 <0.04	<0.01 <0.01	<0.001 <0.002	<0.02 <0.04	<0.001 <0.002	<0.02
1,1-dichloropropene 1,2-dichloroethane	mg/kg mg/kg	0.0005	1.7°	<0.0005 <0.001	<0.0005 <0.001	<0.0005 <0.001	<0.0005 <0.001	<0.01	<0.01 <0.005	<0.0005 <0.001	<0.01 <0.02	<0.0005 <0.001	<0.01
1,2-dichloropropane Dibromomethane	mg/kg mg/kg	0.0005	12 ^M 99 ^{f2}	<0.0005 <0.001	<0.0005 <0.001	<0.0005 <0.001	<0.0005 <0.001	<0.01 <0.02	<0.01 <0.009	<0.0005 <0.001	<0.01 <0.02	<0.0005 <0.001	<0.01
Bromodichloromethane cis-1,3-dichloropropene	mg/kg mg/kg	0.002 0.0005	1.312	<0.002 <0.0005	<0.002 <0.0005	<0.002 <0.0005	<0.002 <0.0005	<0.04	<0.007 <0.01	<0.002 <0.0005	<0.04 <0.01	<0.002 <0.0005	<0.0
trans-1,3-dichloropropene 1,3-dichloropropane	mg/kg mg/kg	0.001	23.000 ⁶²	<0.001 <0.001	<0.001 <0.001	<0.001	<0.001	<0.02	<0.01 <0.007	<0.001 <0.001	<0.02 <0.02	<0.001 <0.001	<0.00
Chlorodibromomethane 1,1,1,2-tetrachloroethane	mg/kg mg/kg	0.002	39 ¹² 560 ⁴¹	<0.002 <0.001	<0.002 <0.001	<0.002 <0.001	<0.002 <0.001	<0.04	<0.01 <0.01	<0.002 <0.001	<0.04 <0.02	<0.002 <0.001	<0.0
Styrene Bromoform	mg/kg mg/kg	0.002	180.000 ⁶⁴ 3,100 ⁶⁴	<0.002 <0.002	<0.002 <0.002	<0.002 <0.002	<0.002 <0.002	<0.04	<0.01 <0.01	<0.002 <0.005	<0.04	<0.002 <0.005	<0.0
Isopropylbenzene 1,1,2,2-tetrachloroethane	mg/kg mg/kg	0.002	7,700 ⁴⁴ 1,100 ⁴¹	<0.002 <0.002	<0.002 <0.002	<0.002 <0.002	<0.002 <0.002	<0.04	<0.005 <0.01	<0.002 <0.002	<0.04 <0.04	<0.002 <0.002	<0.0
1,2,3-trichloropropane n-propylbenzene	mg/kg mg/kg	0.002	0.11 ⁶² 11.000 ⁴⁴	<0.002 <0.002	<0.002 <0.002	<0.002 <0.002	<0.002 <0.002	<0.04	<0.016 <0.01	<0.002 <0.002	<0.04 <0.04	<0.002 <0.002	<0.0
1,3,5-trimethylbenzene tert-butylbenzene	mg/kg mg/kg	0.002	1.500 ⁶² 120.000 ⁶²	<0.002 <0.002	<0.002 <0.002	<0.002 <0.002	<0.002 <0.002	<0.04	<0.008 <0.014	<0.002 <0.002	<0.04	<0.002 <0.002	<0.0
1,2,4-trimethyl benzene sec-butyl benzene	mg/kg mg/kg	0.003	220 ⁶⁴ 120.000 ⁶²	<0.003 <0.001	<0.003 <0.001	<0.003	<0.003 <0.001	<0.06 <0.02	<0.009 <0.01	<0.003	<0.06	<0.003 <0.001	<0.00
p-isopropyltoluene n-butylbenzene	mg/kg mg/kg	0.002	58,000'2	<0.002 <0.003	<0.002	<0.002	<0.002	<0.04	<0.01 <0.011	<0.002	<0.04	<0.002	<0.0
1,2-dibromo-3-chloropropane Hexachlorobutadiene	mg/kg mg/kg	0.002 0.004	0.064 ^{f2} 120 ^{f1}	<0.002 <0.004	<0.002 <0.004	<0.002 <0.004	<0.002 <0.004	<0.04 <0.08	<0.014 <0.02	<0.002 <0.004	<0.04 <0.08	<0.002 <0.004	<0.0 <0.0
H 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	<0.00
Acenaphthylene Acenaphthene	mg/kg mg/kg	0.012	100.000 ⁴¹ 100.000 ⁴¹	<0.012	<0.012	<0.012	<0.012	<0.012	<0.012 <0.008	<0.012	<0.012	<0.012	<0.01
Fluorene Phenanthrene	mg/kg mg/kg	0.01	71.000 ⁴¹ 23,000 ⁴¹	<0.01 <0.015 <0.016	<0.01 <0.015 <0.016	<0.01 <0.015 <0.016	<0.01 <0.015 <0.016	<0.01	<0.01 <0.015 <0.016	<0.01 <0.015	<0.01 <0.015 <0.016	<0.01 <0.015 <0.016	<0.01 <0.01
Anthracene Fluoranthene	mg/kg mg/kg	0.016 0.017 0.015	540,000 ^{f1} 23,000 ^{f1}	< 0.017	< 0.017	<0.016	< 0.017	<0.016 <0.017	<0.017	<0.016 <0.017	<0.016	<0.016	< 0.01
Pyrene Benz(a)anthracene	mg/kg mg/kg	0.014	54,000 ⁴¹ 180 ⁴¹	<0.015 <0.014	<0.015	<0.015	<0.015	<0.015 <0.014	<0.015 <0.014	<0.015	<0.015	<0.015	<0.01
Chrysene Benzo(a) pyrene	mg/kg mg/kg	0.015	350 ^{rt}	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01 <0.015	<0.01	<0.01	<0.01	<0.0
Indeno(1,2,3-c,d)pyrene Dibenz(a,h)anthracene	mg/kg mg/kg	0.018 0.023 0.024	510 ^{r1} 3.6 ^{r1}	<0.018 <0.023	<0.018 <0.023 <0.024	<0.018 <0.023	<0.018 <0.023 <0.024	<0.018	<0.018 <0.023	<0.018 <0.023	<0.018 <0.023	<0.018 <0.023	<0.01 <0.02 <0.02
Benzo(g,h,i)perylene Benzo(b)fluoranthene Benzo(k)fluoranthene	mg/kg mg/kg	0.024	4,000 ⁴¹ 45 ⁴¹	<0.024 <0.015 <0.014	<0.01 <0.01								
senzo(k)fluoranthene PAH 16 Total PAH 17 Total	mg/kg mg/kg mg/kg	0.014	1,200*1	<0.014	<0.014	<0.014	<0.014	<0.014	-0.014 -0.118	<0.014	<0.014	<0.014	<0.0
PAH 17 Total DC Coronene	mg/kg mg/kg	0.2					-	-					_
:oronene 2-methyl naphthal ene 1-bromophenyl phenyl ether	mg/kg mg/kg mg/kg	0.1 0.1	3.00012	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1	<0.1 <0.1	<0.1	<0.1	<0.1 <0.1	<0.1 <0.1	<0.1
I-chlorophenyl phenyl ether	mg/kg	0.1	246	40.1 40.1	<0.1 <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 Bis (2-chloroethoxy) methane Bis (2-chloroethyl)ether	mg/kg mg/kg mg/kg	0.1	26 ¹² 2,500 ¹²	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1 <0.1	<0.1	<0.1 <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-chioroethy) jether Carbazole Dibenzofuran	mg/kg	0.1	14	40.1 40.1	<0.1 <0.1	<0.1 <0.1	<0.1	<0.1 <0.1	<0.1	<0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1
Dibenzoturan Hexachlorocyclopentadiene Hexachloroethane	mg/kg mg/kg mg/kg	0.1	1.200 ^{/2} 7.5 ^{/2} 120 ^{/4}	<0.1 <0.2 <0.1	<0.1 <0.2 <0.1	<0.2	<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
enolics 2-methyl phenol	mg/kg	0.1	120 ^{F4}	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2-metry) prenoi 2-nitrophenol 2,4-dimethylphenol	mg/kg mg/kg	0.1	Use Cresol Total ^M	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <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 4-methylphenol	mg/kg mg/kg mg/kg	0.1	30.000 ⁶⁴ 82.000 ⁶²	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1 <0.1	<0.1 <0.1	<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 4-nitrophenol Phenol	mg/kg mg/kg mg/kg	0.1	Use Cresol Total ⁶⁴	<0.1 <0.01	<0.1 <0.1 <0.01	<0.1 <0.01	<0.1 <0.01	<0.1 <0.01	<0.1 <0.1 <0.01	<0.1 <0.1 <0.01	<0.1 <0.1 <0.01	<0.1 <0.01	<0.1 <0.0
2-chloronaphthalene	mg/kg mg/kg mg/kg	0.01	1.300 ⁴¹ 2.200 ⁴⁴	<0.01 <0.01	<0.01 <0.01	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.1	<0.01	<0.0 <0.0
Cresol Total		0.01	180,000*4	<0.01	<0.035	<0.01	<0.035	<0.01	<0.035	<0.035	<0.01	<0.01	<0.03

Env Stds Comments #1±OM/CIEH S4ULs 2015 #2±USEPA RSL (NOV 2021) #3±Defra C4SL (2014) #4±EC/AGS/CL-AIRE #5±Defra C4SL (2021)

#5:Defra C4SL (2021) GAC: Generic Assessment Criteria

(blank): No assessment criteria availal
-: Not analysed

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

			Field_ID	BH-301	BHSS01	BHSS02	BHSS03	BHSS04	BHSS05	BHT05	BHT07	BHT09	BHT1	BHT10
			Sample_Depth_Range Sampled_Date_Time	1 1	7.5	8	4	3.5	2.5	5 01/06/2023	5.5 31/05/2023	6 29/05/2023	5	5.5
			Lab_Report_Number											
			GAC_HH_COM/IND_SLOAM_>3.48%TOC											
			GALC_HIT_CONVIND_SLOWN_23.467810C											
ChemName	output unit	EQL												
PCBs Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.003	0.16 ⁶²		<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) Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg mg/kg	0.003	0.048 ⁶² 0.49 ⁶²	- :	<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 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 Pentachlorobiphenyl, 2,3,4,4,5- (PCB 123)	mg/kg mg/kg	0.003	0.49 ⁶² 0.49 ⁶²	<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- (PUB 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) Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg mg/kg	0.003	0.5 ¹²	- :	<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) Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	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
Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg mg/kg	0.003	0.00051 ^{f2} 0.52 ^{f2}	- :	<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 PCB 28	mg/kg mg/kg	0.036		<0.003	<0.036 <0.003	<0.036	<0.036	<0.036	<0.036 <0.003	<0.036	<0.036	<0.036	<0.036	<0.036
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 PCB 138	mg/kg 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	<0.003
PCR 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 Total PCB 7 Congeners	mg/kg mg/kg	0.003		<0.003	<0.003	<0.003	<0.003 <0.021	<0.003	<0.003 <0.021	<0.003	<0.003	<0.003	<0.003	<0.003
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	-01
Anilines		0.1				50.1	40.1	50.1	50.1	40.1	50.1	50.1	50.1	10.1
2-nitroaniline 3-nitroaniline	mg/kg 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	<0.1	<0.1 <0.1	<0.1
4-chloroaniline	mg/kg	0.1	11 ^{f2}	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
4-nitroaniline Explosives	mg/kg	0.1	110 ⁶²	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
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 Nitrobenzene	mg/kg mg/kg	0.1	1,900 ⁴⁴ 22 ⁴²	<0.1 <0.1	<0.1 <0.1	<0.1	<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		0.007			<0.02				0.00		0.007	0.14		
Chlorobenzene	mg/kg mg/kg	0.002	130 ⁶¹	-:-	< 0.005	<1	<0.02 <0.005	<0.02 <0.005	<0.02 <0.005	<0.07 <0.02	<0.007	<0.14	<0.007	<0.07
Bromobenzene	mg/kg	0.002	520 ⁸⁴		<0.01	<2	<0.01	<0.01	<0.01	<0.02	<0.002	<0.04	<0.002	< 0.02
2-chlorotoluene 4-chlorotoluene	mg/kg mg/kg	0.003	23,000 ⁶² 23,000 ⁶²	-:-	<0.009	<1.8	<0.009 <0.01 <0.008	<0.009	<0.009	<0.03	<0.003	<0.06	<0.003	<0.03
1,3-dichlorobenzene 1,4-dichlorobenzene	mg/kg mg/kg	0.005	170*1	<0.1 <0.1	<0.01 <0.008 <0.005	<0.1	<0.008 <0.005	<0.01 <0.008 <0.005	<0.01 <0.008 <0.005	<0.05 <0.05	<0.005 <0.005	<0.1	<0.005 <0.005	<0.05
1,2-dichlorobenzene	mg/kg mg/kg	0.005	25,000 ^{e1} 11,000 ^{e1}	<0.1	< 0.01	<0.1	<0.005	<0.01	<0.01	<0.05	<0.005	<0.1	<0.005	< 0.05
1,2,4-trichlorobenzene 1,2,3-trichlorobenzene	mg/kg mg/kg	0.007	1.300"	⊲0.1	<0.02 <0.02	<0.1	<0.02	<0.02	<0.02	<0.07	<0.007	<0.1	<0.007	<0.07
Hexachlorobenzene	mg/kg	0.1	590 ⁶¹	<0.1	<0.1	<0.1	<0.02 <0.1	<0.02	<0.02 <0.1	<0.1 <0.1	<0.01	<0.2 <0.1	<0.01	<0.1
lalogenated Hydrocarbons Dichlorodifluoromethane	ma/ka	0.0005	370 ⁶²		Ann ns	<1.2	Ann n-	-0.00A	-0.00A	-0.005	<0.0005	-0.01	-0.0005	-0.005
Bromomethane	mg/kg mg/kg	0.001	3012	- :	<0.006 <0.01	<2	<0.006 <0.01	<0.006 <0.01	<0.006 <0.01	<0.005 <0.01	<0.0005 <0.001	<0.01 <0.02	<0.0005 <0.001	<0.005
Trichlorofluoromethane 1,2-dibromoethane	mg/kg mg/kg	0.0005	350,000 ⁶² 0.16 ⁶²		<0.006	<1.2	<0.006	<0.006	<0.006	<0.005	<0.0005	<0.01	<0.0005	<0.009
	mg/kg	0.001	0.16	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	1,170,0
Halogenated Phenols 2-chl orophenol	mg/kg	0.1	5.800 ⁴²	<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 2.4.6-trichlorophenol	mg/kg mg/kg	0.1	82.000 ⁶² 210 ⁶²	<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 Pentachlorophenol Phthalates	mg/kg	0.1	400 ⁶¹	<0.1	<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-ethyl hexyl) phthal ate	mg/kg	0.1	86,000 ⁸⁴	<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 Di-n-butyl phthalate	mg/kg mg/kg	0.1	950.000 ⁶⁴	<0.1 <0.1	<0.1 <0.1	<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 ⁴⁴	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Diethylphthalate Dimethyl phthalate	mg/kg 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
		1						100.1	10.1	40.1	10.1		40.1	10.1
Carbon disulfide Isophorone	mg/kg mg/kg	0.001	47 ^{r1} 2.400 ^{r2}	<0.1	<0.007 <0.1	<1.4	<0.007	<0.007	<0.007	<0.01	<0.001	<0.02	0.0068	<0.01
SPOCAS		0.03	2.700	0.114					1.28					
ANC at pH 4 ANC pH_6 dry soil	mol/kg mol/kg	0.03		<0.03		-		0.906 0.03 - 0.0303	0.0479 - 0.048	-	-		-	-
Metals Antimony		0.01		-0.4				0.053	0.074					
Antimony Arsenic Barium	mg/kg mg/kg	0.6	7.500 ⁶⁴ 640 ⁶³	<0.6 3.54 27.8	3.7	34.6	1.25 16.4	0.053 3.59 25.1	0.074 2.45 18.1	2.36	2.05 7.03	3.65 74.2	9.69	1.88
Barium Beryllium	mg/kg mg/kg	0.6	22,000 ^{r4} 12 ^{r1}	27.8 0.254	39 0.392	20.6 0.335	16.4 0.274	25.1 0.469	18.1 0.368	10 0.169	7.03 0.17	74.2 0.317	12.9 0.174	40.8 0.461
Boron	mg/kg	0.7	12" 240,000 ⁴¹	3.97										
Cadmium Chromium (III+VI)	mg/kg mg/kg	0.02	410*3	0.67 4.07	1.27	67 97.6	0.723	0.834	1.83	0.423 7.44	0.302	0.836 7.52	0.379 5.85	0.875
Copper	mg/kg	1.4	Use either CrIII or CrVI ^{F1} 68.000 ^{F1}	11.7	15	23.5	10.3	9.89	9.44	5.88	3.74	10.5	5.21	12.3
Lead Mercury	mg/kg mg/kg	0.7	2.330 ^{f3} 350 ^{f2}	10	8.76	49.3 <0.1	7.32	12.9	8.89	4.88	3.86	<0.1	3.6	10.2
Molybdenum Nickel	mg/kg mg/kg	0.03	17,000 ^{r4}	0.943	39.5	315	17.7	0.081	0.1	11.5	9.32		13	22.2
Selenium	mq/kq	1	980 ⁶¹ 12,000 ⁶¹	2.17	1.34	23.7	<1	<1	<1	<1	<1	22.3	<1	<1
Vanadium	mg/kg	0.2	9,000*1	4.65 55.7	17.7	246 646	9.02	15.3 76.1	12 70.4	4.75	4.51 20.7	11.6 51.7	5.28	10.3
Zinc Chromium (hexavalent)	mg/kg mg/kg	0.6	730.000 ^{r1} 49 ^{rs}	<0.6	89.3 <0.6	646 4.35 93.2	39 <0.6	-0.4	< 0.6	<0.6	< 0.6	<0.6	26.7 <0.6	55.2 <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 TOC	%	0.35		41.9	0.355	6.48	<0.35	0.917 0.532	0.44	2.78	7.52	2.69	9.45	0.46
TOC norganics	%	0.2		24.3		-	-	0.532	0.255	-		-	-	-
Sulphur	mg/kg mg/kg	200		275 - 280	1150	18,700	265 - 270	280 - 283	206 - 210	895 - 900	608 - 610	670 - 673	4750	825 - 8
Cyanide Total Fluoride	mg/kg mg/kg	1	150 ⁴²	<1	<1	<1	<1	- <1	<1	<1	<1	<1	<1	<1
Sulphate	mg/kg	48	47.000 ^{r2}	- :	310 - 314	318 - 320	300 - 301	200 - 204	210	310 - 314	420 - 422	278 - 280	460 - 464	186 - 1
Chloride Moisture	mg/kg	20		. 79	9.1	. 15	9.2	<20 19	<20 12	. 19	3.7		- 11	. 19
Soluble Sulphate 2:1 extract as SO4 BRE	g/L	0.002		<0.002							3.7			
Sulphate (soluble) pH (Lab)	g/L pH_Units	0.0002		0.037 - 0.0371 5.08	0.019 - 0.0194 8.67	0.125 7.18	0.016 8.51	0.0129 - 0.013 8.34	0.0117 - 0.012 8.59	0.02 - 0.0204 8.94	0.017 - 0.0171 9.46	0.0226 - 0.023 8.66	0.04 8.69	0.01
Other		Ĺ												
Bis (2-chloroisopropyl)ether iurrogate	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
Toluene-D8	%			91.1	94.8	99.4	101	101	99.6	103	102	100	101	91.6
Chrysene d12 (surr.) d10-Acenaphthene (SS)	%	1		88.8 94	95.8 93.9	89 90	84.5 88.9	91.1 99.9	106 103	79.6 91.7	96.5	81.6 92.1	89 91	93.7
d10-Phenanthrene (SS) d8-Naphthalene (SS)	%			92.8 97.8	93.8 90.4	84.9 94.4	81.9 94.9	99.5 100	94	83.9 91.3	91.3 94.3	83.8 92.7	89.5 89.1	93.7 92.4 87.3 87.7
% Surrogate Recovery	%	-		97.8 102				97.2	95.2					
GRO Surrogate	92	1		61.6	122	30.9	98.1	107	100	92.9	101	74.2	124	62

GBS surrogate

Fit SMG forments

#1.0MG/IDF SLEA SUS

#1.0MG/IDF SLEA

#

			Field_ID	BHT11	BHT12	BHT13	BHT14	BHT15	BHT17	BHT2	BHT3	BHT4	BHT6
			Sample_Depth_Range Sampled_Date_Time	5 24/05/2023	6	3 24/05/2023	1.5	7	5.5	6 08/06/2023	5.5	4	5.5
			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) Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105)	mg/kg mg/kg	0.003	0.048 ⁶² 0.49 ⁶²	<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 mg/kg	0.003	0.512	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003	<0.003
PCB 118 Pentachlorobi phenyl, 2,3,4,4,5- (PCB 123)	mg/kg mg/kg	0.003	0.49 ⁶² 0.49 ⁶²	<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- (PUB 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) Hexachlorobiphenyl, 2,3,3,4,4,5- (PCB 157)	mg/kg mg/kg	0.003	0.5 ¹²	<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) Hexachlorobiphenyl, 3,3,4,4,5,5- (PCB 169)	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) Heptachlorobiphenyl, 2,3,3,4,4,5,5- (PCB 189)	mg/kg mg/kg	0.003	0.00051 ^{f2} 0.52 ^{f2}	<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 PCB 28	mg/kg	0.036	0.52	<0.036	< 0.036	<0.036	<0.036	< 0.036	<0.036	<0.036	<0.036	< 0.036	< 0.036
PCB 28 PCB 52	mg/kg 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 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
PCR 153	mg/kg 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 Total PCB 7 Congeners	mg/kg mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	< 0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Amino Aliphatics				<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	<0.021	KU.UZ1	<0.021	<0.021
N-nitrosodi-n-propylamine Inilines	mg/kg	0.1	0.33 ⁶²	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
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 4-chloroaniline	mg/kg mg/kq	0.1	116	<0.1 <0.1	<0.1 <0.1	<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	11°° 110°2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2.4-Dinitrotoluene		0.1	3,800*4	<0.1	<0.1	<0.1	<0.1	<0.1	d) 1	<0.1	<0.1	<0.1	<0.1
2,6-dinitrotoluene	mg/kg mg/kg	0.1	1.9004	<0.1	<0.1	<0.1	< 0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Nitrobenzene Ialogenated Benzenes	mg/kg	0.1	22'0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1.3.5-Trichlorobenzene	mg/kg	0.007	130 ^{e1}	<0.007	< 0.007	< 0.007	< 0.007	<0.14	<0.02	< 0.007	<0.14	< 0.007	<0.14
Chlorobenzene Bromohenzene	mg/kg mg/kg	0.002	290 ⁶¹ 520 ⁶⁴	<0.002	<0.002	<0.002	<0.002 <0.002	<0.04	<0.005	<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 1,3-dichlorobenzene	mg/kg mg/kg	0.003	23,000 ^{r2} 170 ^{r1}	<0.003	<0.003	<0.003	<0.003	<0.06	<0.01	<0.003	<0.06	<0.003	<0.06
1.4-dichlorobenzene	mq/kq	0.005	25,000 ^{rt}	<0.005	<0.005	<0.005	<0.005	<0.1	<0.005	<0.005	<0.1	< 0.005	<0.1
1.2-dichlorobenzene 1.2.4-trichlorobenzene	mg/kg mg/kg	0.005	11,000 ^{e1} 1.300 ^{e1}	<0.005	<0.005	<0.005	< 0.005	<0.1	<0.01	<0.005	<0.1	<0.005	<0.1
1,2,3-trichlorobenzene	mg/kg	0.01	590 ⁴¹	<0.01	<0.01	<0.01	<0.01	<0.2	<0.02	<0.01	<0.2	<0.01	<0.2
Hexachlorobenzene	mq/kq	0.1	120 ^{e1}	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Dichlorodifluoromethane	mq/kq	0.0005	370*2	<0.0005	<0.0005 <0.001	<0.0005 <0.001	<0.0005	<0.01	<0.006	<0.0005	<0.01 <0.02	<0.0005	<0.01
Bromomethane	mg/kg mg/kg	0.001	3012	<0.0005 <0.001			<0.0005 <0.001	<0.01 <0.02	<0.006 <0.01	<0.0005 <0.001			<0.01 <0.02
Trichlorofluoromethane 1,2-dibromoethane	mg/kg mg/kg	0.0005	350,000 ⁶² 0.16 ⁶²	<0.0005 <0.001	<0.0005	<0.0005	<0.0005	<0.01	<0.006 <0.01	<0.0005	<0.01	<0.0005	<0.01
	mg/kg		0.10	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	1,120,00
lalogenated Phenois 2-chl orophenoi	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 mg/kg	0.1	82.000 ^{f2} 210 ^{f2}	<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 Pentachlorophenol	mg/kg	0.1	400 ⁶¹	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Phthalates Bis (2-ethyl hexyl) phthalate	mg/kg	0.1	86 000 ⁴⁴	<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 Di-n-octyl phthalate	mg/kg mg/kg	0.1	15.000 ⁴⁴ 89.000 ⁴⁴	<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 ⁶⁴	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-0.1	<0.1	<0.1
Dimethyl phthalate	mq/kq	0.1		<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Carbon disulfide	mg/kg mg/kg	0.001	47 ^{r1}	0.00106	<0.001	<0.001	0.00361	< 0.02	<0.007	0.00334	<0.02	<0.001	<0.02
Isophorone POCAS	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
ANC at pH 4	mol/kg	0.03											
ANC pH_6 dry soil Metals	mol/kg	0.03		-	-		-	-	-		-	_	
Antimony	mg/kg	0.01	7.500 ⁴⁴	-									
Antimony Arsenic Barium	mg/kg mg/kg	0.6	640 ⁶³	2.38 10.4	2.17 7.45	1.71 9.37	1.9 8.27	2.04 38	1.13 20.9	3.63 20.3	2.68 60.9	1.08 7.78	6.28 84.7
Beryllium	mg/kg	0.01	22,000 ⁴⁴ 12 ⁴¹	0.216	0.167	0.199	0.237	0.331	0.262	0.216	0.492	0.142	0.542
Boron Cadmium	mg/kg mg/kg	0.7	240,000 ^{f1} 410 ^{f3}	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 ^{F1}	4.26	4.1	3.23	8.52	4.5	4.95	3.61	6.95	3.36	11.1
Copper Lead	mg/kg mg/kg	1.4	68.000 ^{e1} 2.330 ^{e3}	4.47 3.64	4.11 3.03	4.22 3.43	4.38 7.1	9.17	7.52 4.69	5.98 5.69	15.8 10.5	2.48	19.2 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 Nickel	mg/kg mg/kg	0.03	17,000 ⁴⁴ 980 ⁴¹	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 ^{r1}	<1	<1	<1	<1	<1	<1	<1	1.23	- 4	1.34
Vanadium Zinc	mg/kg mg/kg	1.9	9,000 ^{r1} 730,000 ^{r1}	4.46 27.8	4.58 17.8	4.32 26.1	4.65 29.4	9.33 49.4	8.45 37.3	5.23 44	12.5 72.5	3.6 17.9	15.7 104
Chromium (hexavalent)	mg/kg	0.6	49 ¹⁵	<0.6	-0.6	<0.6	< 0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6
Chromium (Trivalent) rganics	mg/kg	0.9	8.600 ⁴¹	4.26	4.1	3.23	8.52	4.5	4.95	3.61	6.95	3.36	11.1
Organic Matter TOC	%	0.35		0.402	<0.35	<0.35	0.648	8.57	<0.35	7.28	1.88	3.55	3.84
TOC organics												-	
organics Sulphur	mg/kg mg/kg	200		458 - 460	1120	490 - 491	285 - 290	490 - 494	340	819 - 820	840	480 - 481	676 - 68
Cyanide Total Fluoride	mg/kg mg/kg	1	150 ⁶²	<1	<1	<1	<1	<1	<1	<1	<1	- 4	<1
Sulphate	mg/kg	48	47.000 ⁶²	310 - 314	270 - 273	245 - 250	227 - 230	240 - 242	318 - 320	235 - 240	240 - 243	295 - 300	415 - 42
Chloride Moisture	mg/kg	20		2.8			8.9	9.3	. 11	- 18	17	7.8	12
Soluble Sulphate 2:1 extract as SO4 BRE	g/L	0.002				- 3							
Sulphate (soluble)	Q/L	0.0002		0.0169 - 0.017			0.013	0.011		0.045 - 0.0454		0.0179 - 0.018	
pH (Lab) ther	pH_Units	1		9.61	9.43	9.66	8.93	8.61	8.77	8.4	8.6	9.56	8.57
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
urrogate Toluene-D8	1%			116	98.6	101	105	98.6	95.1	96.7	102	103	101
Chrysene-d12 (surr.)	%			87.5	98.6 96.7 91.8	98.6	97.2	76.6	78.4	85.5 95.6	77.9 95.5	80	80.7
	%	\vdash		07.0	91.8	91 9	92	on o	92.6	95.6	95.5	95.0	88
d10-Phenanthrene (SS) d8-Naphthalene (SS)	%			87.7 88.3	87.9 87.8	88.5 87.3	88.9 88	83.5 96.2	87.5 96.9	91.5 99.4	89.4 99.6	90.4	87.7 85.9
% Surrogate Recovery	%			103	113	89.7	90	79.4	80.7	91.8	93.8	95.3	21.8
GRO Surrogate	1~	_		103	113	07./	70	77.4	00.7	71.0	73.0	70.3	21.8

GBS surrogate

Fit SMG forments

#1.0MGIN SLIS and SIS

#1.0MGIN SLI

			Field_ID Sample_Depth_Range Sampled_Date_Time Lab_Report_Number	TP201 2.3-3 02/05/2023	TP204 0.8-0.85 02/05/2023	TP205 2.45-2.55 03/05/2023	TP206 1-1.1 08/05/2023	TP207 1-1.1 03/05/2023	TP209 1-1.1 03/05/2023	TP210 1-1.1 08/05/2023	TP211 1-1.1 09/05/2023	TP212 1.1-1.2 09/05/2023	TP213 1-1.1 10/05/2023	TP214 1-1.1 10/05/2023	TP215 1-1.1 10/05/2023	TP216 1.1-1.2 08/05/2023	TP217 1.1-1.2 05/05/2023	TP218 1-1.1 04/05/2023	TP219 1-1.1 03/05/202
			GAC_HH_COM/ IND_SLOAM_3.48%TOC																
nemName Sulphate, Total Potential as SO4 Perylene-d12	output unit g/kg %	EQL		2.22 91.1	1.77	1.19 94.3	1.31 97.9	90	0.6 106	1.17	0.6 98.7	0.618 - 0.62 91.3	1.1	0.726 - 0.73 82.6	0.936 - 0.94 82.4	1.12	0.897 - 0.9	0.708 - 0.71 92.6	0.64 - 0.64
Asbestos Actinolite Asbestos Anthophyllite	No units No units			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asbestos Anthophyllite Asbestos Tremolite etroleum Hydrocarbons >C10-C44 Aliphatics & Aromatics	No units mg/kg	10		0	1650 - 2000	0	37.6	0	0	0	0	0	0	0	0	0	17.7	0	0
H xC10-C44 Aliphatics xEC10-E044 Aliphatics		5		- 6	300 - 333	-6	27.4	- 410	- 410	-6	- 6	- 6	- 6	- 45	- 45	- 6		- 6	- 410
>EC10-EC44 Aromatics GRO >C5-C10 >C5-C6 Allphatics	mg/kg mg/kg mg/kg	5 0.02 0.01		-5 -0.02	0.442 0.0305	<5 <0.02	10.2 0.221	<0.02	<5 <0.02 <0.01	<5 <0.02	<5 <0.02	<5 <0.02	<5 <0.02	<5 <0.02	<5 <0.02	<0.02 <0.01	9.57 9.15 <0.02 <0.01	-5 -0.02	<0.02 <0.01
>C5-C10 Aliphatics	mg/kg mg/kg mg/kg	0.01	12,000 ^{e1} 40,000 ^{e1}	<0.01 <0.05	0.298	<0.01 <0.05	0.152	<0.01 <0.05	<0.01 <0.05	<0.01	<0.01 <0.05	-0.01 -0.05	-0.01 -0.05	<0.01 <0.05	<0.01 <0.05	<0.01 <0.05 <0.01	<0.01 <0.05 <0.01	<0.01	<0.01
sc6-c8 Aliphatics sc8-c10 Aliphatics sc10-c12 Aliphatics sc12-c16 Aliphatics	mg/kg mg/kg mg/kg	0.01	11,000" 47,000" 90,000"	<0.01	0.0521 0.216 16.3 31.8	<0.01 <1	0.0496 0.103 <1 6.68	<0.01	<0.01 <1	<0.01 <1	<0.01	<0.01	<0.01 <1	<0.01 <1	<0.01 <1	<0.01	<0.01	<0.01	<0.01
C16-C21 Aliphatics	mg/kg mg/kg mg/kg	1	90,000"	d d	31.8 80.2 163-200 41.9	4	8.02 11.5 1.09	- 4		41	- 4	- 4	- 4	- 4	<1 <1	d d	<1 <1 8.01	- 4	4
c21-C35 Aliphatics c35-C44 Aliphatics c5-C10 Aromatics	mg/kg mg/kg mg/kg	0.05 0.01	1,800,000"	<0.05 <0.01	41.9	<1 <0.05	1.09	<0.05	<0.05	<1 <0.05	<0.05	<1 -0.05	<1 <0.05	<1 <0.05	<1 <0.05	<1 <0.05 <0.01	<1	<0.05	<0.03
SECS-ECT Aromatics SECS-ECT Aromatics SECS-ECT Aromatics SECS-ECT Of Aromatics SECS-ECT Of Aromatics SECS-ECT OF Aromatics	mg/kg mg/kg mg/kg	0.01	86,000 ^{r1} 180,000 ^{ri}	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.01 <0.01	<0.01	<0.05 <0.01 <0.01	<0.01	<0.01
SEC8-EC10 Aromatics SEC10-EC12 Aromatics SEC12-EC16 Aromatics	mg/kg	0.01	180,000 ^{rt} 17,000 ^{rt} 34,000 ^{rt} 38,000 ^{rt}	<0.01 <1	0.144 8.34 23.9	<0.01 <1	0.069 <1	<0.01 <1	<0.01 <1	<0.01	<0.01 <1	40.01 <1	<0.01 <1	<0.01 <1	<0.01 <1	<0.01 <1	<0.01 <1	-0.01 1	<0.0
EC12-EC16 Aromatics EC16-EC21 Aromatics EC21-EC35 Aromatics	mg/kg mg/kg mg/kg mg/kg mg/kg	1	28,000" 28,000"	2.09	23.9 41.2 891 - 900	<1 2.42	1.01 8.16	- d - d	<1 1.07	<1 <1	<1 <1	- d - d	<1 <1	<1 2.28	<1	- d - d	<1 6.95 1.65	- d - d	<1
ECC1 EC35 Aromatics EC35 EC44 Aromatics EC40 EC44 Aromatics EC40 EC44 Aromatics	mg/kg mg/kg mg/kg	1 10	28,000 ^{r1}	<1 <1 210	300 - 348 88.6 1650 - 2000	<1 <1 210	<1 <1 37.8	<1 <1 <10	- c1 - c1	<1 <1 20	<1 <1 20	<1 <1 20	<1 <1 210	<1 <1 210	<1 <1 <1 <10	<1 <1	1.65 <1 17.7	- c1 - c1	<1 <1
EX Benzene	mg/kg	0.001	98"	<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	<0.00
Toluene Ethylbenzene Xvlene (m.8. n.)	mg/kg mg/kg	0.001 0.001 0.002	180,000 ^{rt} 27,000 ^{rt}	<0.007 <0.004	<0.14 <0.08	<0.007 <0.004	<0.007 <0.004	<0.007 <0.004	<0.007 <0.004	<0.007 <0.004	<0.007	<0.007 <0.004	<0.007	<0.007 <0.004	<0.007 <0.004	<0.007 <0.004	<0.007 <0.004	<0.007 <0.004	<0.00
Xylene (m & p) Xylene Total Xylene (o) Total BTEX	mg/kg mg/kg mg/kg	0.002	30,000 ^{rt} 33,000 ^{rt}	<0.02 <0.01	<0.4 <0.2	<0.02 <0.01	<0.02 <0.01	<0.02	<0.02 <0.01	<0.02 <0.01	<0.02 <0.01	<0.02 <0.01	<0.02 <0.01	<0.02 <0.01	<0.02 <0.01	<0.02	<0.02	<0.02 <0.01	<0.0
MALDE	Imayka	0.007		<0.04	40.8	<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
Tert Amyl Methyl Ether	mg/kg mg/kg	0.0005	24,000 ^M	<0.01	<0.2 <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	<0.0
orinated Hydrocarbons Chloromethane Vinyl chloride	mg/kg mg/kg	0.002 0.0005	1.6 ⁸⁶ 2.2 ⁶⁶ 2,100 ⁸⁶	<0.007 <0.006	<0.14 <0.12	<0.007 <0.006	<0.007 <0.006	<0.007 <0.006	<0.007 <0.006	<0.007 <0.006	<0.007 <0.006	<0.007 <0.006	<0.007 <0.006	<0.007 <0.006	<0.007 <0.006	<0.007 <0.006	<0.007 <0.006	<0.007 <0.006	<0.00
Chloroethane 1,1-dichloroethene Dichloromethane	mg/kg mg/kg mg/kg	0.001 0.0005 0.005	2,100 ^{rt} 92 ^{rt} 560 ^{rt} 81 ^{rt} 300 ^{rt}	<0.01 <0.01	40.2 40.2	<0.01 <0.01	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.01 <0.01	40.01 40.01	-0.01 -0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.01 <0.01	<0.0
rans-1,2-dichloroethene	mg/kg mg/kg	0.001	81 ⁸¹ 300 ⁶² 850 ⁸¹ 47 ⁸¹ 2300 ⁶²	<0.01 <0.008	<0.2 <0.16	<0.01 <0.008	<0.01 <0.008	<0.01 <0.008	<0.01 <0.008	<0.01	<0.01 <0.008	<0.01 <0.008	<0.01 <0.008	<0.01 <0.008	<0.01 <0.008	<0.01	<0.01	<0.01 <0.008	<0.00
is-1,2-dichloroethene Chloroform	mg/kg	0.0005 0.003 0.0005	47 ^H 2300 ^G	<0.006 <0.008	<0.12 <0.16	<0.006 <0.008 <0.007	<0.006 <0.008	<0.006 <0.008	<0.006 <0.008	<0.006 <0.008	<0.006 <0.008	<0.006 <0.008	<0.006 <0.008	<0.006	<0.006 <0.008 <0.007	<0.006	<0.006	<0.006 <0.008	<0.00
Carbon tetrachloride Trichloroethene	mg/kg mg/kg mg/kg mg/kg mg/kg	0.0005	350 th 3,000 th 14 th 3.4 th 400 th	<0.007 <0.01 <0.009	<0.14 <0.2 <0.18	<0.01 <0.009	<0.007 <0.01 <0.009	<0.007 <0.01 <0.009	<0.007 <0.01 <0.009	<0.007 <0.01 <0.009	<0.007 <0.01 <0.009	<0.007 <0.01 <0.009	<0.007 <0.01 <0.009	<0.007 <0.01 <0.009	<0.01 <0.009	<0.007 <0.01 <0.009	<0.007 <0.01 <0.009	<0.007 <0.01 <0.009	<0.00 <0.00
Carbon tetrachloride Trichloroethene 1,1,2-trichloroethane Tetrachloroethene	mg/kg mg/kg	0.001	400 ^{rt} 130 ^{rs}	<0.01 <0.005	-0.2 -0.1	<0.01 <0.005	<0.01 <0.005	<0.01 <0.005	<0.01 <0.005	<0.01 <0.005	<0.01 <0.005	<0.01 <0.005	<0.01 <0.005	<0.01 <0.005	<0.01 <0.005	<0.01 <0.005	<0.01 <0.005	<0.01 <0.005	<0.01 <0.00
2,2-dichloropropane Bromochloromethane	mg/kg mg/kg mg/kg	0.001	630°	<0.01 <0.01	<0.2 <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	<0.01	<0.01	<0.01	<0.01
1,1-dichloropropene 1,2-dichloroethane 1,2-dichloropropane	mg/kg mg/kg mg/kg	0.0005 0.001 0.0005		<0.01 <0.005	<0.2 <0.1	<0.01 <0.005 <0.01	<0.01 <0.005 <0.01	<0.01 <0.005 <0.01	<0.01 <0.005	<0.01 <0.005 <0.01	<0.005 <0.005	<0.005 <0.005	<0.01 <0.005 <0.01	<0.01 <0.005 <0.01	<0.01 <0.005 <0.01	<0.01 <0.005 <0.01	<0.01 <0.005 <0.01	<0.01 <0.005 <0.01	<0.00 <0.00
Dibromomethane Bromodichloromethane	mg/kg mg/kg mg/kg	0.0005	1.7 ⁿ 12 ⁿ 99 ⁿ 1.3 ⁰	<0.005 <0.01 <0.009 <0.007	<0.18 <0.14	<0.009	<0.009	<0.009	<0.005 <0.01 <0.009 <0.007	<0.009	<0.009	<0.009	<0.009	<0.009	<0.009 <0.007	<0.009	<0.009	<0.009	<0.00 <0.00 <0.00
cis-1,3-dichloropropene trans-1,3-dichloropropene 1,3-dichloropropane	mg/kg mg/kg mg/kg	0.0005 0.001 0.001		<0.01 <0.01 <0.007	<0.2 <0.2 <0.14	<0.01 <0.01	<0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.01	-0.01 -0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01	<0.01	<0.01	<0.0 <0.0
1,3-dichloropropane Chlorodibromomethane 1,1,1,2-tetrachloroethane	mg/kg mg/kg mg/kg mg/kg	0.001 0.002 0.001	23,000 rd 39 rd 560 ^{rh} 180,000 rd	<0.007 <0.01	<0.14 <0.2	<0.007 <0.01	<0.007	<0.007	<0.007 <0.01	<0.007	<0.007	<0.007 <0.01	<0.007 <0.01	<0.007	<0.007 <0.01	<0.007 <0.01	<0.007	<0.007 <0.01	<0.00
Styrene Bromoform	mg/kg mg/kg	0.002	180,000 ^M 3,100 ^M	<0.01	-0.2 -0.2	<0.01	<0.01	<0.01	<0.01 <0.01	<0.01 <0.01 <0.005	<0.01	-0.01 -0.01	<0.01 <0.01 <0.005	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01 <0.005	<0.01	<0.01	<0.0
Isopropy(benzene 1,1,2,2-tetrachloroethane 1,2,3-trichloropropane	mg/kg mg/kg mg/kg mg/kg	0.002 0.002 0.002 0.002	3,100 ^{rt} 7,700 ^{rt} 1,100 ^{rt} 0.11 ^{rt} 11,000 ^{rt}	<0.01 <0.005 <0.01 <0.016	<0.1 <0.2 <0.32	<0.005 <0.01	<0.01 <0.005 <0.01 <0.016	<0.01 <0.005 <0.01 <0.016	<0.01 <0.005 <0.01 <0.016	<0.005 <0.01	<0.005 <0.01 <0.016	<0.005 <0.01 <0.016	<0.005 <0.01 <0.016	<0.005 <0.01 <0.016	<0.005 <0.01 <0.016	<0.005 <0.01 <0.016	<0.005 <0.01 <0.016	<0.01 <0.005 <0.01 <0.016	<0.0° <0.00 <0.01
n-propylbenzene 1,3,5-trimethylbenzene tert-butylbenzene	mg/kg	0.002	0.11° 11,000 ^M	<0.016 <0.008	<0.32 <0.2 <0.16	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016	<0.016 <0.008	<0.016	<0.016 <0.01 <0.008	<0.016	<0.016	<0.016	<0.01
tert-butylbenzene 1,2,4-trimethylbenzene	mg/kg mg/kg mg/kg	0.002 0.002 0.003 0.001	1,500°2 120,000° 220°6 120,000°	<0.014 <0.009	<0.28 <0.18 <0.2	<0.014 <0.009	<0.014 <0.009	<0.014 <0.009	<0.014 <0.009	<0.014	<0.014	<0.014 <0.009	<0.014	<0.014 <0.009	<0.014 <0.009	<0.014 <0.009	<0.014	<0.014 <0.009	<0.01
1,2,4-trimethylbenzene sec-butylbenzene o-isopropyltoluene	mg/kg mg/kg mg/kg	0.002	120,000 ⁴⁰ 58,000 ⁴⁰	<0.01	-0.2	<0.01 <0.01 <0.011	<0.01	<0.01 <0.01 <0.011	<0.01 <0.01 <0.011	<0.01	<0.01 <0.01	<0.01 <0.01 <0.011	-0.01 -0.01	<0.01 <0.01 <0.011	<0.01 <0.01 <0.011	<0.01	<0.01	<0.01 <0.01 <0.011	<0.0
n-butylbenzene 1,2-dibromo-3-chloropropane Hexachlorobutadiene	mg/kg mg/kg mg/kg	0.003 0.002 0.004	0.064 rd 120 rd	<0.011 <0.014 <0.02	<0.22 <0.28 <0.1	<0.014 <0.02	<0.011 <0.014 <0.02	<0.014 <0.02	<0.014 <0.02	<0.011 <0.014 <0.02	<0.014 <0.02	<0.014 <0.02	<0.011 <0.014 <0.02	<0.014	<0.014 <0.02	<0.011 <0.014 <0.02	<0.011 <0.014 <0.02	<0.014 <0.02	<0.01 <0.01 <0.02
H Naphthalene Acenaphthylene	mg/kg mg/kg	0.008	1,100 ^m	<0.009 <0.012	<0.009	<0.009	<0.009 <0.012	<0.009	<0.009	<0.009 <0.012	<0.009 <0.012	<0.009	<0.009 <0.012	<0.009	<0.009 <0.012	<0.009	<0.009	<0.009 <0.012	<0.00
Acenaphthylene Acenaphthene Fluorene	mg/kg mg/kg mg/kg	0.012 0.008 0.01	100,000 ^{rs} 100,000 ^{rs} 71,000 ^{rs}	<0.008 <0.01	<0.008	<0.008 <0.01	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008	<0.008 <0.01	<0.008	<0.008	<0.008 <0.01	<0.00
Horrene Phenanthrene Anthracene Houranthene Pyrene Benru[a]anntracene	mg/kg mg/kg mg/kg mg/kg mg/kg	0.015	71,000 ^{rt} 23,000 ^{rt} 540,000 ^{rt}	<0.015 <0.016	<0.015	<0.015	<0.015	<0.015	<0.015 <0.016	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015 <0.016	<0.015	<0.015	<0.015 <0.016	<0.01
Pyrene Beru(a)anthracene	mg/kg mg/kg	0.015	23,000 ^{Pl} 54,000 ^{Pl} 180 ^{Pl}	<0.017 <0.015 <0.014 <0.01	<0.017 <0.015 <0.014 <0.01	<0.017 <0.015 <0.014	<0.017 <0.015 <0.014 <0.01	<0.017 <0.015 <0.014	<0.017 <0.015 <0.014 <0.01	<0.017 <0.015 <0.014	<0.017 <0.015 <0.014	<0.017 <0.015 <0.014 <0.01	<0.017 <0.015 <0.014 <0.01	<0.017 <0.015 <0.014 <0.01	<0.017 <0.015 <0.014	<0.017 <0.015 <0.014 <0.01	<0.017 <0.015 <0.014 <0.01	<0.017 <0.015 <0.014 <0.01	<0.01 <0.01 <0.01
Serugajanniacene Ehrysene Berzo(a) pyrene ndeno(1,2,3-c,d)pyrene Xbenz(a,h)anthracene	mg/kg mg/kg mg/kg	0.01 0.015	54,000" 180" 350" 36"	<0.015	<0.015	<0.01 <0.015	<0.015	<0.01 <0.015	<0.015	<0.01 <0.015	<0.01	<0.01 <0.015	<0.015	<0.01 <0.015	<0.01 <0.015	<0.015	<0.015	<0.015	<0.01
ndeno(1,2,3-c,d)pyrene Dibenz(a,h)anthracene Benzo(a,h,f)berviene	mg/kg mg/kg mg/kg	0.018 0.023 0.024	3.6" 4.000"	<0.018 <0.023 <0.024	<0.018 <0.023 <0.024	<0.023 <0.024	<0.018 <0.023 <0.024	<0.018 <0.023 <0.024	<0.018 <0.023 <0.024	<0.023 <0.024	<0.023	<0.023 <0.024	<0.018 <0.023 <0.024	<0.023 <0.024	<0.023 <0.024	<0.018 <0.023 <0.024	<0.018 <0.023 <0.024	<0.018 <0.023 <0.024	<0.01 <0.02 <0.02
lenzo(g, h, i)perylene lenzo(b)fluoranthene lenzo(k)fluoranthene	mg/kg mg/kg mg/kg	0.015	45" 1,200"	<0.015 <0.014	<0.015 <0.014	<0.015 <0.014	<0.015 <0.014	<0.015 <0.014	<0.015 <0.014	<0.015 <0.014	<0.015 <0.014	<0.015 <0.014	<0.015 <0.014	<0.015 <0.014	<0.015 <0.014	<0.015 <0.014	<0.015 <0.014	<0.015 <0.014	<0.01
AH 16 Total C -methylnachthalene	Imarka	0.118	3,000	-0.118 -di 1	<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	40.118	<0.11
emethylnaphthalene Eromophenyl phenyl ether I-chlorophenyl phenyl ether	mg/kg mg/kg mg/kg	0.1		<0.1 <0.1	<0.1 <0.1	40.1 40.1	<0.1 <0.1	<0.1 <0.1	40.1 40.1	<0.1 <0.1	40.1 40.1	40.1 40.1	<0.1 <0.1	40.1 40.1	d0.1 d0.1	<0.1 <0.1	-0.1 -0.1	<0.1 <0.1	40.1 40.1
krobenzene lis (2-chloroethoxy) methane	mg/kg mg/kg	0.1	26 ⁷⁰ 2,500 ⁷⁰	40.1 40.1	40.1 40.1	40.1 40.1	40.1 40.1	<0.1 <0.1	40.1 40.1	40.1 40.1	40.1 40.1	40.1 40.1	<0.1 <0.1	40.1 40.1	-0.1 -0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1
arbazole Veneziere	mg/kg mg/kg mg/kg	0.1	1,200°	40.1 40.1	40.1 40.1	40.1 40.1	<0.1 <0.1	<0.1 <0.1	40.1 40.1	40.1 40.1	40.1 40.1	40.1 40.1	<0.1 <0.1	40.1 40.1	-0.1 -0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1 <0.1	40.1 40.1
Sexachlorocyclopentadiene Sexachloroethane	mg/kg mg/kg	0.1	7.5°0 120°0	<0.1 <0.1	<0.1 <0.1	40.1 40.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	-0.1 -0.1	-0.1 -0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1
enolics 2-methylphenol 2-nitrophenol	mg/kg mg/kg	0.1	Use Cresol Total ⁸⁰	<0.1	<0.1 <0.1	40.1 40.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	40.1 40.1	40.1 40.1	<0.1	<0.1 <0.1	<0.1	<0.1
2-nitrophenol 2,4-dimethylphenol 4-chloro-3-methylphenol	mg/kg mg/kg mg/kg mg/kg	0.1	30,000 ^M 82,000 ^{f2}	<0.1 <0.1	<0.1 <0.1	40.1 40.1	<0.1 <0.1	<0.1 <0.1	40.1 40.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	40.1 40.1	-0.1 -0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1
4-methylphenol 4-nitrophenol Phenol		0.1 0.1 0.01	Use Cresol Total ⁴⁴	<0.1 <0.2 <0.01	<0.1 <0.2 <0.01	40.1 40.2 40.01	<0.1 <0.1 <0.01	<0.1 <0.2 <0.01	40.1 40.1 40.01	<0.1 <0.1 <0.01	<0.1 <0.1 <0.01	40.1 40.1 40.01	<0.1 <0.1 <0.01	40.1 40.1 40.01	40.1 40.1 40.01	<0.1 <0.1 <0.01	<0.1 <0.2 <0.01	<0.1 <0.1 <0.01	40.1 40.1
2-chloronaphthalene Cresol Total	mg/kg mg/kg mg/kg mg/kg mg/kg	0.1	2,200 ^{rt} 180,000 ^{rt}	<0.1	<0.1 <0.01	<0.1 <0.01	<0.1 <0.01 <0.035	<0.1 <0.01	<0.1 <0.01	<0.1 <0.01	<0.1 <0.01	<0.1 <0.01	<0.1 <0.01	<0.1 <0.01	<0.1	<0.1 <0.01	<0.01	<0.1 <0.01	<0.1 <0.01
Total Monohydric Phenols (S) Corrected Xylenols	mg/kg mg/kg	0.035		<0.035 <0.015	<0.035 <0.015	<0.035 <0.015	<0.035	<0.035	<0.035	<0.035 <0.015	<0.035 <0.015	<0.035 <0.015	<0.035	<0.035 <0.015	<0.035 <0.015	<0.035	<0.035 <0.015	<0.035	< 0.035

Env Stds Comments #1:LQM/CIEH S4ULs 2015 #2:USEPARSL (NOV 2021) #3:Defra C4SL (2014)

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

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

			Field_ID Sample_Depth_Range Sampled_Date_Time Lab_Report_Number	TP220 1-1.1 04/05/2023	TP301 0.7-0.8 16/05/2023	TP302 0.9-1 16/05/2023	TP303 2.2-2.3 16/05/2023	TP304 2.3-2.4 17/05/2023	TP305 0-0.9 17/05/2023	TP306 1.5-1.6 17/05/2023	TP307A 1-1.1 17/05/2023	1P308 1.3-1.4 22/05/2023	TP309 0.3-0.4 22/05/2023	TP310 3.1-3.2 22/05/2023	TP311 3.9-4 22/05/2023	TP312 1.2-1.3 30/05/2023	TP313 0.5-0.6 31/05/20
	la de de de	Iros	GAC_HH_COM/ IND_SLOAM_>3.48%TOC														
emrame Sulphate, Total Potential as SO4 Perylene-d12	output unit 9/kg %	EQL		0.6 85.5	0.6 97.4	2.06 92.3	17 87.9	0.78 - 0.783 79.7	0.6 79.5	90.7	0.6 88.4	1.52 84.5	0.6 80.9	0.6 95	1.16	1.39	1.17
Asbestos Actinolite	No units			0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asbestos Anthophyllite Asbestos Tremolite roleum Hydrocarbons	Nounits			0	0	0	0	0	0	0	0	0	0	0	0	0	0
roleum Hydrocarbons -C10-C44 Aliphatics & Aromatics I	mg/kg	10		<10	29.4		250-300	<10	<10	<10	16.8	53.2	<10	<10	<10	<10	24.7
SCIO-C44 Aliphatics SECIO-C44 Aromatics	mg/kg mg/kg	5		-6	5.22 24.2	32.3 79.1	70.5 179 - 200	-45 -45	-6	-5	11.9	14.8 38.4	-6	-6	5.62	-6	10.1
GRO >C5-C10 >C5-C6 Aliphatics >C5-C10 Aliphatics	mg/kg mg/kg mg/kg	0.02 0.01 0.05	12,000"	<0.02 <0.01 <0.05	<0.02 <0.01 <0.05	<0.02 <0.01 <0.05	<0.02 <0.01 <0.05	<0.02 <0.01 <0.05	<0.02 <0.01 <0.05	<0.02 <0.01 <0.05	<0.02 <0.01 <0.05	<0.02 <0.01 <0.05	<0.02 <0.01 <0.05	<0.02 <0.01 <0.05	<0.02 <0.01 <0.05	<0.02 <0.01 <0.05	<0.0
C6-C8 Aliphatics C8-C10 Aliphatics	mg/kg	0.01 0.01	40,000 ²¹ 11,000 ²¹ 47,000 ²¹	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	-0.01 -0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.0
C10-C12 Aliphatics C12-C16 Aliphatics C16-C21 Aliphatics	mg/kg mg/kg mg/kg	1	47,000 ²¹ 90,000 ²¹	- 1	1.39	<1 <1 1.18	<1 9.06	<1	<1 <1	- (1		<1 2.56			- 4	- 4	<1 <1 1.21
C21-C35 Aliphatics C35-C44 Aliphatics	mg/kg mg/kg	1	1,800,000**	- 4	2.54 1.29	24.6 6.13	46.7 14.8	<1	- d - d	- d - d	3.91	8.88 3.32	- 4	- 4	1.1	- 4	6.4
-C5-C10 Aromatics -EC5-EC7 Aromatics	mg/kg mg/kg mg/kg	0.05 0.01 0.01 0.01	86,000"	<0.05	<0.05 <0.01 <0.01	<0.05 <0.01	<0.05 <0.01 <0.01	<0.05 <0.01	<0.05	<0.05 <0.01	<0.05 <0.01	<0.05 <0.01	<0.05 <0.01	<0.05	<0.05 <0.01	<0.05 <0.01	<0.05
>EC7-EC8 Aromatics >EC8-EC10 Aromatics >EC10-EC12 Aromatics	mg/kg mg/kg mg/kg	0.01	180,000 ^{rt} 17,000 ^{rt} 34,000 ^{rt}	<0.01 <0.01	<0.01	-0.01 -0.01	<0.01	<0.01 <0.01	<0.01	<0.01	-0.01 -0.01	<0.01	<0.01 <0.01	<0.01	<0.01	<0.01 <0.01	<0.01
>EC12-EC16 Aromatics >EC16-EC21 Aromatics	mg/kg mg/kg mg/kg	1	38,000" 28,000"	- d - d	<1 4.14	1.1	<1 19.7	- 4	<1 <1	- 4	<1 1.26	6.72	- 4	<1	- 4	- 4	<1
EC21 EC35 Aromatics EC35 EC44 Aromatics EC40 EC44 Aromatics	mg/kg mg/kg mg/kg	1	28,000 ^{rt} 28,000 ^{rt}	d d	17.8 2.29 1.16	66 12	100 - 134 24.9 6.43	1.63	<1	1.23	9.35	23.4 8.28 2.2	- 4	2.25	3.62 1.46	- 4	2.35
>EC40-EC44 Aromatics >C5-C44 Aliphatics & Aromatics EX	marka	10		<1 <10	29.4	100-111	6.43 250 - 300	<10	<10	<1 <10	11.9	53.2	<10	<10	<10	<10	24.1
Benzene Toluene Ethylbenzene	mg/kg mg/kg mg/kg	0.001 0.001 0.001	98 ⁹³ 180,000 ⁹¹	<0.009 <0.007	<0.009 <0.007 <0.004	<0.009 <0.007	<0.02 <0.02	<0.009 <0.007	<0.009 <0.007	<0.009 <0.007	<0.009 <0.007	<0.001	<0.009 <0.007	<0.009 <0.007	<0.009 <0.007	<0.001	-0.00
Ethylbenzene Xytene (m & p) Xytene Total	mg/kg mg/kg	0.001 0.002 0.02	180,000 th 27,000 th	<0.004 <0.01	<0.004 <0.01	<0.004 <0.01	<0.02 <0.04	<0.004 <0.01	<0.004 <0.01	<0.004	<0.004 <0.01	<0.001 <0.002	<0.004	<0.004	<0.004	<0.001 <0.002	<0.00
Xylene Total Xylene (o) Total BTEX	mg/kg mg/kg mg/kg mg/kg	0.02 0.002 0.007	30,000 ^{r1} 33,000 ^{r1}	<0.02 <0.01 <0.04	<0.02 <0.01 <0.04	<0.02 <0.01 <0.04	<0.04 <0.14	40.01 40.04	<0.02 <0.01 <0.04	<0.02 <0.01 <0.04	<0.02 <0.01 <0.04	<0.002 <0.002	<0.02 <0.01 <0.04	<0.02 <0.01 <0.04	<0.02 <0.01 <0.04	<0.002 <0.002	<0.00 <0.00
ygenates MTRF	mg/kg mg/kg	0.0005	24,000 ^M	<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	-0.00
Iert Amyl Metnyl Etner		0.001	1.4	<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	40.00
Chloromethane Vinyl chloride Chloroethane	mg/kg mg/kg mg/kg mg/kg mg/kg	0.002 0.0005 0.001	1.6 ⁴⁶ 2.2 ⁴⁶ 2,100 ⁷⁶	<0.007 <0.006 <0.01	<0.007 <0.006 <0.01	<0.007 <0.006 <0.01	<0.04 <0.01 <0.02	<0.00/ <0.006 <0.01	<0.007 <0.006 <0.01	<0.007 <0.006 <0.01	<0.007 <0.006 <0.01	<0.002 <0.0005 <0.001	<0.00/ <0.006 <0.01	<0.007 <0.006 <0.01	<0.00/ <0.006	<0.002 <0.0005 <0.001	<0.00 <0.00
1.1.dichlornethene	mg/kg mg/kg	0.0005	92 ^M 560 ^M 81 ^M 300 ^M	<0.01 <0.01	<0.01	<0.01 <0.01	<0.01 <0.1	<0.01 <0.01	<0.01	<0.01	<0.01 <0.01	<0.0005 <0.005	<0.01 <0.01	<0.01 <0.01	<0.01 <0.01	<0.0005 <0.005	<0.00 <0.00
Dichloromethane trans-1,2-dichloroethene 1,1-dichloroethane cis-1,2-dichloroethene	mg/kg mg/kg	0.001 0.0005	81 ^{#1} 300 [®] 850 [®] 47 ^{#1} 2300 [®]	<0.01 <0.008	<0.01 <0.008	<0.01 <0.008	<0.02 <0.01	<0.01 <0.008	<0.01 <0.008	<0.01 <0.008	<0.01 <0.008	<0.001 <0.0005	<0.01 <0.008	<0.01 <0.008	<0.01 <0.008	<0.001 <0.0005	<0.00
cis-1,2-dichioroethene Chloroform 1.1.1-trichloroethane	mg/kg mg/kg	0.0005 0.0005 0.0005	47" 2300" 350" 3.000"	<0.006 <0.008 <0.007	<0.006 <0.008 <0.007	<0.006 <0.008 <0.007	<0.01 <0.06 <0.01	<0.006 <0.008 <0.007	<0.006 <0.008 <0.007	<0.006 <0.008 <0.007	<0.006 <0.008 <0.007	<0.0005 <0.003 <0.0005	<0.006 <0.008 <0.007	<0.006 <0.008 <0.007	<0.006 <0.008 <0.007	<0.0005 <0.003 <0.0005	<0.00 <0.00
Carbon tetrachloride	mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg mg/kg	0.0005	350 ^{rs} 3,000 ^{rs} 14 ^{rs} 3.4 ^{rs} 400 ^{rs}	<0.01	<0.009	<0.009	<0.01 <0.01 <0.02	<0.009	<0.007 <0.01 <0.009	<0.009	<0.009	<0.0005 <0.001	<0.01	<0.01	<0.01 <0.009	<0.0005	<0.00
1,1,2-trichloroethane Tetrachloroethene	mg/kg mg/kg	0.001	400 rd 130 rd	<0.01 <0.005	<0.01 <0.005	<0.01 <0.005	<0.02 <0.04	<0.01 <0.005	<0.01 <0.005	<0.01 <0.005	<0.01 <0.005	<0.001 <0.002	<0.01 <0.005	<0.01 <0.005	<0.01 <0.005	<0.001 <0.002	<0.00 <0.00
2,2-dichloropropane Bromochloromethane	mg/kg mg/kg mg/kg	0.001	630°°	<0.01	<0.01	<0.01 <0.01	<0.02	<0.01 <0.01	<0.01	<0.01	-0.01 -0.01	<0.001	<0.01	<0.01	<0.01	<0.001	<0.00
1,1-dichloropropene 1,2-dichloroethane	mg/kg mg/kg	0.0005 0.001 0.0005		<0.01 <0.005	<0.01 <0.005	<0.01 <0.005 <0.01	<0.01	<0.01 <0.005 <0.01	<0.01 <0.005 <0.01	<0.01 <0.005 <0.01	<0.005 <0.005	<0.0005 <0.001 <0.0005	<0.01 <0.005 <0.01	<0.01 <0.005 <0.01	<0.01 <0.005 <0.01	<0.0005 <0.001 <0.0005	<0.000 <0.000 <0.000
1,2-dichloropropane Dibromomethane	mg/kg mg/kg mg/kg mg/kg mg/kg	0.0005 0.001 0.002	1.7 ⁿ 12 ⁿ 99 ⁿ 1.3 ^e	<0.005 <0.01 <0.009	<0.005 <0.01 <0.009	<0.01 <0.009	<0.02 <0.01 <0.02 <0.04	<0.009	<0.01	<0.01 <0.009	<0.009	<0.0005	<0.009	<0.009	<0.009	<0.0005 <0.001	<0.000 <0.00
cis-1,3-dichloropropene trans-1,3-dichloropropene	mg/kg mg/kg	0.0005	1.5	<0.01	<0.01	<0.01 <0.01	<0.01	40.01 40.01	<0.01	<0.01	<0.01 <0.01	<0.0005	<0.01	<0.01	<0.01	<0.0005 <0.001	<0.00
trans-1,3-dichloropropene 1,3-dichloropropane Chlorodibromomethane 1,1,1,2-tetrachloroethane	mg/kg mg/kg mg/kg mg/kg mg/kg	0.001 0.001 0.002 0.001	23,000 rd 39 rd	<0.007 <0.01	<0.01 <0.007 <0.01	<0.007 <0.01	<0.02 <0.04	<0.007 <0.01	<0.01 <0.007 <0.01	<0.007 <0.01	<0.007 <0.01	<0.001 <0.002	<0.007 <0.01	<0.007 <0.01	<0.007 <0.01	<0.001 <0.002	<0.00 <0.00
1,1,1,2-tetrachloroethane Styrene	mg/kg mg/kg	0.002	39 ^{/2} 560 ^{''} 180,000 ^{/6}	<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 -0.01	<0.001	<0.01	<0.01	<0.01	<0.001	<0.00
Isopropylbenzene 1,1,2,2-tetrachloroethane	mg/kg mg/kg mg/kg mg/kg mg/kg	0.002 0.002 0.002 0.002	3,100 ^{rt} 7,700 ^{rt} 1,100 ^{rt} 0.11 ^{rt} 11,000 ^{rt}	<0.005	<0.01 <0.005 <0.01 <0.016	<0.01 <0.005 <0.01 <0.016	<0.04 <0.04 <0.04 <0.04	<0.01 <0.005 <0.01 <0.016	<0.01 <0.005 <0.01 <0.016	<0.005 <0.01	<0.01 <0.005 <0.01 <0.016	<0.002 <0.002 <0.002	<0.01 <0.005 <0.01	<0.01 <0.005 <0.01 <0.016	<0.01 <0.005 <0.01 <0.016	<0.002 <0.002 <0.002 <0.002	0.00 00.00 00.00
1,1,2,2-tetrachloroethane 1,2,3-trichloropropane n-propylbenzene	mg/kg mg/kg	0.002	0.11 ¹⁰ 11,000 ^M	<0.01 <0.016 <0.01	< 0.01	<0.01	<0.04	<0.01	<0.01	<0.016 <0.01	<0.01	<0.002 <0.002	<0.016 <0.01	<0.01	<0.016 <0.01	<0.002	<0.00 <0.00
1,3,5-trimethylbenzene tert-butylbenzene	mg/kg mg/kg	0.002 0.002 0.002	1,500°0 120,000°0 220°0 120,000°0	<0.008 <0.014	<0.008 <0.014	<0.008 <0.014	<0.04 <0.04	<0.008	<0.008 <0.014	<0.008 <0.014	<0.008	<0.002 <0.002	<0.008	<0.008	<0.008 <0.014	<0.002 <0.002	<0.00
1,2,4-trimethylbenzene sec-butylbenzene p-isopropyltoluene	mg/kg mg/kg mg/kg mg/kg mg/kg	0.003 0.001 0.002	120,000°	<0.01	<0.01	<0.01 <0.01	<0.06 <0.02 <0.04	<0.01 <0.01	<0.01	<0.01	-0.01 -0.01	<0.001	<0.01	<0.01 <0.01	<0.01	<0.001	<0.00 <0.00
n-butylbenzene 1,2-dibromo-3-chloropropane	mg/kg	0.003	58,000 rd 0.064 rd	<0.011 <0.014	<0.011 <0.014	<0.011 <0.014	<0.06 <0.04	<0.011 <0.014	<0.011 <0.014	<0.011 <0.014	<0.011 <0.014	<0.003 <0.002	<0.011 <0.014	<0.011 <0.014	<0.011 <0.014	<0.003 <0.002	<0.00 <0.00
Hexachforobutadiene H Naphthalene	mg/kg mg/kg	0.004	120 ^m	<0.02	<0.02	-0.02	<0.08	<0.02 <0.009	<0.02	<0.02	<0.02	<0.004	<0.02	<0.02	<0.02	<0.004	<0.00
Acenaphthylene Acenaphthene	mg/kg mg/kg	0.008 0.012 0.008	100,000 ^m	<0.012 <0.008	<0.012 <0.008	<0.012 <0.008	<0.012 <0.008	<0.012 <0.008	<0.012 <0.008	<0.012 <0.008	<0.012 <0.008	<0.012 <0.008	<0.012 <0.008	<0.012 <0.008	<0.012 <0.008	<0.012 <0.008	<0.01 <0.00
Fluorene Phenanthrene Anthracene	mg/kg mg/kg mg/kg mg/kg mg/kg	0.01	71,000 ^{rt} 23,000 ^{rt} 540,000 ^{rt}	<0.01 <0.015	<0.01 <0.015	<0.01 <0.015	<0.01 <0.015	<0.01 <0.015	<0.01 <0.015	<0.01 <0.015	<0.01 <0.015	<0.01 <0.015	<0.01 <0.015	<0.01	<0.01	<0.01 <0.015	<0.01
Fluoranthene Pyrene	mg/kg mg/kg	0.016 0.017 0.015		<0.016 <0.017 <0.015	<0.016 <0.017 <0.015	<0.016 <0.017 <0.015	<0.016 <0.017 <0.015	<0.016 <0.017 <0.015	<0.016 <0.017 <0.015	<0.016 <0.017	<0.016	<0.016 <0.017 <0.015	<0.016	<0.016 <0.017 <0.015	<0.016	<0.016	<0.01 <0.01
	mg/kg mg/kg mg/kg mg/kg mg/kg	0.014	54,000"1 180" 350"	<0.014 <0.01	<0.014 <0.01 <0.015	<0.014 <0.01	<0.014 <0.01	<0.014 <0.01	<0.014 <0.01	<0.014 <0.01	<0.014 <0.01	<0.014	<0.014 <0.01	<0.014 <0.01	<0.014 <0.01	<0.014 <0.01	<0.01 <0.01
Berup(a) pyrene Indeno(1,2,3-c,d)pyrene Dibena(a,h)anthracene	mg/kg mg/kg	0.015 0.018 0.023	510 ^{rt}	<0.015	<0.015 <0.018	<0.015 <0.018	<0.015	<0.015	<0.015	<0.015 <0.018	<0.015	<0.015	<0.015	<0.015	<0.015	<0.015	<0.01 <0.01
uibenzja,njantirracene Benzo(g,h,i)perylene Benzo(b)fluoranthene	mg/kg mg/kg mg/kg	0.024	3.6" 4,000" 45" 1,200"	<0.024 <0.015	<0.024 <0.015	<0.024 <0.015	<0.024 <0.015	<0.024 <0.015	<0.024 <0.015	<0.024 <0.015	<0.023 <0.024 <0.015	<0.023 <0.024 <0.015	<0.024 <0.015	<0.023 <0.024 <0.015	<0.023 <0.024 <0.015	<0.024 <0.015	<0.02 <0.02
Berum (k) fluoranthene PAH 16 Total	mg/kg mg/kg	0.014	1,200"	<0.014 <0.118	<0.014 <0.118	<0.014 <0.118	<0.014 <0.118	<0.014 <0.118	<0.014 <0.118	<0.014 <0.118	<0.014 <0.118	<0.014 <0.118	<0.014 <0.118	<0.014 <0.118	<0.014 <0.118	<0.014 <0.118	<0.01 <0.11
DC 2-methylnaphthalene 1-bromophenyl phenyl ether		0.1	3,000 ^{rg}	40.1	d0.1	40.1	40.1	40.1	<0.1	40.1	40.1	40.1	40.1	40.1	40.1	40.1	<0.1
Lehlorophenyl phenyl ether	mg/kg mg/kg mg/kg mg/kg	0.1	26'0	-0.1 -0.1	<0.1 <0.1 <0.1	40.1 40.1	<0.1 <0.1	<0.1 <0.1 <0.1	<0.1 <0.1	<0.1 <0.1	40.1 40.1	40.1 40.1	40.1 40.1	40.1 40.1	40.1 40.1	<0.1 <0.1	40.1 40.1
Azobenzene Bis (2-chloroethoxy) methane Bis (2-chloroethyl)ether	mg/kg mg/kg	0.1	2,500 rd	-0.1 -0.1	<0.1	40.1 40.1	<0.1 <0.1	<0.1 <0.1	<0.1	<0.1 <0.1	<0.1 <0.1	-0.1 -0.1	40.1 40.1	40.1 40.1	40.1 40.1	<0.1 <0.1	40.1 40.1
Carbazole Dibenzofuran	mg/kg mg/kg mg/kg	0.1	1,200 ^{rg} 7.5 ^e	<0.1 <0.1	<0.1 <0.1	-0.1 -0.1	<0.1 <0.1	<0.1	<0.1	<0.1	<0.1 <0.1	40.1 40.1	-0.1 -0.1	40.1 40.1	<0.1 <0.1	<0.1 <0.1	40.1 40.1
Hexachlorocyclopentadiene Hexachloroethane enolics	mg/kg	0.1	7.5 ^{el} 120 ^{el}	<0.1 <0.1	<0.2 <0.1	<0.1 <0.1	<0.1	<0.1 <0.1	<0.1 <0.1	<0.1	<0.2 <0.1	⊲0.2 ⊲0.1	40.1 40.1	<0.1 <0.1	<0.2 <0.1	<0.1 <0.1	<0.1 <0.1
2-methylphenol 2-nitrophenol	mg/kg mg/kg	0.1	Use Cresol Total ^{re}	40.1 40.1	<0.1 <0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	-0.1 -0.1	40.1 40.1	0.1 0.1 0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1
2-nitrophenol 2,4-dimethylphenol 4-chloro-3-methylphenol	mg/kg mg/kg mg/kg mg/kg mg/kg	0.1	30,000 ^M 82,000 ^M	-0.1 -0.1	500.1	40.1 40.1	<0.1	<0.1 <0.1	<0.1	<0.1 <0.1	<0.1 <0.1	40.1 40.1	40.1 40.1	40.1 40.1	40.1 40.1	<0.1 <0.1	<0.1
4-methylphenol 4-nitrophenol Phenol	mg/kg mg/kg	0.1 0.1 0.01	Use Cresol Total ⁴⁴	40.1 40.1 40.01	<0.1 <0.1 <0.01	<0.1 <0.1 <0.01	<0.1 <0.1 <0.01	<0.1 <0.1 <0.01	<0.1 <0.1 <0.01	<0.1 <0.1 <0.01	<0.1 <0.1 <0.01	<0.1 <0.1 <0.01	<0.1 <0.1 <0.01	<0.1 <0.1 <0.01	<0.1 <0.1 <0.01	<0.1 <0.1 <0.01	40.1 40.1
2-chloronaphthalene Cresol Total	mg/kg mg/kg mg/kg mg/kg mg/kg	0.1	2,200 ^{rt} 180,000 ^{rt}	<0.01 <0.01	<0.1	<0.1 <0.01	<0.1	<0.1 <0.01	<0.1	<0.1	40.1 40.01	<0.1	<0.1 <0.01	<0.1 <0.01	<0.1 <0.01	<0.1	<0.1
Total Monohydric Phenols (S) Corrected Xylenols	mg/kg mg/kg	0.035		<0.035	<0.035 <0.015	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	<0.035	40.035

Env Stds Comments #1:LQM/CIEH S4ULs 2015 #2:USEPARSL (NOV 2021) #3:Defra C4SL (2014)

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

Key NOX 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 Sampled_Date_Time	2.3-3	0.8-0.85	2.45-2.55 03/05/2023	1-1.1	1-1.1	1-1.1	1-1.1 08/05/2023	1-1.1	1.1-1.2 09/05/2023	1-1.1	1-1.1	1-1.1	1.1-1.2	1.1-1.2	1-1.1	1-1.1
			Lab_Report_Number GAC_HH_COM/ IND_SLOAM_>3.48%TOC																
emName	output unit	EQL																	
Bs Tetrachlorobiphenyl, 3,3,4,4-(PCB 77)	mg/kg	0.003	0.16	<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	<0.00
Tetrachlorobiphenyl, 3,4,4,5- (PCB 81)	mg/kg mg/kg	0.003	0.048 rd 0.49 rd	<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	<0.00
Pentachlorobiphenyl, 2,3,3,4,4- (PCB 105) Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg	0.003	0.5	<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	<0.00
PCB 118 Pentachlorobiphenyl, 2.3.4.4.5-(PCB 123)	mg/kg mg/kg	0.003	0.49*0	<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	<0.003 <0.003	<0.00
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.003	0.49 rd 0.00015 rd		<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	<0.00
Hexachlorobiphenyl, 2,3,3,4,4,5-(PCB 156) Hexachlorobiphenyl, 2,3,3,4,4,5-(PCB 157)	mg/kg mg/kg	0.003	0.5 ^e	<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	<0.00
Hexachlorobiphenyl, 2,3,4,4,5,5-(PCB 167)	mg/kg	0.003	0.51 ⁶²	<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	<0.00
Hexachlorobiphenyl, 3,3,4,4,5,5-(PCB 169) Heptachlorobiphenyl, 2,3,3,4,4,5,5-(PCB 189)	mg/kg mg/kg	0.003	0.00051 ⁶⁰ 0.52 ⁶⁰	<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	<0.003	<0.003 <0.003	<0.00
Total PCB WHO 12	mg/kg	0.036	0.52	< 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	<0.03
PCB 28 PCB 52	mg/kg 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	<0.003	<0.00
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	<0.003	<0.00
PCB 138 PCB 153	mg/kg 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	<0.003	<0.003 <0.003	<0.00
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	<0.003	<0.00
Total PCB 7 Congeners nino Aliphatics	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	<0.021	<0.02
N-nitrosodi-n-propylamine	mg/kg	0.1	0.33*0	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
illines 2-nitroaniline	mg/kg	0.1	8,000	e0.1	e0.1	-01	<0.1	-0.1	-0.1	-0.1	-0.1	di 1	-0.1	-01	-0.1	<0.1	-0.1	an 1	20 T
3-nitroaniline	mg/kg mg/kg	0.1	0,000	<0.1	40.1	<0.1	<0.1	<0.1	40.1	40.1	40.1	40.1	<0.1	40.1	<0.1	<0.1	<0.1	d0.1	40.1
4-chloroaniline 4-nitroaniline	mg/kg mg/kg	0.1	11 rd 110 rd	<0.1	<0.1	<0.1	<0.1	<0.1	-0.1	<0.1	40.1 40.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
plosives				500.1	1 500.1				1 200.1		1 200.1	1 100.1	1 200.1		1 200.1	1 500.1	1 500.1	1 500.0	100.1
2,4-Dinitrotoluene 2.6-dinitrotoluene	mg/kg mg/kg	0.1	3,800 ^{rt} 1,900 ^{rt}	<0.1	<0.1	<0.1	<0.1	<0.1	40.1 40.1	<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"	<0.1	40.1	<0.1	<0.1	<0.1	-0.1	-0.1	-0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
logenated Benzenes 1.3.5-Trichlorobenzene	mg/kg	0.007	130 ^{rt}	<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
Chlorobenzene	ma/kg	0.002	290 ^{rt} 520 ^{rt}	<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
2-chlorotoluene	mg/kg mg/kg	0.002	520 ^H 23,000 ^D	<0.01	<0.2 <0.18	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.009	<0.009	<0.009	<0.01 <0.009	<0.01	<0.01	<0.01	<0.01
4-chlorotoluene 1 3-dichlorohenzene	mg/kg	0.003	23.000*2		<0.2	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01 <0.008	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01
1,4-dichlorobenzene	mg/kg mg/kg	0.005	170 ^{rt} 25,000 ^{rt}	<0.008	<0.1 <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	<0.008	<0.003
1,2-dichlorobenzene 1,2,4-trichlorobenzene	mg/kg	0.005	11,000"	<0.01	<0.1 <0.1	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01 <0.02	<0.01 <0.02	<0.01 <0.02	<0.01 <0.02	<0.01	<0.01	<0.01	<0.01
1,2,4-trichlorobenzene 1,2,3-trichlorobenzene	mg/kg mg/kg	0.007	1,300 ^{e1} 590 ^{e1}	<0.02	<0.1	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	40.02 40.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02
Hexachlorobenzene	mg/kg	0.1	120 ^m	<0.1	<0.1	<0.1	<0.1	<0.1	-0.1	<0.1	-0.1	<0.1	<0.1	-0.1	<0.1	<0.1	<0.1	<0.1	⊲0.1
alogenated Hydrocarbons Dichlorodifluoromethane	mg/kg	0.0005	370 ^{/0}	<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
Bromomethane Trichlorofluoromethane	mg/kg	0.001	30 ^{/0}	<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-dibromoethane	mg/kg mg/kg	0.0005	350,000 rd 0.16 rd	<0.006 <0.01	<0.12 <0.2	<0.006	<0.006	<0.01	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006	<0.006 <0.01	<0.006	<0.01	<0.006 <0.01	<0.006
logenated Phenols 2-chlorophenol	mg/kg	0.1	5.800 ^{rg}	0.1		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 ^{cc}	<0.1	<0.1	40.1	<0.1	<0.1	40.1	40.1 40.1	40.1 40.1	40.1 40.1	<0.1	40.1 40.1	<0.1	<0.1	<0.1	<0.1	40.1
2,4,5-trichlorophenol 2,4,6-trichlorophenol	mg/kg	0.1	82,000 ^{/2}		<0.1	40.1	<0.1	<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-trichiorophenol Pentachiorophenol	mg/kg mg/kg	0.1	210°0 400°°	<0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1	40.1 40.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	-0.1 -0.1	<0.1	<0.1	<0.1	<0.1	<0.1 <0.1
thalates Bis(2-ethylhexyl)phthalate	ma/kg	0.1		0.1	1 01	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	86,000 ^M 950,000 ^M	<0.1	<0.1 <0.1	<0.1 <0.1	<0.1 <0.1	<0.1	40.1 40.1	<0.1 <0.1	<0.1 <0.1	40.1	<0.1 <0.1	<0.1 <0.1	<0.1	<0.1	<0.1	<0.1 <0.1	<0.1
Di-n-butyl phthalate Di-n-octyl phthalate	mg/kg mg/kg	0.1	15,000 ^M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	40.1 -0.1	<0.1	-0.1	-0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Diethylphthalate	mg/kg	0.1	89,000 ^M 290,000 ^M	<0.1	40.1	40.1	<0.1	<0.1	40.1	40.1	40.1	40.1	<0.1	40.1	<0.1	<0.1	<0.1	<0.1	40.1
Dimethyl phthalate ilvents	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
Carbon disulfide	mg/kg mg/kg	0.001	47 ^m	<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
Isophorone etals	mg/kg	0.1	2.400"	<0.1	<0.1	⊲0.1	<0.1	<0.1	-0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
Arsenic	mg/kg mg/kg	0.6	640 ^{rs}	10.6	5.73	8.56 19.1	10	14.2	11.7 31.3	10.5	7.11	4.89	2.55	1.17	4.29 17.5	7.94	8.36 50	19.1	5.76 21.8
Barium Bervilium	mg/kg mg/kg	0.6	22,000 ^M 12 ^M	26.6 0.595	61.9	19.1	44.9 0.836	28.3 0.832	0.7	36.4 2.19	0.669	20.9	16.3	14.6 0.0335 - 0.034	0.271	14 0.375	0.684	18.6 0.882	0.417
Beryllium Cadmium	ma/kg	0.02	410"	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) Copper	mg/kg mg/kg	1.4	Use either Crill or CrW ^{III} 68,000 ^{III}	12.1	15.3	13.6	9.66 13	21.4	17.3	18.5	13.2	11.7	6.75 8.15	2.69	9.25	12.2	12.1	14.7	8.3 11.7
Copper Lead	mg/kg mg/kg	0.7	2,330*1	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 Nickel	mg/kg mg/kg	0.2	350 ^{/0} 980 ^{/0}	40	19.8	<0.1 25.3	64.4	51.3	40.6	<0.1 89.5	48.3	<0.1 25.7	<0.1 20.6	-0.1 12.4	<0.1 20.5	40	<0.1 40.7	61.1	30.8
Selenium	mg/kg	1	12,000"	6.77	1.13	3.22	<1	1.07	1.01	<1 18.2	<1	<1 9.77	<1	<1	<1 8.65	<1	<1	1.32	<1
Vanadium Zinc	mg/kg mg/kg	0.2 1.9	9,000 ^{rt} 730,000 ^{rt}	17.4 105	8.67 58.9	13 70.5	18.5 129	19.6 94.6	17.8 94.7	18.2	14.5 98.9	9.77	9.29 44.9	9.31 49.1	8.65 48.5	11.6 68.7	23 105	14.8	13.3 57.6
Chromium (hexavalent)	mg/kg	0.6	49"1	<0.6 15.8	<0.6 8.4	-0.6 17.9	<0.6 9.66	<0.6 19	-0.6 11.8	40.6 8.24	-0.6 7.8	<0.6 5.84	<0.6 6.75	-0.6 9.18	<0.6 4.97	<0.6 5.08	<0.6 13.9	<0.6 5.79	<0.6 8.3
Chromium (Trivalent) ganics			8.600"						11.8	8.24	1 7.8	5.84	6.75		4.97			5.79	8.3
Organic Matter organics	%	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
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 - 21
Cyanide Total Sulphate	mg/kg	1 40	150°	<1 380 - 384	<1 520 - 523	<1	<1 300	<1 48.4 - 50	<1 <48	<1 80 - 83.9	<1 149 - 150	<1 140	<1 208 - 210	<1 80 - 81	<1 180 - 182	<1 165 - 170	<1 210	<1	<1
Moisture	mg/kg %	ed.		380 - 384 26	21	50 - 52.7 19 0.0207 - 0.021		19	13	15	8.1	12	7.8	19	9.3	6.8	19	-48 11	9.4
Sulphate (soluble)	91	0.0002						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 - 0.0
pH (Lab) her	pH_Units	-		8.16	8.12	5.52	8.32	8.46	8.74	8.86	9.06	8.74	8.89	5.59	у у	8.85	7.61	8.98	8.76
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
bestos Asbestos Gravimetric Quantification	mass %	0.001		-	<0.001						1 -								
Asbestos Quantification - PCM Evaluation Asbestos Quantification - Total - %	%	0.001		-	<0.001	-	-	-	-	-	-	-	-	-	-	-		-	-
rrogate	10	V.001		_	- «U.UU1	-	-	-		-	1	-						1 - 1	-
Toluene-D8 Chrysene-d12 (surr.)	%			91.2	95.7	100	98.2 97.7	108 86.5	99.9	102	100	100 93.3	99.8 81.4	97.8 86.8	101 83	99.5 82.7	96.9 101	101	99.6 115
d10-Acenaphthene (SS)	%	—		98.2	109	103	88	98	111 106 106	92.2	91.9	94.2	88.6	89.2	89	88.8	101 102 100	98.9	115 106 106
d10-Phenanthrene (SS) d8-Naphthalene (SS)	%			93.6 110	117	111	89.7 87	99	106 98.7	92.4 89.1	91.1	97.6 88.6	80.2 95.8	83.3 94.7	81.5 95.2	80.9 95.1	100 106	98.8	106 99.8
d8-Naphthalene (SS) GRO Surrogate	%			96.2	66.1	108	97.2	98.9	98.7	89.1 101	89.3 105	102	95.8	94.7	95.2 101	95.1	106 92	99.9	99.8
	_	_																	

Env Stds Comments #1:LOM/CIEH S4ULs 2015 #2:USEPARSL (NOV 2021) #3:Defra C4SL (2014) #4:EIC/AGS/CI-JARE

GAC: Generic Assessment Criteria (blank): No assessment criteria available

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	14.1	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 Lab_Report_Number	04/05/2023	16/05/2023	16/05/2023	16/05/202	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
			GAC_HH_COM/ IND_SLOAM_>3.48%TOC														
			IND_AGMIC_CAUMOC														
hemName	output unit	EQL															
dBs Tetrachlorobiphenyl, 3,3,4,4- (PCB 77)	mg/kg	0.003	0.16"	<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	<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) Pentachlorobiphenyl, 2,3,4,4,5- (PCB 114)	mg/kg mg/kg	0.003	0.49 ^{rg} 0.5 ^{rg}	<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 Pentachlorobiohenyl. 2.3.4.4.5-(PCB 123)	mg/kg mg/kg	0.003	0.49**	<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	<0.003	<0.003	<0.003
Pentachlorobiphenyl, 3,3,4,4,5- (PCB 126)	mg/kg	0.003	0.49 ^{f2} 0.00015 ^{f2}	<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) Hexachlorobiphenyl, 2,3,3,4,4,5-(PCB 157)	mg/kg	0.003	0.5 ⁴⁰ 0.5 ⁴⁰	<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 <0.003	<0.003 <0.003	<0.003
Hexachlorobiphenyl, 2.3.4.4.5.5-(PCB 167)	mg/kg mg/kg	0.003	0.510	<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 mg/kg	0.003	0.00051*0	<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 189) Total PCB WHO 12	mg/kg mg/kg	0.036	0.52 rd	<0.036	<0.036	<0.003	<0.036	<0.003	<0.003	<0.036	<0.003	<0.036	<0.003	<0.003	<0.003	<0.036	<0.036
PCB 28	mg/kg 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 PCB 101	ma/kg ma/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	<0.003 <0.003	<0.003	<0.003 <0.003
PCB 138	ma/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 PCB 180	mg/kg 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	<0.003
Total PCB 7 Congeners	ma/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	40.021
mino Aliphatics N-nitrosodi-n-propylamine	mg/kg	0.1	0.33 ⁶²	z0.1	<0.1	<0.1	0.1	-01	<0.1	z0.1	e0.1	-0.1	0.1	0.1	-0.1	-0.1	- 0.1
nilines		1					40.1	40.1		40.1	40.1		40.1	40.1	40.1		40.1
2-nitroaniline 3-nitroaniline	mg/kg	0.1	8,000 ^{rg}	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-0.1	40.1 40.1	-0.1	<0.1	<0.1	<0.1	<0.1
4-chloroaniline	mg/kg mg/kg	0.1	11"	<0.1	<0.1	<0.1	<0.1	40.1 40.1	<0.1	<0.1	40.1	<0.1	40.1 40.1	40.1	<0.1 <0.1	<0.1 <0.1	40.1 40.1
4-nitroaniline	mg/kg	0.1	11 ¹⁰	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	d0.1	-0.1	<0.1	<0.1	<0.1	<0.1	<0.1
xplosives 2,4-Dinitrotoluene	mg/kg	0.1	3,800 ^M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	40.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,6 dinitrotoluene	mg/kg	0.1	1,900 ^{rt}	<0.1	<0.1	<0.1	<0.1	40.1	<0.1	<0.1	40.1	40.1	<0.1	<0.1	40.1	<0.1	<0.1
Nitrobenzene lalogenated Benzenes	mg/kg	0.1	22"	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1
1,3,5-Trichlorobenzene	mg/kg	0.007	130 ^{rt}	<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 Bromobenzene	mg/kg mg/kg	0.002	290 ^{rt}	<0.005	40.005	<0.005	<0.04	<0.005	<0.005	40.005	<0.005	<0.002	<0.005	<0.005	<0.005	<0.002	<0.002
2-chlorotoluene	mg/kg	0.003	520 ^M 23,000 ^M	<0.009	<0.009	<0.009	<0.06	<0.009	<0.009	<0.009	<0.009	<0.002	<0.009	<0.009	<0.009	<0.002	40.002
4-chlorotoluene	mg/kg	0.003	23,000	<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 1.4-dichlorobenzene	mg/kg mg/kg	0.005	170 ^{rt} 25,000 ^{rt}	<0.008	<0.008 <0.005	<0.008 <0.005	<0.1	<0.008	<0.008	<0.008	<0.008	<0.005 <0.005	<0.008	<0.008	<0.008	<0.005	<0.005
1,2-dichlorobenzene	mg/kg mg/kg	0.005	11,000"	<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 1,2,3-trichlorobenzene	mg/kg mg/kg	0.007	1,300 ^{rt} 590 ^{rt}	<0.02	<0.02	<0.02	<0.1	<0.02 <0.02	<0.02	<0.02	<0.02 <0.02	<0.007	<0.02	<0.02	<0.02	<0.007	<0.007
Hexachlorobenzene lalogenated Hydrocarbons	ma/kg	0.1	120 ^m	<0.1	<0.1	<0.1	40.1	40.1	<0.1	<0.1	40.1	40.1	40.1	40.1	40.1	<0.1	<0.1
Ralogenated Hydrocarbons Dichlorodifluoromethane	mg/kg	0.0005	370 ^{rg}	-0.004	-0.006	-0.004	-0.01	-0.004	I -0.004	-0.004	-0.004	-0.0005	-0.006	-0.004	-0.004	-0.0005	-0.0005
Bromomethane	mg/kg	0.001	30 ^{/0} 350,000 ^{/0}	<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 1,2-dibromoethane	mg/kg mg/kg	0.0005		<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
alogenated Phenois	Imarka	0.001	0.16"	<0.01	<u.u1< td=""><td><0.01</td><td><0.02</td><td>40.01</td><td><0.01</td><td><0.01</td><td>40.01</td><td><0.001</td><td><0.01</td><td><0.01</td><td><0.01</td><td><0.001</td><td><0.001</td></u.u1<>	<0.01	<0.02	40.01	<0.01	<0.01	40.01	<0.001	<0.01	<0.01	<0.01	<0.001	<0.001
2-chlorophenol	mg/kg	0.1	5,800°	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	40.1	-0.1	<0.1	<0.1	<0.1	<0.1	<0.1
2,4-dichlorophenol 2,4-5-trichlorophenol	mg/kg mg/kg	0.1	2,500 ^{rg} 82,000 ^{rg}	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	40.1 40.1	40.1 40.1	<0.1 <0.1	<0.1	<0.1 <0.1	<0.1	<0.1
2,4,5-trichlorophenol 2,4,6-trichlorophenol	mg/kg	0.1	21010	<0.1	<0.1	<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 hthalates	mg/kg	0.1	400"	<0.1	<0.1	<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-ethylhexyl) phthalate	mg/kg	0.1	86,000 ^M 950,000 ^M	<0.1	<0.1	<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 Di-n-butyl phthalate	mg/kg	0.1	950,000 ^M 15,000 ^M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-0.1	40.1 40.1	<0.1	<0.1 <0.1	<0.1	<0.1	<0.1
Di-n-octyl phthalate	mg/kg mg/kg	0.1	89,000 ^M	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	40.1	<0.1	<0.1	40.1	40.1	<0.1	<0.1
Diethylphthalate Dimethyl phthalate	mg/kg mg/kg	0.1	290,000 ^{rt}	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	-0.1	-0.1	<0.1	40.1	<0.1	<0.1	<0.1
plyents		1		405.1	40.1	60.1	40.1	40.1	50.1	400.1	40.1	40.1	40.1	90.1	90.1	40.1	40.1
Carbon disulfide Isophorone	mg/kg	0.001	47 ⁿ	<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
Actals	mg/kg	0.1	2.400"			60.1	40.1		40.1	40.1	40.1	02.1	40.1	40.1	40.1	40.1	40.1
Arsenic Barium	mg/kg	0.6	640 ^{rs}	5.52 22.4	2.78	4.28 137	7.09	2.41 25.9	4.96 130	13.6	2.25 46.4	2.89 32.2	2.07	3.81	9.13	3.02	3.02
Beryllium	mg/kg mg/kg	0.01	22,000 ^H	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"	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+W) Copper	mg/kg mg/kg	0.9	Use either Criti or CrW ¹¹ 68.000 ²¹	9.17 15.2	9.9	31.8	27.1	6.54 5.14	27.5 5.73	2.96 5.22	12.4	6.85 8.03	7.43	29.8	15.8	7.08 10.5	2.66
Lead	ma/kg	0.7	2,330%	13.6	8.9	25	25.5 15.3	6.08	16.2	5.53	8.29	11.4	6.94	19.4	17.8	9.97	4.1
Mercury Nickel	mg/kg mg/kg	0.1	350°0 980°	<0.1 32.4	<0.1 17.9	<0.1 24.5	<0.1 43	10.9	<0.1 34.8	<0.1 10.9	40.1 15.6	-0.1 14.6	<0.1 20.7	<0.1 54	<0.1 92.7	<0.1 40.7	<0.1 11.4
Selenium	mg/kg	1	12,000"	<1	<1	<1	1.89	<1	<1	<1	<1	<1	<1	<1	<1	1.18	<1
Vanadium Zinc	mg/kg mg/kg	0.2 1.9	9,000 ^{rt} 730,000 ^{rt}	14.4 78.1	15.3 33.5	30.2 109	22.5 117	8.24 27	27.8 52.9	11.3	12 29.8	8.19 38.8	9.72 49.5	33.9 127	15.8 265	13.3 75	4.85 28.6
Ohromium (hexavalent)	mg/kg	0.6	730,000** 49**	-0.6		-0.6	-0.6	-0.6	-0.4	<0.6	-0.6			-0.6	-0.6		-0.6
Unromium (Irivalent)	mg/kg	0.9	8.600"	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
ganics 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
organics		200															
Sulphur Cyanide Total	mg/kg mg/kg	200	150°	<200	<200	688 - 690	5670	260 - 261	<200	<200	<200	506 - 510 <1	<200	<200	386 - 390 <1	460 - 462	390 - 391
Sulphate	mg/kg	48	130	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 Sulphate (soluble)	% 9/L	0.0002		13	17	52 0.065 - 0.0654	54 0.376	19	23 0.015	17 0.014	24 0.0389 - 0.039	28 0.0319 - 0.032	9.5	25 0.0146 - 0.015	21	9.6	0.0119 - 0.0
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
ther	mg/kg	0.1		-0.1	-01	-01	-01	-01	-0.1	-01	-01	-0.1	-0.1	-01	-01	-0.1	-0.5
Bis(2-chloroisopropyf)ether sbestos	prograd			eut.1	ed.1	60.1	40.1	40.1	40.1	60.1	43.1	97.1	97.1	ed.1	ed.1	40.1	40.1
Asbestos Gravimetric Quantification	mass %	0.001			-	-	-	-	-	-	-	-	-	-	-	-	-
Asbestos Quantification - PCM Evaluation Asbestos Quantification - Total - %	%	0.001		-	-	-	-	-	-	-	-	-	-	-	-	-	-
irrogate																	
Toluene-D8 Chrysene-d12 (surr.)	%	1		97.4 90	101 97.7	92.1 94.6	99.4	97.8 77.4	95.3 84	98.8	96.3 91	95.7 83	100 77.4	94.9	98.9 92	95.8 91	93.7 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) d8-Naphthalene (SS)	%	-		93.9	97.8 94.6	95.4	98	84.9	87.9 88.2	98	94.5	90.2	86.9	90	96.1	88.4 90.8	89.5 90.5
GRO Surrogate	%			106	103	92.4 82.9	70.1	96.8	86.8	96.8	93.7	105	98.3	88	92.3	90.8	103

GAC: Generic Assessment Criteria
(Briant): No assessment criteria availlable Ned ranslysed

Rey

XXX

Exceedance of HH Soil. Commercial/Industrial. Sandy Loam. TCC >-3.48%

			Field_E	179701	1P9P02	TPSP03	TPSPOI	TPEPOS	TPSPOL	198907	176F00	TPC01	19002	19003	TPCD4	TPCDS	3PC06	TPC07	TPCCSI	TPSSOI	1PS501	TPS502	TPS502	TPS503	1PSS03	TPSS04
			Sample_Depth_Range Sampled_Date_Time Lab_Report_Numbe	1.6-1.5 23/05/2023	0303	0.203	0.50.6 24/05/2023	0504 23/05/2023	03-03 24/05/2023	0.3-0.4 24/05/2023	12-13 24/05/2023	24-3.7	2.5-2.6 29/05/0023	3.2-3.3 30/05/0023	1.6-1.7 30/05/2023	0.5-0.6 30/05/2023	2.5-2.6 30/05/2023	1.6-1.5 30/05/2023	29-3 29/05/2023	1-1.1 11/05/2022	3.25-3.35 11.05/2023	192	3.4-3.6	1.1-1.2 10/05/2022	32.2 10/05/2023	2.1-3.2 11/05/2022
			GAC_HH_COM/ IND_SIDAM_>1.485TOC																							
ChemName Sulphate, Total Potential as SOI	output unit	EQ.			1 0.00	1.39	17.6	2.99	1.91	1.86	144	Lan and	1.00	45	1.4	19.9	F.04	4.000 0.00		1.00	0.004 0.00	Last sam	0.000 0.0		0.033 0.00	1.00
Purylens-d12	%	H		93.2	96	91.5	82.7	91.5	92.3	92.1	80.3	77.6	932	82.0	805	822	92.2	0.907 - 0.91 75.9	90.2	92.3	102	92.9	82.4	9.0	101	100
Arbertos Actinolite Arbertos Anthophyllite Arbertos Tremplite	No units No units 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
Petrolisum Hydrocarbons	No units mg/kg	10		198 - 200	192	0	82.9	- 0	- 0	- 0	- 10	- 0	0		100 - 121	201 400	12.5	- 0	- 0	1000 - 1070	- 10	15.9	- 0	1 145	- 0	
TRI >C10-C44 Alighatics >C10-C44 Arenatics GRD >C5-C10 >C5-C10 Alighatics >C5-C10 Alighatics		5		56-2 100 - 141	9.40	- 4	21 61.9	- 4	6.27	- 6	- 4	- 4	- 4	- 3		100-111 272-300		d	- 6	200 - 228 800 - 945	d	- 3	- 6	- 4	- 4	- 4
>EC10ECH4 Aromatics GRD >C5-C10	ngkg ngkg ngkg	5 0.02		100 - 141	97 -002	62 -022		-0.02	- d - d(2)	617	-0.00	-d -d02	-0.022	-5 -012	21.5 -0.02	272 - 300 -(0.02 -(0.01	15.1	-0.02	4.09	<0.02	-0.00	11.1	-0.02	12 -0.00	-d -d02	5.78 -0.02 -0.01
>CS-CS-Alighatics >CS-C10 Alighatics	moke	0.01	12,000*	-0.05	-001 -005	<001 <005	-0.01 -0.05	-0.01	-001	-0.00	-0.01	-001 -005	-001 -005	-001 -005	-001 -005	<0.05	-0.05	-0.01	-0.01	-0.00	-0.01	-001 -005	-001 -005	-0.05	-(0.01 -(0.05	-0.01
SG-CI Alghatics	mg/kg mg/kg	0.01	40,000° 11,000° 47,000°	-0.01 -0.01	<0.01	4001	-0.01 -0.01	-0.01	4001	-0.01 -0.01 -(1	-0.01	<0.01	-001 -(1	-001 -1	4001 9.22	<001 <001 <1	40.01	-0.01	-0.01	-0.00 -0.00	-0.01 -(1	<0.01	<0.01	-0.01	<0.01	<001
>C13-C16 Alighatics >C16-C21 Alighatics	mg/kg	1	42,000°	9.55	<1 <1 2.07	d d 119	211	- 4	<1 <1 5.71	<1 <1 106	d	- d	d d	- d - d	42 39.2 14.4	29.7	d d	d d	<1 <1 1.61	1.88 10.8 158 - 200	d d	<1 <1 2.63	- c1 - c1	d d	d	- d - d
>CS-CH Alighetics >CS-CH Alighetics >CS-CTO Aromatics	ngkg ngkg ngkg	1 0.05	1,800,000*	36.9 9.43	-(1 -(105	-(1 -(0)))	162 163	-0.05	471 -0.05	-1 -0.05	-1 -0.05	<1	<1	-005	-0.05	69.5 12.1 -0.05	-1.56 -0.05	-0.05	-11 -0.05	57.1 -0.05	-0.05	1 100	<1 <0.05	-0.05	-c1 -c1 -c105	<1 <0.05
SCITCOS Appentos SCIS CHA Alphatica SCIS CHA Alphatica SCIS CHA Acomatica SCIS CHA Acoma	mp/kg mp/kg	0.01	96,000° 190,000°	-0.01 -0.01	<001 <001	<001 <001	-0.01 -0.01	-0.01 -0.01	-0.01 -0.01	-0.00	-0.01 -0.01	<001 <001	<001 <001	<001 <001	<0.01 <0.01	<001 <001	-0.01 -0.01	-0.01 -0.01	-0.01	-0.00 -0.00	-0.01	<001 <001	<001 <001	<0.01 <0.01	<0.01 <0.01	<001 <001
>ECII-EC10 Aromatics >EC10-EC12 Aromatics		0.01	17,000° 34,000° 38,000°	<0.01	<0.01	-001	-0.01 -d	<0.01	<0.01	<0.01	-0.01 <1	<0.01	<0.01	-001 -(1	<0.01	-001	<0.01	-0.01	-401	<0.01	-0.01	<0.01	<0.01	-0.01	<0.01	<0.01
JC/JACCO Amendio	moka moka moka moka	H	29,000*	16.2 90.6	457	462	196	- d - d - 22	41 1.19	486	d d	- 4	- 0	- 0	7.99 7.96 4.19	13.6	d d	136	42	2.11 4.57 656 - 700	d d	9.23	- 0	- d - d - 987		199
>EC114CIS Aromatics >ECIS4CH Aromatics >EC004CH Aromatics	mg/kg mg/kg	1	28,000° 28,000°	90.6 34.2 11.7 198 - 200	6.57 2.40 <1	d	36.4 22.6	- 4	d 	- 41	d d	- d	d d	- d - d		200 - 227 21.4 1.77	d	d d	- 4	456 - 700 192 - 200 100 - 101	d d	9.23 1.32 <1	d	d	- d	d
OTEY	mg/kg mg/kg	0.001	60"	198 - 200	193	<10	82.9	- 10	-10	<10	<10	<10	<10	<10	100 - 121	393 - 400	15.1	-10	-30	1000 - 1070	<10	11.1	<10	1 12	-10	-30
Enterior Tokano Ethylborumo	mg/kg mg/kg	0.001	180,000" 27,000"	-000 -000	<0.001 <0.001	-0.001 0.00392 -0.001	<0.00181 <0.00181	-0.02	-0.000 -0.000 -0.000	-0.001 0.00172 -0.001		-0.001 -0.001	-0.001 -0.001	-0.001 -0.001	-0.001 -0.001	-002 -002	-0.00 -0.00	-0.001 -0.001 0.00162	-0.001 -0.001	-0.19 -0.14 -0.09	-0.00V -0.007 -0.004	-0.009 -0.007 -0.004	-0.009 -0.007	<0007 <0007	-0.007 -0.004	-0.007 -0.007
Xylone (m & g) Xylone Total	mg/kg	0.002	30,000"	-0.04 -0.4	-0.002 -0.002	-0.000 -0.002	<0.002 <0.00	-0.04	-0.002	-0.00	-0.00	-0.002 -0.002	-0.000 -0.002	-0.003 -0.02	-0.002 -0.002	1004 104	-0.04 -0.4	-0.002 -0.02	-0.002	-0.2 -0.4	-0.01	<001 <002	<001 <002	-0.01 -0.02	<001 <002	<001 <002
Xylens (c) Total STEX Oxygenates	mg/kg mg/kg	0.002	23,000"	-0.04 -0.14	-0.002 -0.007	-0.003 -0.007	<0002 <0007	-0.14	-0.002 -0.007	4007	0.00909	-0.002	-0.007	-6007	-0.002	<034 <034	-0.04 -0.14	-0.002	-0.002	-0.2	-0.01	-001 -004	-001	-0.01	-001 -004	-001
Chygonatos MTEE Tert Amyl Methyl Ether Chlorinated Hydrocarbons	mg/kg mg/kg	0.000s 0.001	24,000"	-0.01 -0.02	<0.0005 <0.001	<0.0005 <0.001	<0.0005 <0.001	-0.01	-0.0005 -0.000	-0.0005 -0.001	-0.0005	-0.0005 -0.001	-0.0005	-0.0005 -0.001	<0.0005 <0.001	<001 <002	-0.01 -0.02	<0.0005 100.00	-0.0005 -0.000	-0.2	-0.01 -0.01	-001 -001	<001	<0.01 <0.01	<001 <001	<001
	mg/kg	0.002	1.6" 2.2"	10.01	<0.002	<0.000	<0.002	-0.04	-0.002	-0.000	-0.002	-0.002	-0.000	-0003	<0.002	1004	<0.04	<0.002	-0.002	-0.14	-0.007	-0.007	<0.007	<0.007	-0.007	<0.007
Vinyl chlorido Chloroethane 1.1-dichloroethane	mg/kg mg/kg	0.0005 0.001 0.0005	2,100°	10.00	-0.0005 -0.0005	-0.0005 -0.0005	<0.0005 <0.0001 <0.0005	-0.01 -0.02	-0.0005 -0.0005	-0.005 -0.005	-0.0005 -0.001 -0.0005	-0.0005 -0.001	-0.0005 -0.0005	-0.0005 -0.0005	-0.0005 -0.0005	-001 -002	-0.00 -0.00	-0.0005 -0.0005	-0.0005 -0.000	-0.12	-0.00	-0.006 -0.01	-0.006 -0.01	-0.006 -0.01	<0.006 <0.01	-0.006 -0.01
1,1-dichloroethene Dichloromethano Irano 1,2-dichloroethene	mp/kg mp/kg mp/kg	0.0005 0.005 0.001	92" 560" 81" 300"	-0.1 -0.00	<0.005 <0.001	<0.005 <0.001	<0.005 <0.001	-0.1	-0.005 -0.001	-0.005 -0.001	<0.005 <0.001	-0.005 -0.001	-0.005 -0.001	-0.005 -0.001	<0.005 <0.001	<0.1 <0.02	-0.1 -0.03	<0.005 <0.001	-0.005	-0.2 -0.2	-0.01	<001 <001	<001 <001	-0.01 -0.01	<0.01 <0.01	<001 <001
trans 1,2 dichigrosthere 1,1 dichigrosthere dis 1,2 dichigrosthere	mg/kg	0.0005		10.01	-0.0005 -0.0005	-0.0005 -0.0005	-0.0005 -0.0005	-0.01 -0.01	<0.0005 <0.0005	<0.0005 <0.0005	-0.0005 -0.0005	<0.0005 <0.0005	-0.0005 -0.0005	-0.0005 -0.0005	-0.0005 -0.0005	<001 <001	-0.01 -0.01	<0.0005 <0.0005	<0.0005 <0.0005	-0.16 -0.12	-0.006	-0.000	-0.000	<0.000	-0.000 -0.006	-0.000 -0.006
Chlorotom 1,1,1-trichlorosthane Carbon tetrachloride	mg/kg mg/kg	0.000 0.0005	47" 2330" 250" 1,000"	-0.00 10.00	-0.003 -0.0005	-0.0005 -0.0005	<0.003 <0.0005	-0.06 -0.01	-0.000 -0.0005	-0.000 -0.0005	-0.003	-0.003 -0.0005	-0.0005	-0.0005 -0.0005	-0.003 -0.0005	-006 -001	-0.06 -0.01	-0.0005 -0.0005	-0.000 -0.0005	-0.16 -0.14	-0.009 -0.007	-0.009 -0.007	-0.000 -0.007	<0.000 <0.007	-0.009 -0.007	-0.008 -0.007
1,1,2-trichloroethane	mg/kg	0.000	14" 2.4" 400"	-0.00 -0.00	<0.001 <0.001	-(0.001 -(0.001	<0001 <0001	-0.02 -0.02	-0.001 -0.001	-0.001 -0.001	-0.001 -0.001	-0.001 -0.001	-0.001 -0.001	+0.001 +0.001	<0.001 <0.001	-002 -002	-(0.00 -(0.00	100.00 100.00	-0.001 -0.001	-0.18 -0.2	-0.009 -0.01	-0.009 -0.01	-0.009 -0.001	-(0.009 -(0.01	-0.009 -(0.01	-(0.009 -(0.01
Tetrachioroethene VOC	moke	0.002	130*	10.01	<0.002	-0.003	-0.002	-0.04	-0.002	-0.000	-0.002	-0.002	-0.003	-0000	<0.002	-004	10.00	-0.002	-0.002	-0.1	-0.005	-0.005	-0.005	-0.005	-0.005	-0.005
Branothioromethane 1,1-dictioromethane 1,2-dictioromethane	ngkg ngkg ngkg ngkg	0.002	430"	-0.01	-0.002	-0.000 -0.0005	-0.002 -0.0005	-0.01	-0.000	-0.000	-0.002	-0.001 -0.002 -0.0005	-0.000	-0.000	-0.002 -0.0005	-004 -001	-0.04 -0.01	-0.002 -0.003	-0.002	-0.2	-0.01	<001 <001	<001 <001	-0.01 -0.01	<001 <001	-001 -001
1,2-dichloropropane		0.000	1.7"	-0.00 -0.00	<0.001 <0.0005	<0.0005	<0.001 <0.0005	-0.02	-0.000 -0.0005	-0.001 -0.0005	<0.001 <0.0005	-0.001	-0.0005	-0.0005	<0.001	<002 <001	<0.00 <0.00	<0.001 <0.0005	-0.000 -0.0005	-0.1 -0.2	-0.005 -0.01	-0.005 -0.001	<0.005 <0.01	<0.005 <0.01	<0.005 <0.01	<0.005 <0.01
Ditromomethane Bromodichloromethane	moka moka moka moka moka	0.000	130	-0.00 HO.0>	<0.001 <0.002	<0.000 <0.000 <0.0005	<0001 <0002 <00005	-0.02 -0.04 -0.01	-0.000 -0.000	-0.001 -0.000 -0.0005	-0.001 -0.002	-0.001 -0.002 -0.0005	-0.001 -0.000	-0.001 -0.002 -0.0005	-0.001 -0.002 -0.0005	-002 -004	-0.00 -0.00 -0.00	-0.001 -0.002 -0.0005	-0.000	-0.18 -0.14	-0.009 -0.007 -0.01	-0.009 -0.007 -0.01	<0.009 <0.007 <0.01	<0.009 <0.007	-0.009 -0.007 -0.01	-0.009 -0.007
dis1,3-dichioropropone trans1,3-dichioropropone 1,3-dichioropropane	mg/kg mg/kg	0.0005 0.001 0.001	23,000°	-0.00	-0.001 -0.001	-0.001 -0.001	<0.001 <0.001	-0.02	-0.001 -0.001	-0.001 -0.001	-0.001 -0.001	-0.001	-0.001 -0.001	-0.001 -0.001	-0.001 -0.001	-0.02 -0.02	-0.00 -0.00	-0.001 100.0>	-0.001	-0.2 -0.14	-0.01 -0.007	-0.007 -0.007	<0.01 <0.007	<0.01 <0.007	<0.01 <0.007	<001 <0007
Chorodoronometrane	moke	0.002	39"	10.00	<0.002 <0.001	-0.003 -0.001	<0002 <0001	-0.04 -0.02	-0.000 -0.000	4000	-0.002	-0.002	-0.003	-0.000 -0.001	<0.002 <0.001	<004 <002	-0.00 -0.00	-0.002 -0.001	-0.000	-0.2	-0.01 -0.01	<001 <001	<001 <001	-0.01 -0.01	<0.01 <0.01	<001 <001
Styrene Styrene Remobrn Inspropylbenome 1,1,2,3-estrachloraethane 1,2,3-4stchloropylpane	mg/kg mg/kg	0.002	180,000" 2,100" 7,700" 1,100"	10.04	-0.002 -0.002	-0000 -0000	-0002 -0002	1000	-0.002 -0.002	-0.00	-0.002 -0.002	-0.002	-0.000	4000	-0.002 -0.002	<011 <001	-0.1 -0.04	-0.002	-0.002	-0.2	-0.01	-0.005	-001 -005	-0.01 -0.005	<0.001 <0.005	-001 -005
1,1,2,3 tetrachioroethano 1,2,3 trichioropropano	mg/kg	0.002		10.01	<0.002 <0.002	-0.000 -0.000	<0002 <0002	400k	-0.002 -0.002	-0.002	-0.002 -0.002	-0.002 -0.002	-0.000	-0.000 -0.000	<0.002 <0.002	-004 -004	-0.04 -0.04	-0.002 -0.002	-0.002	-0.2	-0.01 -0.016	-0.01 -0.014	<001 <001s	-0.01 -0.016	<0.01 <0.016	<001 <0016
1.35-trimethylbetgene	mg/kg mg/kg	0.002	11,000° 1,500°	-0.04 -0.04	-0.002 -0.002	-0.003 -0.003 -0.003	<0.002 <0.002	-004 -004 -004 -006	-0.002 -0.002	400	-0.002	-0.002 -0.002 -0.002	-0.000 -0.000	-0.000 -0.000	-0.002 -0.002	-004 -004	40.04 40.04	-0.002 -0.002	-0.002	-0.2 -0.16 -0.29	-0.00 -0.008 -0.014 -0.009	-0.009 -0.004	-0.00 -0.000 -0.004 -0.009	-0.00 -0.000	<0.001 <0.009	-001 -0008
teri-buty/benzene 1,2,4-trimethy/benzene secbuty/benzene	noko noko noko noko noko	0.000	120,000° 220° 120,000°	-0.00	<0.003	-0.003 -0.001	<0000 <00001	-0.00	-0.000 -0.000	4000	-0.003	-0.003	-0.003 -0.001	4000	<0.003	-006 -002	-0.00	-0.003 -0.001	-0.000	-0.19	-0.009	-0.009	-0.009 -0.001	-0.009 10.00	-0.009 -0.001	-0009
so-butyliberanne p-ispropylioluene n-butyliberanne 1,3-dibromo-3-diloropropane		0.002	58,000° 0.064°	-0.04 -0.06	<0.002 <0.003	-0.003 -0.003	<0002 <0003	1000	-0.000 -0.000	4000	-0.002	-0.002	-0.000 -0.000	-0.000 -0.000	<0.002	<004 <005	-0.00 -0.00 -0.00	-0.002 -0.002	-0.000	-0.2 -0.22 -0.29	-0.01 -0.011	-0.011	-001 -0011	<0.01 <0.011	<0.011 <0.011	<001 <0011
	noka	0.002	126"	-0.04	-0.002 -0.004	-0.000 -0.004	<0002 <0004	-0.00	-0.000	-0.000	-0.002	-0.002	-0.000	-0.001	-0.002	-004 -009	-0.04 -0.08	-0.002 -0.004	-0.000	-0.29	-0.00	-0.014 -0.02	-0.014 -0.02	-0.00	-0.014 -0.02	<0014 <002
PMH Nuphthalone Aconsphilylone Aconsphilylone Fluorene	ng-kg ng-kg	0.008	1,100° 100,000°	-0.009 -0.012	<0.000 <0.012	<0.000 <0.012	-0.000 -0.006	-0.009 -0.012	<0.000 <0.012	4000	-0.000 -0.012	-0.000 -0.012	-0.000 -0.012	-0.000 -0.013	<0.000 <0.012	<0.009 <0.013	<0.009 <0.012	-0.000 -0.012	-0.000 -0.004	-0.009 -0.013	-0.009	-0.009	-0.009 -0.013	<0.009 <0.012	-0.009 -0.012	-0.009 -0.013
Aconsphitness Fluorens		0.008	100,000° 71,000°	-0.008	<0.000 <0.001	-0.008 -0.01	-0.04 -0.05	-0.000 -0.001	-0.000	-0.008	-0.008	-0.000	-0.008 -0.01	-0.008 -0.01	<0.000 <0.001	-0.000 -0.001	-0.000 -0.001	-0.000	-0.0%	-0.008	-0.009	-0.009	-0.009 -0.01	-0.000 -0.01	-0.009 -0.001	-0008 -001
Photarithrono Anthrasino Fluoratthono	noko noko noko noko noko	0.015	23,000° 540,000° 23,000°	-0.016	<0.015 <0.017	<0.016 <0.017	<0.08 <0.08	<0.016 <0.017	-0.01s -0.017	-0.016	-0.016	-0.015 -0.017	-0.016 -0.017	4016	<0.016 <0.017	<0.016 <0.017	<0016 <0017	-0.016 -0.017	-0.022	-0.016	-0.016	-0.016	-0.016 -0.017	<0016 <0017	<0.016 <0.017	-0.01s -0.017
Pyrene Bengljanthracine Chrysine	mo/kg	0.015	23,000° 54,000° 190°	-0.015 -0.014	<0.015 <0.014	<0.015 <0.014	-0.075 -0.07	-0.015 -0.014	<0.015 <0.014	-0.015 -0.014	-0.015 -0.014	-0.015 -0.014	-0.015	4015	-0.015 -0.014	<0.015 <0.014	<0015 <0014	-0.015 -0.014	-0.03 -0.029	-0.015 -0.014	-0.015	-0.015 -0.014	-0.015 -0.014	<0015 <0014	-0.015 -0.014	<0.015 <0.014
Chrysene Bereo() pyrene Indena(), 2,3<, dpyrene Dibere(), hjanthracene	mg/kg mg/kg	0.015	250° 36° 510°	-0.015 -0.015	<0.015 <0.015	<001 <0015 <0018	-0.05 -0.075 -0.09	-0.015 -0.015	-0.015 -0.015	-0.01 -0.015 -0.018	-0.01 -0.015 -0.018	-0.015 -0.015	-001 -0015 -0018	-001 -0015 -0018	-0.015 -0.015	-001 -0015 -0018	<0015 <0016	-0.01 -0.015 -0.019	-0.02	-0.01 -0.015 -0.018	-0.01 -0.015	-0.015 -0.019	-001 -0015 -0018	-0015 -0015	-0.015 -0.015	-001 -0015 -0018
Dibendy Alanthraces Besolg h (porylene Besoldfluoranthese	roko roko roko roko roko	0.023	26° 4000°	-0.023	<0.023 <0.024	-0023 -0024	<0.115 <0.12	-0.023 -0.024	<0.023 <0.024	-0.020 -0.024	<0.003 <0.004	-0.023 -0.024	-0.021 -0.024	-0.023 -0.024	-0.023 -0.024	-0.023 -0.024	<0022 <0024	<0.003 <0.004	<0046 <0048	-0.023 -0.024	-0.023 -0.024	-0.023 -0.024	-0.021 -0.024	<0022 <0024	-0.023 -0.024	<0.023 <0.024
Benro@flucranthene Benro@flucranthene PAH 16 Total		0.015	45" 1,200"	-0.015 -0.014	<0.015 <0.014	<0.015 <0.014	<0.075 <0.07	<0.015 <0.014	<0.015 <0.014	-0.015 -0.014	-0.015 -0.014	-0.015 -0.014	-0.015 -0.014	-0.015 -0.014	<0.015 <0.014	<0.015 <0.014	<0015 <0014	<0.015 <0.014	-0.03 -0.039	-0.015 -0.014	-0.015 -0.014	-0.015 -0.014	-0.015 -0.014	<0.015 <0.014	<0.015 <0.014	-0.015 -0.014
	mokg mokg	0.1	1,000°	-0.118	<0.118	-0.116	-0.59 -0.5	-0.119	-0.1	-0.1	-0.116	<0.119	-0.11	-0.1	-0.1 ml	-0.11	-0.119	-0.1	-0.1	-0.1	-0.118 -0.1	-0.11sl	-0.1	-0116	-0.11sl	-0.11
2-mithylinaphthalono 4-bromphenyl phonyl ether 4-chiosphonyl phonyl ether	mpkg mpkg mpkg mpkg	0.1		-0.2	<0.3 <0.3	-0.1 -0.1	-05	-0.1	-0.1 -0.1	-0.1	41	<0.1 <0.1	-0.1	-0.1 -0.1	<0.1 <0.1	-0.1 -0.1	-01 -01	-0.1	-0.1 -0.1	-0.1	-0.1 -0.1	<0.1 <0.1	<0.1 <0.1	<01 <01	<01 <01	-0.1 -0.1
Big-chicrosthoy/methans	mg/kg	0.1 0.1	36" 3,500*	-0.1 -0.1	<0.3 <0.3	-01 -01	-05	41	-0.1 -0.1	-0.1	41	<0.1 <0.1	-0.1 -0.1	-0.1	+0.1 +0.1	-0.1 -0.1	-01	-01 -01	-01 -01	-01	-0.1 -0.1	+0.1 +0.1	-0.1 -0.1	-01 -01	<01 <01 <01	-01
Carbasole Dibensoluran Heasthioroxycloperiadiene	noka noka noka	0.1	1,200*	-0.2	-03 -03	-0.1	-05	41	-0.1	-0.1	41	<0.1 <0.1	-0.1	-0.1	<0.1 <0.1	-0.1 -0.1	-01 -01	-0.1	-0.1	-0.1	-0.1	<0.1 <0.1	-0.1 -0.1	-01 -01	<0.1 <0.1	-01
Hearthorocyclopertadione Hearthoroethane		0.1	7.5° 100°	-0.4 -0.2	-03 -03	-02 -01	-d5	-0.1	-0.1 -0.1	-0.2 -0.1	41	<0.1 <0.1	-0.1	-0.1 -0.1	<0.1 <0.1	-0.1 -0.1	-01 -01	-0.1 -0.1	-0.1 -0.1	-0.1	-0.1 -0.1	<0.1 <0.1	<0.1 <0.1	-01 -01	-01 -01	-0.1 -0.1
Phenolics 2-enthylphenol 2-eltrophenol		0.1	Uso Crosol Total ²⁴	-0.2	-03 -03	-01	-05	41	-01	-0.1	41	<0.1	-0.1	-0.1	-0.1 -0.1	-0.1 -0.1	-61	-01	-01	-01	-0.1	-0.1 -0.1	-0.1	-01	-01 -01	-01
2,4 directhylphenol 4-chiono 2-methylphenol 4-methylphenol	noko noko noko noko noko	0.1	20,000° 92,000°	-0.2	-02 -03	-0.1 -0.1	-05	-01	40.1	-0.1	401	49.1 49.1	-0.1 -0.1	-0.1 -0.1	<0.1 <0.1	-0.1 -0.1	401 401	41	-0.1 -0.1	-0.1	-0.1 -0.1	40.1 40.1	-0.1 -0.1	-01 -01	<0.1 <0.1	-0.1 -0.1
		0.1	Use Crosol Total ⁴⁹	-0.2 -0.2	<0.3 <0.3	-0.1 -0.1	-05	-0.1 -0.1	-0.1 -0.1	-0.1	41	<0.1 <0.1	-0.1 -0.1	-0.1 -0.1	<0.1 <0.1	40.1 40.1	-01 -01	-0.1	40.1	-0.1	-0.1	<0.1 <0.1	-0.1 -0.1	-01 -01	<01 <01	-01 -01
Phonol 2-chioronaphi/halone Cresol Total	mokg mokg mokg	0.01	1,000° 3,200° 180,000°	<0.01 <0.01 <0.01	<001 <02 <001	<0.01 <0.01	-0.01 -0.5 -0.01	<001 <0.1 <0.01	-0.01 -0.01	-0.00 -0.11	-0.01 -0.01	-0.01 -0.01	<0.01 <0.1 <0.01	-001 -0.1 -001	<001 <0.1 <0.01	<001 <01 <001	<0.01 <0.01 <0.01	-0.01 -0.1	-0.01 -0.1 -0.01	-0.01 -0.11	-0.01 -0.1	-0.01 -0.1 -0.01	-001 -01 -001	-0.01 -0.01	<001 <0.1 <0.01	-001 -01 -001
Cresol Total Total Monohydric Phenols (5) Corrected Xplanols	noka noka noka	0.035		-0.005 -0.015	<0.005 <0.015	<0.035 <0.015	<0005 <0015	-0.005 -0.015	-0.035 -0.015	-0.0% -0.0%	-0.025 -0.075	-0.005 -0.015	-0.035 -0.015	-0.015 -0.015	-0.005 -0.015	<0.035 <0.015	<0005 <0015	-0.035 -0.035	<0.035 <0.015	-0.0% -0.0%	-0.005 -0.015	-0.005 -0.015	-0.035 -0.015	<0005 <0015	-0.005 -0.015	<0.035 <0.015
Env Stds Commonts #1sQMACQEH SHUIs 2015																										

Env Stds Commonts

#11:DM/CENF SHUIS 2015

#2:USER RSI, (RDV 2021)

#2:DSER RSI, (RDV 2021)

#2:DSER RSI, (RDV 2021)

#2:DSER RSI, (RDV 2021)

#4:DDRACS/12-ARE

#5:DSRa OHS (RDV)

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

Key

Koy

Exceedance of HH Soil. Commercial/Industrial. SandyLoam. 10C--1.48

			Field_ID Sample_Depth_Range	TPSS04 4.14.2	199905 2.6-3.7 11/05/2023	195505 3.5-3.7	19506 1313	TPSS06 3-3-2	19101 2.4-2.5	19102 2.1-2.2	TP103 15-14	39304 0.1-0.2	19905 1-1.1	TP106 0.30.4	T9907 0.3-0.4	19109 0.50.6	19110 0.30.3	TPT11 03-03	19112 0.3-0.4	TFT12 02-03	TPT14 0.15-0.3	19115 0.4-0.5	19116 0.80.9	TPT17 2.1-2.2	19118	0.50.8 13.06/2023
			Sampled_Date_Time Lab_Report_Number	11/05/0022	11/05/2023	11/05/2022	11/05/2023	11/05/2023	26/05/2023	26/05/2023	26/05/2022	26/05/2023	25/05/2023	25/05/2022	25/05/2022	25/05/2023	25/05/2023	26/05/2023	23/05/2023	16/05/2023	16/05/2022	16/05/0022	15/05/2022	15/05/2022	15/05/2023	13/06/2023
			GAC_HH_COM/ IND_SIGAM_>3.48%100																							
Chemiliame Sulphato, Total Potential as SO4 Perylone-d12	p/kg	FOL		0.717 - 0.72	1.13	096	1.03	4.14	14.9	12.1	1.95	1.15	0.6	0.6	0.609-0.61	2.17	0966-097	0.6	1.29	0.816 -0.82	0.6	0.6	2.15	1.06	0819-082	1.27
	-	Н		0.717 - 0.72 96.7	8	95.7	1.03 97.6	414 97.6	87.1	12.1 68.1	90.4	92.1	99.7	29.4	0409-041 843	97.3	93.8	90.2	1.29 89.3	0.916 -0.92 76.3	975	0.6 86.4	2.15 91.4	913	\$1.7	127
Asbestos Actinolite Asbestos Anthophylite Asbestos Tremplice	No units No units No units	Н		0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Asbedos Tremolito Petroleum Hydrocarbons >C10-CH Alighatics & Anomatics										- 0											-					- 0
>C10-CH4 Aliphatics & Aromatics. TPH	ng/kg	10		<10	<10	<10	500 - 52N	<10	45	75.8	<10	59.7	<10	11.2	<10	22.2	- 410	<10	<10	12.6	<10	23.8	217	<10	<10	<10
200-004 Aliphatics 360104 CH4 Anomatics	ng/kg ng/kg			- 6	- 6	- 6	186 - 200 200 - 239	- 6	36.1 20.9	25.6 50.2	- 6	7.24 51.5	- 6	5.00 6.17	2.44	187	6.35	- 6	523	7.75	- 6	20.8	7.36 16.4	- 4	- 6	5.37
GEO IGS CO GEO IGS CO IGS CO Aliphatics IGS CO Aliphatics IGS CO Aliphatics IGB CO Aliphatics IGB CO Aliphatics IGB CO Aliphatics	ng/kg ng/kg	0.02	12,000"	-002 -001	4002 4001	-0.00	-002 -001	400	-0.00	-0.00	401	-0.02 -0.01	-0.00	-0.02 -0.01	-002	-0.00	-0.02	401	-0.00	-0.00	<0.02 <0.01	-002 -001	-0.00	-002 -001	4002 4001	-0.00
-CS-CR Alphatics	mg/kg mg/kg	0.01	40,000° 11,000°	-005 -001	4001	-0.01	<001 <001	-0.01	10.00	-0.05	401	1000	-0.01	-001	-001 -001	-0.01	-0.05	401	10.00	-0.01 -0.01	<005 <001	1000	-0.01 -0.01	-005 -001	1000	-0.01 -0.01
>C10-C12-Allpharies >C12-C16-Allpharies	ng/kg ng/kg ng/kg		47,000° 90,000°	- 0	d	d	- d		<1	a	<1		d	- 41	- 0	d	d d				d		d	- 4	d	d
:CN-C21 Aliphetics :C21 CS Aliphetics	mg/kg			d	d	d	7.72 154 - 200	d	2.4 11.2 1.27	2.5 21.2	d	5.74	d	1.11 2.12	122	-(1 15.2	232	d		3.92	d	2.13	6.05 1.29	- 0	d	d
CID CIT Aliphatics CID CID Aliphatics	mg/kg	0.05	1,800,000**	<1 <0.05	<0.05	-d -0.05	23.7 -0.05	-(1 -(0.05		-0.05	40%	1.5	<1 <0.05	<1 <0.05	<0.005	-0.05	-0.05	-41	122	-0.05	<1 <0.05	<0.05	1.29	-d -d05	<0.05	-0.05
JGS-CHAdomatics JGC-EGR Aromatics	ing/kg ing/kg ing/kg	0.01	84,000° 180,000°	<0.01 <0.01	-000 -000	-(0.01 -(0.01	<0.01 <0.01	-0.01	10.05	-0.01	-0.01 -0.01	<001	-0.01 -0.01	<001 <001	<001 <001	-0.01 -0.01	-0.01 -0.01	-0.01	10.00	-0.01	<001 <001	<001 <001	-0.01 -0.01	<0.01 <0.01	<001	-0.01 -0.01
:608-6010 Aromatics :6010-6012 Aromatics	ng/kg ng/kg	1	17,000° 34,000° 38,000°	<0.01	<0.001	<0.01	<0.01	-0.01 -(1	<0.00	-0.01 -2	-0.01 <1	<0.01	<0.01	<0.01	<001	<0.01	-0.01 -d	-0.01 <1	<0.00	<0.01	<0.01	<0.01	<0.01	<0.01	<001 cl	<0.01
HC124C16 Aromatics HC164C21 Aromatics	ng/kg ng/kg ng/kg		28,000°	- d	d	d	263	- d	- 0	239	- 41	d	d	- d	- d	277	d	- 4	- d	1.65	- d - d	- d	1.65	- 4	d d	d
>6C214C35 Anomatics >6C354C04 Anomatics >6C466C04 Anomatics	ng/kg ng/kg		28,000° 28,000° 28,000°	- d	1.19	d	200 - 247 45.6 346 500 - 524	d d	16.9 11.4	22.2 14.7	1.00	47 4.07	2.63	42N <1	65	6.5 4.27	3.92 2.21	- d	231	5.41 1.14	1.63	16 4.1	9.97 4.77	1,07	d d	2.62 1.69
>CS-CHI ASPRIBLICA APORTATIO.	ng/kg ng/kg	10		<10	<10	<10	344 500-524	<10	45	2.7 75.8	<10	59.7	<10	112	<10	32.2	-d -d0	<10	<10	<10	<10	20.8	22.7	<10	<10	- (10
Bergene Tolume	ng kg ng kg	0.001	99 ¹⁶ 190,000 ¹⁷	-0.009	-0.009 -0.007	-0.009 -0.007	-018 -014	-0.009	-0.001 -0.001	-0.00	401	-0.001	<0.001 <0.001	-0.001 0.00093	-0.001 -0.001	<0.001 0.00273	<0.001 <0.001	-0.001 0.00127	-0.001	-0.009	-0.009	-0.009	<0.009 <0.007	-0.009	-0.009 -0.007	<0001 <0001
Benzene Tolure Ethylbensone Xylene (m & p) Xylene Total	mg/kg mg/kg	0.001	27,000"	<0.004 <0.01	-000F	<0.004 <0.01	-0.00	-0.001	<0.001 <0.001 <0.002	-0.00	-0.01	-0.001	-0.001 -0.002	<0.001	-0.001 -0.002	<0.001	-0.001 -0.002	-0.000 -0.000	-0.001	-0.004	-0.004	-0.004 -0.01	<0.004	<0.004	-0004 1004	<0.001 <0.002
Xylene Total Xylene [c]	mg/kg mg/kg	0.002	30,000° 21,000°	<0.02 <0.01	<002 <001	<0.00 <0.01	<0.4 <0.2	-0.02	<0.00 <0.00 <0.00	-0.01	-002 -02 -002	-0.00 -0.000	-0.00 -0.002	<0.002 <0.002	<0.002 <0.002	<0.00 <0.002	-0.02 -0.002	-0.02	-0.000 -0.000	-0.00	-0.02 -0.01	<002 <001	-0.01 -0.02	<0.02 <0.01	<000 <000 <000	<0.00 <0.000
Total BTEX Oxygenaties	ng/kg ng/kg	0.007		-001	<004	-0.04	-01	-0.04	<0.007	-0.14	-447	-0.007	-0.007	-0.007	-0.007	<0.007	-0.007	<0.007	-0.007	-0.01	-001	<001	-0.04	-001	-034	<0.007
Xylone Total Xylone (c) Total BTEX Chyperatins AFIBE Tert Amyl Methyl Ether Silorinated Hydrocarbons	ng/kg ng/kg	0.0005	34,000"	<001 <001	<001 <001	<0.01 <0.01	-02 -02	-0.01 -0.01	<0.0005 <0.001	-0.01	-0.005 -0.01	-0.0005 -0.001	-0.0005 -0.001	<0.0005 <0.001	-0.0005 -0.001	<0.0005 <0.001	<0.0005 <0.001	<0.0005 <0.000	-0.0005 -0.001	-0.01 -0.01	-001 -001	<001 <001	<0.01 <0.01	<0.01 <0.01	<001 <001	<0.0005 <0.001
Unionnated Hydrocarbons Chlororwithans	mg/kg	0.002	1.6" 2.2"	-0.007	<0.007	<0.007	-0.14	-0.007	<0.000	-0.01	-002	-0.000	-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
Obsromitane Vinyl drionide Obsromitane 1,1-diddenseithene	ing lisp ing lisp ing lisp ing lisp	0.0005 0.0001	2,700° 2,700°	-0.006 -0.01	-0006 -001	-0006 -000	-012 -03 -03	-0.006 -0.01	-0.0005 -0.0005	-0.01	-0.005 -0.01 -0.005	-0.0005 -0.0001	-0.0005 -0.001 -0.0005	-0.0005 -0.001	-0.0005 -0.0001	-0.0005 -0.0001	-0.0005 -0.001	-0.0005 -0.0007	-0.0005 -0.001	-0.006 -0.01	-0.006 -0.01	-0.006 -0.01	-0.006 -0.01	<0.006 <0.01	-0.006 -0.01	-0.005 -0.001
	mg/kg	0.005	560" 81" 300"	<0.01	4001 4001	-0.01 -0.01	-02	400	<0.005	41	-0.05	-0.005	-0.005	-0.005	-0.005	<0.005	<0.005	-0.005	-0.005	-0.01	<0.01	<001	<0.01	<0.01	<001	<0.005
trans-1,2-dichloroethene 1,1-dichloroethane div1,2-dichloroethene	ng/kg ng/kg	0.0005	950" 47" 2300°	-0.000	-0.000	<0.000	-016 -012	-0.000	-0.005 -0.0005	-0.01	-0.005 -0.005	-0.0005	-0.0005	-0.0005	-0.0005	-0.0005	<0.0005 <0.0005	<0.0005	-0.0005 -0.0005	-0.000	-0.000	-0.000	<0.000	-0.000	-0.000	-0.0005
Chlorolorm 1,1,1-trichloroethane	mg/kg mg/kg	0.003	350°	-0.000	-0.000 -0.007	<0.000	-016 -014	-0.000	<0.003 <0.0005	-0.06	-0.005	-0.000	-0.003	-0.0003 -0.0005	-0.003 -0.0005	<0.002 <0.0005	<0.002 <0.0005	-0.000 -0.0005	-0.003 -0.0005	-0.000	-0.000	-0.000	<0.000	-0.000	-0.000 -0.007	<0.003 <0.0005
Carbon tetrachloride Trichloroethene 1,1,2-trichloroethane	uðyd uðyd uðyd	0.0005	14" 14" 400"	<0.01 -0.009	-000 -0009	<0.01	<0.2 <0.18	-0.01 -0.009	<0.0005 <0.001	-0.01	-0.005	-0.0005 -0.001	-0.0005 -0.001	<0.0005 <0.001	<0.0005 <0.0001	<0.0005 <0.001	<0.0005 <0.001	<0.0005	<0.0005 <0.001	-0.00	-0.009	-0.009	10.00 40.009	-0.01 -0.009	-0.001 -0.0009	<0.0005 <0.0001
1,1,2-trichloroethane Tetrachloroethene	ng/kg ng/kg	0.001	400" 130"	<0.01 -0.005	<001 <0.005	<0.01 <0.005	<0.1 <0.1	-0.01 -0.005	<0.001	-0.00	401	-0.001 -0.002	<0.001 <0.002	<0.001 <0.002	<0.001 <0.002	<0.001 <0.002	<0.001 <0.002	-0.000 -0.000	-0.001	-0.01 -0.005	-0.005	-0.005	<0.01 <0.005	<0.001 <0.005	<001 <0005	<0.001
VOC 2,2-dichloropropane Bromochicromethane	ng/kg	0.001		<0.01	<001	<0.01	<0.2	-0.01	<0.001	-0.00	401	-0.001	<0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-0.001	-0.01	-0.01	<001	<0.01	<0.01	<001	<0.001
Bromodiaromethane 1,1-dictionograpene 1,2-dictionosthane 1,2-dictionopropane	ing/kg ing/kg ing/kg	0.0005	esc*	<0.01 <0.01	<001 <001	-0.01 -0.01	-0.2	401	-0.000	-0.01	-0.005	-0.0005	-0.002 -0.0005	-0.0005	-0.0005	<0.002 <0.0005	<0.002 <0.0005	<0.0005	-0.000 -0.0005	-0.01	-0.01	<001 <001	-0.01 -0.01	<0.01 <0.01	-001 -001	-0.000
1,2-dichioropropane	mg/kg	0.0005	12 th 99 th	-0.001 -0.009	1000	-0.000 -0.000	<0.2 <0.18	400	-0.0005 -0.0001	-0.01	-0.005	-0.0005	-0.0005 -0.001	-0.0005	-0.0005	-0.0005	<0.0005	<0.0005	-0.0005	-0.01	-0.01	-0.001	<0.01	<0.01	<001	-0.0005
Dizromomethano Bromodistionomethano dis-1.2 dichlorogroppine	ng/kg ng/kg	0.000	1.34	-0.007	<0.007	<0.007	-014 -02	-0.007	-0.000	-0.01	-0.005	-0.000	-0.002	-0.0005	-0.000	<0.002 <0.0005	<0.002	-0.000	-0.000	-0.007	-0.007	-0.007 -0.001	<0.07	<0.007	<0.007 <0.007	-0.000 -0.0005
di-1,3 dichloropropene tram-1,3 dichloropropene 1,3 dichloropropane	ng/kg ng/kg	0.001 0.001	23,000°	<0.01 -0.007	<0.001	<0.01	<0.2 <0.14	-0.01	<0.001	-0.00	401	-0.001 -0.001	-0.001 -0.001	<0.001 -0.001	-0.001 -0.001	<0001 <0001	<0.001	-0.001 -0.001	-0.001 -0.001	-0.01	-0.01	<0.001	<0.01	<0.01 <0.007	<001 <000	<0.001
OLD GOLD IN THE	mg/sg	0.002	39"	<001 <001	<001 <001	<0.01 <0.01	<0.2 <0.2	-0.01	<0.000 <0.001	-0.01	-0.02	-0.000 -0.001	<0.002 <0.001	<0.002 <0.001	-0.002 -0.001	<0.002 <0.001	<0.002 <0.001	-0.002 -0.001	-0.000 -0.001	-0.01 -0.01	-0.01 -0.01	<001 <001	-0.01 -0.01	<0.01 <0.01	<001 <001	<0.002 <0.001
Styrone Bromolorm	ng/kg ng/kg	0.002	180,000** 2,100**	<001 <001	<001 <001	<0.01 <0.01	-03 -03	-0.01	<0.000 <0.000	-0.01	402	-0.000 -0.000	-0.002 -0.002	<0.002 <0.002	-0.003 -0.003	<0002 <0002	<0.002 <0.002	-0.002 -0.002	-0.000	-0.01 -0.01	-0.01 -0.01	<001 <001	-0.01 -0.01	<0.01 <0.01	<001 <001	<0.002 <0.006
Styrene Styrene Styrene Stromotorn Incpropylbenane 1,1,2,24etractionerthane 1,2,2-etractionopropane		0.000	7,700° 1,100°	-0.005 -0.001	<0.005 <0.001	<0.005 <0.01	<0.1 <0.2	-0.005 -0.01	<0.000 <0.000	-0.01	-002	-0.000	-0.002 -0.002	<0.002 <0.002	-0.002 -0.002	<0.002 <0.002	<0.002 <0.002	-0.002	-0.000	-0.005 -0.01	-0.005 -0.01	-0.005 -0.01	<0.005 <0.01	<0.005 <0.01	<0.005 <0.01	<0.002
	mg/kg mg/kg	0.002	0.11° 11,000° 1,500°	-0.0% -0.0%	<0.016	-0.016 -0.01	<032 <03	-0.016	<0.000	-0.01	40	-0.000	-0.002	-0.002 -0.002	-0.002	<0.002	<0.002	-0.002	4000	-0.01	-0.0%	<0.016	4000s 10.0s	<0.016 <0.01	<0.016	<0.002
1,25-trimethylberane terl-butylberane 1,2,4-trimethylberane	ng/kg ng/kg	0.002	120,000"	-0.004	<0.000	<0.014 -0.014	-0.10	<0.004	<0.000	-0.01	-0.02	-0.000	-0.002	-0.002	-0.002	<0.002	<0.002	-0.002	-0.000	40.004	-0.004	-0.004	<0.000 <0.000	10000	<0.014	<0.002
p-icomputation	mg/kg	0.001	220" 120,000"	<001 <001	<001 <001	-0.01 -0.01	<0.2 <0.2	-0.01 -0.01	-0.001 -0.002	-0.00	401	-0.001	-0.001 -0.002 -0.003	-0.001 -0.002	-0.001 -0.002	<0001 <0002	<0.001 <0.002	-0.000	-0.001 -0.002	-0.01 -0.01	-0.01	-001 -001	-0.01 -0.01	-001 -001	<001 <001	<0.001 <0.002
n-buty/benzene 1,2-dibromo-3-hioropropane Hesschlorobutsdiene	ng/kg ng/kg	0.003	58,000° 0.064° 120°	-0.011 -0.014	<0.011 <0.014	<0011 <0014	<0.22 <0.28	<0.011 <0.014	<0.000 <0.000 <0.000 <0.000	-0.06	40	-0.003 -0.003	-0.003 -0.002	<0.002 <0.002	<0.003 <0.003	<0002 <0002	<0.003 <0.002	-0.000 -0.000	-0.003 -0.003	<0.011 <0.014	-0.011	-0.011 -0.014	<0011 <0014	<0.011 <0.014	<0.011 <0.014	<0003 <0002
DAH		0.004		<0.02	<0.02	<0.00	-01	-002	-0.00H	-0.00	-004	-0.001	-0.004	-0.004	-0.001	<0004	-0.004	-0.004	-0.001	-0.00	-0.02	<0.02	-0.00	-0.02	-(002	<0001
Naphthalene Aceraphthylene	ng kg ng kg	0.000	1,100° 100,000°	-0.009	<0.009	<0.009 <0.012	-0.009 -0.012	<0.009 <0.012	-0.008 -0.06	-0.019	-0.009	-0.000	-0.000	<0.000 <0.012	-0.000 -0.012	<0.000 <0.012	-0.009 -0.012	<0.000	-0.000	-0.009	-0.009	-0.009	<0.009	-0.009	<0.009	<0.000
Astrophiboso Fluores Prevanthreso Arthracese	mg/kg mg/kg	0.008	100,000 ⁴ 71,000 ⁶	-0.00M	<0001	-0.00E	<0.001 -0.001	1000	40.05	-0.00	-0.000	-0.00	-0.00	-0000 -0001	-000E	<0.01 -0.01	-0.000 -0.001	-000	-0.00	-0.01	-0.004	-0001 -001	<0.01 -0.01	-0.001 -0.001	1001	-0.00E
	mg/kg mg/kg mg/kg	0.015	21,000° 540,000°	-0.015 -0.016	<0.015 <0.016 <0.017	<0.015 <0.016 <0.017	<0.015 <0.016 <0.017	<0.015 <0.016 <0.017	-0.0% -0.08	-0.03	-0.015 -0.016 -0.017	-0.015 -0.016	-0.015 -0.016 -0.017	<0.015 <0.016 <0.017	<0015 <0016 <0017	<0016 <0017	<0.015 <0.016	<0.015 <0.015	-0.015 -0.015	-0.015 -0.016 -0.017	-0.015	-0.015 -0.016	<0.015 <0.016 <0.017	<0.015 <0.016 <0.017	<0.015 <0.016 <0.017	<0015 <0016 <0017
Pyrone Bengganhraune Chyune	ng/kg ng/kg	0.015	23,000° 54,000° 180°	-0.015	<0015 <0014	<0015 <0014	<0.015 <0.014	-0.015 -0.014	-0.075 -0.07	-0.03	-0.015 -0.014	-0.015	-0.015 -0.014	-0.015 -0.014	<0015 <0014	<0015 <0014	-0.015 -0.014	<0015 <0014	-0.015	-0.015	-0.015	-0.015	<0015 <0014	-0.015 -0.014	-0.015 -0.014	-0015 -0014
		0.01 0.015	36"	<0.01 -0.015	<0.01 <0.015	<0.01 <0.015	<0.01 <0.015	<0.01 <0.015	-0.05 -0.075	-0.00	-0.015	-0.01 -0.015	-0.01 -0.015	<0.01 <0.015	<001 <0015	<0.01 <0.015	<0.01 <0.015	-0.01 -0.015	-0.015	-0.01 -0.015	-0.015	<001 -0.015	<0.01 <0.015	<0.01 <0.015	<001 <0015	<0.01 <0.015
Dibunit Northronn		0.018	510" 14" 4,000"	-0.019	<0.018 <0.023	<0.018 <0.023	-0.018 -0.023	<0.018 <0.023	<0.09 <0.115	-0.036 -0.046	-0.018	-0.018 -0.023	-0.019	<0.019 <0.023	<0.018 <0.022	<0018 <0023	-0.019 -0.023	<0.019 <0.029	-0.018	-0.003	-0.019	-0.018	<0.018 <0.022	-0.013 -0.023	<0.018 <0.023	<0018 <0022
Beroog hillponylene Berook/fluoranthene Berook/fluoranthene PAH 16 Total	ng/kg ng/kg ng/kg	0.004	4,000° 45°	-0.004 -0.015	<0.024 <0.015	<0.024 <0.015	<0.004 <0.005	<0.034 <0.015	<0.13 <0.075	-0.00	-0.004 -0.005	-0.034 -0.015	-0.004 -0.005	<0.004 <0.005	<0.0015	<0004 <0015	<0.004 <0.015	<0.004 <0.015	-0.094 -0.015	-0.004 -0.015	-0.004 -0.015	-0.034 -0.015	<0024 <0015	<0.004 <0.005	<0.034 <0.015	<0024 <0015
Renzok/Suzranthene PAH 16 Total	payaq	0.014 0.118	1,200"	-0.014	<0.014 <0.118	<0.014 <0.118	<0.014 <0.119	-0.014 -0.118	-0.07	-0.000	-0.014 -0.119	-0.014	-0.014	-0.014 -0.119	<0.014 <0.118	<0014 <0118	<0.014 <0.119	<0.014 <0.119	-0.014 -0.118	-0.014 -0.119	-0.014	40.014	<0.014 <0.118	-0.014 -0.119	-0.014 -0.118	<0.014 <0.118
3 methylosophibalana	ng kg ng kg ng kg	27	1,000"	<0.1	-0.1	-01	<01	-01	-0.2	-01	<0.1	-0.1	-01	<0.1	-0.1	-0.1	-01	-0.1	-0.1	-0.1	<0.1	-0.1	-0.1	<0.1	-01	401
4-bromophenyl phenyl other 4-blorophenyl phenyl other Azoberwene	mg/kg mg/kg	61	34"	40.1 40.1	40.1	-01	-01 -01	40.1	-0.2	41	-0.1 -0.1	-0.1	-0.1 -0.1	40.1 40.1	-0.1	-01	41	40.1	-0.1	41	<0.1 <0.1	-0.1	-01 -01	40.1 40.1	-011 -01	401
Big-chloroethooj) methane Big2-chloroethy/lether	mg/kg mg/kg	0.1 0.1	25°° 2500°	<0.1 <0.1	-0.1	-61	<01 <01	40.1	-0.2	41	-0.1 -0.1	-0.1 -0.1	-0.1 -0.1	40.1 40.1	-0.1 -0.1	-0.1 -0.1	41	-0.1	-0.1	-0.1	<0.1 <0.1	-0.1 -0.1	+0.1 +0.1	<0.1 <0.1	-0.1 -0.1	-01 -01
Carbazolo Diberuolaran	ng/kg ng/kg	9.1 9.1	1,200°	<0.1	-0.1 -0.1	-01 -01	<0.1 <0.1	40.1	-0.2	-01	-0.1 -0.1	-0.1 -0.1	-0.1 -0.1	<0.1 <0.1	-0.1 -0.1	-01 -01	-0.1 -0.1	-0.1 -0.1	-0.1	-0.1	<0.1	-0.1 -0.1	-0.1 -0.1	<0.1 <0.1	<0.1 <0.1	-01 -01
Heactforccyclopentadiene Heactforcethane	ng/kg ng/kg	0.1 0.1	7.5° 120°	40.1 40.1	-0.1 -0.1	-01 -01	<01 <01	-0.1 -0.1	-0.4 -0.2	41	-0.1	-0.2 -0.1	<0.3 <0.1	<0.3 <0.1	-0.4 -0.1	<0.2 <0.1	41	-0.1 -0.1	-0.1	-0.1	-0.1 -0.1	-0.1 -0.1	-0.1 -0.1	<0.1 <0.1	-0.1 -0.1	401
		2.1	Use Cresol Total®	40.1	-0.1	-01	<0.1	40.1	-0.2	-0.1	-0.1	-0.1	-0.1	<0.1	-0.1	-0.1	-01	40.1	-0.1	41	<0.1	-0.1	-0.1	<0.1	-0.1	-01
2-methylphenal 2-eltraphenal 2-6-dinwithylphenal 4-dison-3-methylphenal 4-methylphenal	ng kg ng kg	9.1 9.1	30,000"	<0.1 <0.1	-0.1 -0.1	-01 -01	<0.1 <0.1	-0.1	-0.2	41	40.1	-0.1 -0.1	-0.1 -0.1	<0.1 <0.1	-0.1 -0.1	-01 -01	<01 <01	-0.1 -0.1	-0.1	-0.1	<0.1 <0.1	<0.1 <0.1	-0.1 -0.1	<0.1 <0.1	-0.1 -0.1	-01 -01
6-thioro-3-methylphenol 6-methylphenol 6-nitrophenol	PRQ-943	0.1 0.1	82,000° Use Cresol Total®	40.1 40.1	40.1	-01 -01	<0.1 <0.1	40.1	-0.2	41	40.1	-0.1 -0.1	-0.1 -0.1	40.1 40.1	-0.1	-01 -01	<0.1 <0.1	40.1	-0.1	41	<0.1 <0.1	-0.1	-0.1 -0.1	40.1 40.1	-0.1 -0.1	-01
	raying raying raying raying raying	0.01 0.01	1,300° 2,300°	<0.1 <0.01	-001 -001	-001 -001	-001 -001	40.0 40.01	-0.2 -0.01	-0.01	401	-0.01 -0.01	-0.01 -0.01	-0.1 -0.1	-001 -001	-0.01 -0.01	<0.01 <0.01	401	-0.0	-0.01	-0.1 -0.01	-001 -001	-01-0017 -01	<0.1 <0.01	-001 -001	-0.01 -0.01
Phonoi 2-chiororuphithaliene Cresol Total Total Monohydric Phonois (5) Corrected	mg/kg mg/kg	0.01	190,000"	-0.035	<0.01 <0.035	<0.01 <0.025	-0.01 -0.035	1001	-0.01 -0.03	-0.01	-0.01	0013-00136	-0.01	-0.035	-001 -0035	-0.01 -0.025	-0.035	-0.01	-0.01 -0.035	-0.01	-0.03	-0.01 -0.035	-0.01 -0.005	-0.01 -0.035	1001	-0.01 -0.02 -0.02
Ayunas	1999	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	10015	-0.015	<0.015	-0.015	-0.0%	-0.015	4015	-0.015	-0.015	<0.015	<0.015
Env Stds.Comments																										

Env Stds. Comminents #11.DM/CEH S 401x 2015 #2 LISEPA RSL (NOV 2021) #2 Delta C452, (2014) #4 SECASS/GLARS #5 Delta C452, (2021)

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

Kovedance of HH Sail. Commercial Industrial. Sandy Learn. TOC>+2 68

		F	Field_ID Sample_Depth_Range	179701 1.4-1.5	1P9P02 0.2-0.3	TPSP03 0.2-0.3	199904 0.5-0.6	176P05 0.5-0.6	02-03	0.3-0.4	12-13	24-27	TP002 2.5-2.6	19003 2.2-1.3	TPC04 1.6-1.7	TP005 0.5-0.6	3PC06 2.5-2.6	TPC07 1.6-1.5	293	TPSS00 1-1.1	195501 125-135	TPSS02 1.9-2	2.4-2.6	TPSS03 1.1-1.2	32.2	TPSS04 2.1-3.2
		E	Sampled_Date_Time Lab Report Number	23/05/2023	23/05/0023	23/05/2023	24/05/2023	23/05/2023	24/05/2023	24/05/2022	24/05/2023	29/05/2023	29/05/0022	30/05/0023	30/05/2023	30/05/2023	30/05/2023	30/05/2023	29/05/2023	11/05/2023	11/05/2023	10/05/0022	10/05/0022	10/05/2022	10/05/2023	11/05/2022
		Г	GAC_HH_COM/ IND SIDAM >2.48NTOC																							
ChemNamo	output unit	EQL	HE SHARE THE SHARE																							
PCBs Tetrachlorobiphonyl, 3,3,4,4-PCB77)	ng/kg	0.000	0.16*	<0.003	<0.003	<0.003	<0015	-0.002	-0.000	-0.003	<0.001	-0.003	<0.003	-0.003	-0.003	<0.001	<0.003	<0.003	-0.006	-0.001	-0.002	-0.003	<0.003	<0.003	<0.003	-0.000
Tetrachlorobigheryl, 3.4,4,5-PCR81) Pentachlorobigheryl, 2.2,2,4,4-PCR105	mo/kg D mo/kg	0.000	0.49°	<0.003 <0.003	<0.003	-0.003	<0015 <0015	-0.002 -0.003	-0.000	-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	<0.002	-0.006	-0.003 -0.003	-0.002	-0.003	-0.003 -0.003	<0.003 <0.003	<0.003	-0.000 -0.000
Pontachlorobiphonyl, 2,2,4,4,5- (PCB 114 pro 110	ng/kg	0.000	0.5°	<0.003 -0.003	<0.003	<0.003	<0015 >0115	<0.003	-0.000	-0.003	<0.003	-0.003	<0.003	-0.003	-0.003 -0.003	<0.003	<0.003	<0.003	-0.006	-0.003	-0.002	-0.003	<0.003 -0.003	<0.003	<0.002	-0.000
Pontachiorobiphonyl, 2,3,4,4,5-POI 123 Pontachiorobiphonyl, 2,3,4,4,5-POI 126	i) mg/kg	0.000	0.49*	<0.003	<0.003	-0.003	-0315	-0.003	-0.000	-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	-(0.000 -(0.000
Houshlorobiphoryt, 2,3,2,4,45- PCB 15 Houshlorobiphoryt, 2,3,2,4,45- PCB 15	(4) mg/kg	0.000	0.00015° 0.5° 0.5°	<0.003	-0.003	-0.003	10015	-0.002	-0.000	-0.003	-0.003	-0.003	-0.003 -0.003	-0001	-0.003	<0.003	<0.003	<0.002	-0.006	-0.003	-0.003	-0.003	-0.003	<0.003	<0.003	-0.000
Hosachlorobiphoryl, 2,2,4,4,5,5- PCR 16	(7) mg/kg	0.000	051°	<0.003	<0.003	-0.003	10015	-0.003	-0.003	-0.003	-0.003	-0.003	-0.003	10003	-0.003	<0.003	<0.003	<0.003	-0.006	-0.003	-0.003	-0.003	<0.003	<0.003	<0.003	<0.000
Heachlorobiphenyl, 3,3,4,4,5,5-PCB to Heptachlorobiphenyl, 2,3,3,4,4,5,5-PCB		0.000	0.00051° 0.52°	<0.003	<0.003	-0.003 -0.003	<0015 <0015	-0.003	-0.000	-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	-0.002	-0.003	-(0.003 -(0.003	<0.003	<0.003	-0.000 -0.000
Total PCB WHO 12 PCB 28 PCB 53	mo/kg	0.003		<0.003	<0.003 <0.003	-0.003s -0.003	<0.12 <0.015	-0.002	-0.035	-0.000	-0.003	-0.003	-0.003	-0.036 -0.003	-0.003	<0.003	<0.000	<0.000 <0.000	-0.072	-0.003	-0.001	-0.003	<0.003 <0.003	<0.003	<0.003	-0.000
PCB 101	mp/kg	0.000		<0.003	<0.003	-0.003	<0015 <0015	-0.003	-0.000 -0.000	-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	-0.000
PCB 139 PCB 153	moNo	0.000		-0.003	<0.003	-0.003 -0.003	<0015 <0015	-0.003 -0.003	-0.000	-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	-0.006	-0.003 -0.003	<0.003	-0.003	<0.003 <0.003	<0.003 <0.003	<0.003	-0.000
PCB 180 Total PCB 7 Congeners		0.000		-0.003 -0.021	<0.003 <0.001	-0.003 -0.021	<0.0015 <0.105	-0.003 -0.001	<0.003 <0.021	-0.003 -0.021	<0.003 <0.001	-0.003	-0.003 -0.021	-0.003 -0.021	-0.003 -0.001	<0.003 <0.021	<0.003	<0.003 <0.001	-0.006	-0.003 -0.021	-0.003	-0.003	<0.003 <0.003	<0.003 <0.021	<0.003	-0.003 -0.021
Amino Aliphatics N-eltroxodi-n-propylamine	noka	0.1	032"	<0.2	<0.2	<0.1	·05	-0.1	<0.1	-0.1	-0.1	<0.1	-0.1	-0.1	<0.1	40.1	-0.1	-0.1	40.1	<0.1	40.1	<0.1	-0.1	-01	<0.1	-0.1
Antines 2-streamline	maka	0.1	4,000*	-0.2	-02	-0.1	-05	-01	-0.1	-0.1	-01	40.1	-0.1	-0.1	-01	-01	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-01	-01	-01
3-streamline 4-disconline	mg/kg mg/kg	0.1	11"	-0.2	-02 -02	-0.1 -0.1	-05	-01	40.1	-0.1	×0.1	40.1 40.1	-0.1	-0.1 -0.1	<01 <01	-0.1	-0.1	41	40.1	-0.1	40.1	<0.1 <0.1	-0.1	-01	<01 <01	-0.1
4-sitranilire Oploives	noka	0.1	110*	-0.2	-0.3	-0.1	-05	-0.1	-0.1	-0.1	-0.1	<0.1	-0.1	-0.1	<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-Dinitrotolume		0.1	1,800"	-0.2	<0.2	-0.1	-05	-01	-0.1	-0.1	-0.1	40.1	-0.1	-0.1	-01	-0.1	-0.1	41	-0.1	-0.1	-0.1	40.1	-0.1	-01	<01 -01	-0.1
2,6-distrotoluene Nitrobensene	noka noka	0.1	22"	-0.2	-03 -03	-0.1	-05	41	40.1	-0.1	-01	40.1	-0.1	-0.1	401	40.1	-0.1	41	40.1	-0.1	-0.1	40.1 40.1	-0.1	-01	<01 <01	40.1
Halogenated Bergenes 1,3,5-Trichlorobensene		0.007	130*	<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	<0.00	-0.02	<0.02
Chiorobenzene Bromobenzene	mg/kg	0.002	240° 520°	-0.04 H0.0>	<0.002	-0.002	<0.002 <0.002	-0.04	-0.002	-0.000	-0.002	-0.002	-0.003	-0.000 -0.000	-0.002 -0.002	<0.04	-0.04 -0.04	<0.002	-0.002	-0.1 -0.2	-0.005	-0.005 -0.001	<0.005 <0.01	<0.005 <0.01	<0.005 <0.01	<0.005 <0.001
2-chiprotokanne 4-chiprotokanne	mo/kg	0.000	22,000° 22,000°	-0.06 -0.06	<0.003	-0.003 -0.003	<0003	-0.06	-0.003 -0.003	-0.003 -0.003	<0.003	-0.003	-0.003 -0.003	-0.003 -0.003	-0.003 -0.003	<006 <006	-0.06 -0.06	<0.003	-0.000	-0.18	-0.009	-0.009 -(0.01	-0.009 -0.001	<0.009 <0.01	<0.009 <0.01	-0009 -001
1,3-dichlorobersene 1,4-dichlorobersene		0.005	170° 25,000°	-0.1 -0.1	<0.005 <0.005	-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	-0.1 -0.1	-0.1	<0.005 <0.005	-0.005	-0.1 -0.1	-0.000	-0.000	-0.000 -0.005	<0.000 <0.005	<0.000	-0.000 -0.005
1,2-dichlorobetsene 1,2,4-trichlorobetsene	10030	0.005	11,000"	<0.1 <0.14	<0.005 <0.007	-0.005	<0.005 <0.007	-0.1	-0.005 -0.007	-0.005	<0.005 <0.007	-0.005	-0.005	-0.005 -0.007	-0.005 -0.007	-0.1 -0.1	-0.1	<0.005 <0.007	-0.005	-0.1	-0.01	<0.01 <0.02	-(0.01 -(0.02	-(0.01 -(0.00	-0.01 -0.02	<001 <0.1
1,234richioroberanno Heapthioroberanno		0.01	590°	-0.2 -0.1	-001 -01	<001 v0.1	-0.01	-0.2	-0.01 -0.1	-0.01	-0.01	<0.01	-001 -01	-021	<001 -01	-02 -01	-0.2	-0.01	-0.01	-0.4	-0.02	<0.02 ×0.1	-012 -01	-0.00	<0.02 <0.1	-02
Halogenated Hydrocarbons Dichlorodifluoromethane	maka	0.0005	230°	-0.00	-0.0005	-0.0005	-0.0005	-0.01	-0.0005	-0.0005	-0.0005	<0.0005	-0.0005	-0.0005	-0.0005	1001	<0.01	-0.0005	-0.0005	-0.12	-0.006	-0.006	-0.006	-0.006	<0.006	-1006
Bronomethane Trichionofupromethane	mo/kg	0.000	30° 350,000°	-0.00	<0.001	-0.000	<0.001	-0.02	-0.000	-0.001	<0.001	-0.001	-2-001	-0.001	-0.001	1002	-0.00	<0.001	-0.000	-0.2	-0.01	<0.01	<001	<0.01	-0.001 -0.001	1001
1,2-ditromoethane	noka	0.000	0.14"	-0.03	<0.001	-0.000	<0.001	-0.02	<0.000	-0.001	<0.001	-0.001	42.001	-0.001	-0.001	1022	-0.00	<0.001	-0.000	-0.2	-0.01	<0.01	<021	<0.01	<0.001	-001
Halogenated Phonois 2-chlorophonoi	ng/kg	0.1	5,800*	×0.2	<0.2	-0.1	<0.5	-01	-0.1	-0.1	-01	<0.1	-0.1	-0.1	<0.1	<0.1	-0.1	-01	40.1	<0.1	-0.1	<0.1	-0.1	-01	<0.1	40.1
2,4-dichlorophenol 2,45-trichlorophenol 2,4s-trichlorophenol		0.1	2,500° 82,000°	-0.2	<0.2	-0.1	-05	-0.1	40.1	-0.1	-0.1	40.1	-0.1	-0.1	<0.1	40.1	-0.1	-0.1	40.1	40.1	-0.1	<0.1	40.1	-01	<0.1	40.1
Pentachlorophenol	mg/kg mg/kg	0.1	210° 400°	-0.2	-02	-0.1	-05	-0.1	40.1	-0.1	-01	40.1	-0.1	-0.1	<0.1	40.1	-0.1	-0.1	40.1	- O.1	40.1	<0.1	-0.1	-01	<0.1 <0.1	40.1
Phthalates BisQ-ethylhosyl] phthalate	mp/kg	0.1	84,000°	-0.2	<0.2	-0.1	-05	-0.1	40.1	-0.1	-0.1	-0.1	-0.1	-0.1	<0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	<0.1	-0.1	-01	<0.1	40.1
Butyl bersyl phthalate Di-o-butyl phthalate	ng/kg ng/kg	0.1	950,000 th 15,000 th	-0.2 -0.2	<0.3 <0.3	-0.1 -0.1	-05	-0.1	-0.1 -0.1	-0.1	-0.1 -0.1	<0.1	-0.1 -0.1	-0.1 -0.1	<0.1 <0.1	-0.1	-0.1	-0.1	40.1	-0.1 -0.1	-0.1	<0.1	-0.1	-01	<01 <01	-0.1 -0.1
Di-n-octyl phthalate Diethylphthalate	mp/kg	0.1	99,000" 290,000"	-0.2 -0.2	<0.2 <0.2	-0.1 -0.1	-05	-0.1 -0.1	<0.1 <0.1	-0.1	-0.1 -0.1	40.1 40.1	<0.1 <0.1	-0.1 -0.1	<0.1 <0.1	-0.1 -0.1	-0.1	-0.1 -0.1	-0.1 -0.1	-0.1 -0.1	40.1	<0.1	-0.1 -0.1	-01	<0.1 <0.1	<0.1 <0.1
Dimethyl phthalate Solvents Carbon disulfide	noka	0.1		<0.2	<0.2	-0.1	-05	-0.1	-0.1	-0.1	<0.1	40.1	<0.1	-0.1	<0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	<0.1	-0.1	-0.1	<0.1	-0.1
Carbon disulfide Inophorone	mg/kg mg/kg	0.000	47" 2.600"	1.57	0.00295	-0.001 -0.1	<0001 <05	-0.02	-0.001 -0.1	-0.001	0.00299	0.00135	-0.001 -0.1	0.00387	0.0143	-0.02	-0.00	0.00346	0.00487	-0.14	-0.007	-0.007 -0.1	-0.007	<0.007 <0.1	<0.007 <0.1	-0.007 -0.1
Metals Americ		0.6	640°	51.8	2.56	2.14	14.7	291	215	8.89	1.56	4.14	6.46	5.85	4.00	63	5.93	53	952	-0.6	2.42	1.49	1.24	1.99	1.44	1.29
Barken Brodism	mg/kg	0.6	22,000°	99.6	182	11.2	20	55	34.4	61.9	29	22.6	85.7	71.2 0.567	96.4 0.463	127	276	166	213	422	17.6	26.4	23.9	15.1	21.1	12
Cadmium Chromium (III-VI)	mg/kg	0.02	400° Use either O'll or O'W	2.14	0.354	0.295	1.65	0.395	0.755	0.791	0.779 5.79	0.591	0.689	0.516 25.7	0.450	0.0498 - 0.049	0522 21.6	0.995	0.271	-0.00	0.548	0.557	0.625	0.374	0.708	0.22
Copper Lead	maka maka	1.4	68,000°	20.9	2.47	2.62	23.7	5.00	2.22	852 12.8	9.36 5.92	7.39	19.9	12.7	9.12	2.56 1.87	25.4 27	15.8	110	4.4	7.64	4.7	8.34 7.29	4.2 18.9	9.53	2.17 10.4
Mercury	mo/kg	0.1	250° 960°	-0.1 54.7	401	<0.1	-01 29.4	-0.1	<0.1	-0.1	-0.1 15.9	<0.1	<0.1	-0.1	<0.1	<0.1	-0.1	-0.1	<0.1	-0.1	10.1	40.1 14.5	-0.1 17.7	-0.1 17	<0.1	<0.1
Nickel Selenium	mg/kg mg/kg	1	12,000*	241	1.25	4.65	9.47	d	494 <1	30.5	<0	28.2	72.8	49.9	603 <1	906 141	44.2 4.23	71.6	9.4 2.01 2.2	0.492	21.5	<1	17.7	<1	18.4 -:1 9.12	9.41
Varadum Zirc	mg/kg mg/kg	1.9	9,000° 730,000°	22.5 165	249	124	996 71.6	7.04 21.1	5.09 17.6	19.1 72.4	8.91 41	46	29 85.9	29.1 57.4	27.8 97.1	1.27 6.39	19:3 91:1	53.3 102	20.7	0.591 4.66	42.3	15.5 58	50.6	11.5 72.4	9.12 53.8	190 33.9
Oronium (housvalent) Oronium (frivalent)	noka noka	0.6	8400°	119	0.921	2.1	61	-0.6 5.54	257	14.2	5.79	17.9	-0.6 22.1	-0.6 25.7	47.8	-0.6	-0.6 21.6	53.8	-0.6 2.98	-0.4	7.97	12.7	4.72	104	-0.6 5.53	-0.6 8.18
Organics Organic Matter	x	0.25		27.9	15.4	7.36	9.76	6.95	0.638	2.5	5.17	0.721	1.19	2.81	1.51	22.4	2.91	1.92	11.8	47.9	-0.25	2.24	<0.25	0.621	-0.25	5.72
Inorganics Sulphur	ng/kg	200		29,000	3030	459 - 460	5880	995 - 1000	637 - 640	620	545 - 550	307 - 310	610	1500	466 - 470	6430	1990	269 - 270	6760	626 - 640	320 - 322	230 - 271	265 - 270	-200	290 - 293	340-341
Cyanide Total Sulphate	noka noka	1 49	150*	9660	<1	330 - 332	1430	587-590	<1 576-580	139 - 340		410 - 412	217 - 220	365 - 270	<1 285 - 290	1550	420 - 422	e0 - 82	1570	410 - 412	460 - 461	<1 147 - 150	190 - 191	100 - 101	219 - 220	206-210
Moleture Subhate (toluble)	N at	0.0002		61 0.735	25 0.364	4 0.0115 - 0.012	39 0.379	22 0.0498 - 0.05	1.8 0.0146 - 0.015	25 0.0219 - 0.022	7.5	20	20 0.0229 - 0.023	0.0365 - 0.027	21 0.0047 - 0.005	25	29	29 0.0147 - 0.015	51 0.25	97	19 00277-0:028	29 0.014 - 0.0143	8.9 0.0129 - 0.013	15 0.0245 - 0.025	10	29 8 0.025 -0.0252
pH (at) Other	pH_Units	1		5.56	8.2	2.79	7.75	9.03	9.02	E.4	9.03	9.49	7.9	2.36	6.68	5.36	7.25	7.74	7.89	4.4	8.63	4.05	2.49	5.77	9.56	5.97
Big-chlorologropy(ether Surrogate	noka	0.1		-0.2	<0.1	-0.1	-05	-01	-0.1	-0.1	-0.1	<0.1	-0.1	-0.1	<0.1	<0.1	-01	-41	-0.1	-0.1	-0.1	<0.1	-0.1	<0.1	<0.1	<0.1
Tolueno-DB Chrywne-d12 (urr.)	X X	-		97.2	92 109	97.2	99.7	98.6 106	90.7 102	94.7 106	97.1 92.7	97.2 78.4	95.0 95.0	96.3	91.6 90.9	99.4 85.4	103	90.5 77.8	95.0	96.1 111	99.5 112	95.1 95.5	101 82.1	92.1 94.7	100	99.2
diSAconaphrhene (SS) diSPhenarihrene (SS)	Š.	-		106 97.1 104	94.6	100 92.4 92.3	105 69.3 99.5	92.4 92.1	93.9 93.3	93.2 93.8	92.3 88.7	91.0	96.1 92.1	92.7 91.0 89.8	95.1	92.1 92.8	92.5	90.3	90.1 96.2	160	98.8 103	90.5 90.7 92.1	97.7 90.6	86.1 86.2	90.1 92.6	988 908 93
di O-Phenanthrene (55) di Naghthalene (55) GRO Surrosate	X X			95.4 65.5	96.4	92.3 86.8 91.0	99.5 92.9	93.3 97.3 70.4	93.3 97.0 97.0	92.9 96.9	99.7 96.9 99.1	92.4 93.2 154	92.1 91.5	99.5 99.5	95.5	92.8 94.6	92.5 91.4 99.5	92.7 92.7	96.3 94.8	91.4 92.2	96.4 140	92.1 92.1	90.6 94.7 10%	92.4 93.7	92.6 97.6 99.3	92.4 142
Lveu siurrogatie	N.	_		605	80.8	91.0	63	70.6	95.0	100	99.3	104	101	100	90.0	66	99.5	99.7	92.0	67.2	148	99.4	105	92.7	99.3	142

Env Stds Comments #1::DM/CEH SHEE 2015 #2:USER RS: (NOV 2021) #2:Deba OHS (DH) #4:ECHCS/CI ARE

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

Key Screedings of HH Sall. Commercial/Industrial. Sandy Loam. TOC >=3.4

		-	Field_ID Sample_Depth_Range Sampled_Date_Time	175504 4 14.2 11/05/0022	TPSS05 2.6-2.7 11/05/2022	19505 2.5-2.7 11/05/2022	19506 1.2-1.3 11/05/2023	TPSS06 3-3-2 11/05/2023	39101 2.4-2.5 26/05/2023	19102 21-22 26/05/2023	19103 15-1.6 36/05/2023	39304 0.1-0.2 26/05/2023	19105 1-1.1 25/05/2023	TP106 0:3-0.4 25/05/2022	19907 0.3-0.4 25/05/2023	19100 0.5-0.6 25/05/2023	19T10 0.2-0.3 25/05/2023	TPT11 0.2-0.3 26/05/2023	39112 0.3-0.4 23/05/2022	19113 0.2-0.3 16/05/2023	TP114 0.15-0.3 16-05/2023	TPT15 0.4-0.5 16/05/0023	19114 0.9-0.9 15/05/2023	TPT17 2.1-2.2 15/05/2022		1918 0.5-0.8 13/06/2023
		ŀ	GAC_HH_COM/																							
ChemName	output unit	i Ci.	IND_SIGAM_>2.48%100																							
PCBs Tetrachionobiphenyl, 3,3,4,4-PCB 77)		0.000									.0.000	-0.003									-0.003					
Tetrachiorobiphenyl, 3,3,4,4-PCR77) Tetrachiorobiphenyl, 3,4,4,5-PCR811		0.003	0.16 ⁴⁰ 0.048 ⁴⁰	<0.003	-0.003	<0.003	<0.003	-0.000	-0.015	-0.015	-0.003	-0.000	<0.003	<0.003	<0.003	<0.003	<0.003	-0.000	-0.000	-0.003	-0.003	<0.003	<0.002	<0.003	-0.003	<0.003
Pentachlorobigheryl, 2.1.2.4.6 (PCB 1)	(05) mg/kg	0.003	0.49"	<0.003	<0.003	<0.003	<0.003	<0.000	-0.015	-0.015	-0.003	-0.003	<0.003	<0.003	<0.003	<0.002	<0.003	-0.000	-0.003	-0.003	-0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Portachlorobighoryl, 2,1,4,5, (PCB 1) PCB 118	(14) mg/kg mg/kg	0.003	0.690	<0.003	<0.003	<0.003	<0.003	-0.000	-0.015	-0.015	-0.000	-0.003	<0.003	<0.003	<0.003	<0.003	<0.003	-0.000	-0.003	-0.003	-0.003	<0.003	<0.003	<0.003	<0.003	<0.003
		0.003	0.49"	<0.003	<0.003	<0.003	<0.003	<0.000	-0.015	-0.015	-0.003	-0.000	<0.003	<0.003	<0.003	<0.002	<0.003	-0.000	-0.003	-0.003	-0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Pertachlorobiphoryl, 2.1.4.4.5 (PCB L Hissorbiorobiphoryl, 2.1.1.4.5-(PCB L	Os) Ing/kg	0.003	0.00015"	<0.003	<0.003	<0.002	<0.003	<0.000	-0.015	<0.0%	-0.003	-0.003	<0.003	<0.002	<0.003	<0.002	<0.003	-0.000	-0.003	<0.003	-0.003	<0.003	<0.003	<0.003	<0.003	<0.003
		0.003	05"	<0.003	<0.003	<0.003	<0.003	<0.000	-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
Hesachiorobiphoryl, 2.1.4.4.5.5-(PCB) Hesachiorobiphoryl, 2.1.4.4.5.5-(PCB)	167) Ing/kg	0.003	0.51"	<0.003	<0.003	<0.003	<0.003	<0.000	-0.015	-0.015	-0.003	-0.003	<0.003	<0.003	<0.003	<0.002	<0.003	-0.000	-0.003	<0.003	-0.000	<0.003	<0.002	<0.003	<0.003	<0.003
Historiorobiphonyl, 2,3,2,4,5,5-PG	CB mg/kg	0.003	0.00051**	<0.003	<0.003	<0.003	<0.003	-0.000	-0.015	-0.0%	-0.003	-0.001	<0.003	<0.003	<0.003	<0.003	<0.002	-0.000	-0.003	-0.003	-0.003	<0.003	<0.003	<0.003	<0.003	<0.003
Total PCB WHO 12 PCB 28	mg/kg	0.006		<0.036	<0.036	<0.036	<0.036	<0.036	-0.19	-0.18	-0.035	-0.036 -0.003	<0.036	<0.036	<0.036	<0.036	<0.036	-0.036	-0.036	-0.006	-0.005 -0.003	-0.036	<0.006	<0.036	<0.036	<0.036
PCB52	ing/kg ing/kg	0.003		<0.003	<0.003	<0.003	<0.003	-0.000	4000	-0.0%	-0.003	-0.003	<0.003	<0.003	<0.003	<0.003	<0.003	-0.000	-0.003	-0.003	-0.003	-0.003	<0.003	<0.003	<0.003	<0.003
PCB 101	mg/kg	0.003		<0.000	<0.003	<0.003	<0.003	<0.000	-0.015	-0.0%	-0.003	<0.003	<0.002	<0.003	<0.003	<0.002	<0.003	-0.000	<0.003	<0.003	-0.003	-0.003	<0.002	<0.003	<0.003	<0.003
PCB 128	mg/kg mg/kg	0.003		<0.003	-0.003	<0.003	<0.003	-0.000	-0.015	-0.0%	-0.003	<0.003	<0.003	<0.003	<0.000	<0.003	<0.003	-0.000	-0.000	-0.003	-0.003	-0.003	<0.002	<0.003	-0.003	<0.003
PCB 153 PCB 160	mg/kg	0.003		<0.003	<0.003	<0.003	<0.003	<0.000	-0.015	-0.015	-0.003	-0.000	<0.003	<0.003	<0.003	<0.002	<0.003	-0.000	-0.003	-0.003	-0.003	-0.003	<0.003	<0.003	<0.003	<0.003
Total PCB 7 Congeners Amino Alighatics	mp/kg	0.021		<0.021	<0.021	<0.021	<0.001	<0.021	-0.105	-0.105	-0.021	-0.021	<0.021	<0.001	<0.021	<0.021	<0.021	-0.021	-0.021	-0.021	-0.021	-0.021	<0.021	<0.001	<0.021	-0.021
N-nitroxed-n-propylamine	ng/kg	21	0.22*	<0.1	-0.1	-01	-0.1	-0.1	-0.2	-0.1	<0.1	-0.1	40.1	<0.1	<0.1	-0.1	-0.1	-0.1	-0.1	40.1	<0.1	<0.1	<0.1	<0.1	<0.1	-0.1
Antines 2-stroppiles	Ing/kg		8,000"	10.1	-0.1	-01	-0.1	40.1	-0.2	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1		40.1		-0.0	-9.1			-0.1		
3-strountine	mg/kg	2.1	EJAN T	<0.1	-0.1	-01	-0.1	-0.1	-0.2	41	<0.1	-0.1	-0.1	<0.1	-0.1	-0.1	41	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	<0.1	-0.1	-0.1
4-dioroaniine 4-nitroaniine	mg/kg	0.1	11 ^e	<0.1	-0.1	-01	-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	-0.1
Seplesives	mpliq	-	110"	40.1	-0.1	-61	- 41	48.1	-0.2	-61	-0.1	-0.1	1 461	40.1	-021	- cal	- 61	40.1	-0.1	- cal	40.1	- 03.1	-61	40.1	-02.1	46.1
2,4Cinitrotolume	mg/kg	21	2,800"	<0.1	-0.1	-01	<01	-0.1	-0.2	-0.1	<0.1	-0.1	<0.1	<0.1	-0.1	-01	-0.1	-0.1	-0.1	-0.1	<0.1	-0.1	<0.1	<01	<0.1	-0.1
2,6-diritrotolume Nitrobenome	mg/kg mg/kg	1	1,900° 22°	-0.1 -0.1	-0.1	-01	<0.1 <0.1	-0.1	-0.2	41	<0.1	-0.1	-0.1	<0.1	-0.1 -0.1	-01	-0.1	-0.1	-0.1	40.1	<0.1 <0.1	-0.1	-01	<0.1	-0.1 -0.1	-0.1
Halogonated Betweens										_																_
1,3,5-3richlorobenzene Chlorobenzene	mg-fig mg-fig	0.007	130° 290°	-0.02	-0.02	-0.00	-0.4 -0.1	-0.02	4007	-0.14	407	-0.007	<0.007	-0.007 -0.002	-0.007	<0.007 <0.002	-0.007	-0.007	-0.007	-0.00	-0.00	-0.02	-0.00	-0.00 -0.005	-0.02	-0.007 -0.000
Bromobersene	mg/kg	0.000	520"	<0.01	<000	<0.01	<0.2	-0.01	<0.002	-0.01	40	-0.002	-0.002	<0.002	<0.002	<0.002	<0.002	<0.002	-0.002	-0.01	<0.01	<001	<0.01	<0.01	<001	<0.002
2-thiominium 4-thiominium	ng/kg ng/kg	0.003	23,000° 23,000°	-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	<0.002	<0.000	-0.003	-0.009	-0.009	-0.009	<0.009	<0.009	<0.009	<0.003
1,3-dichiorobergone	mg/kg	0.005	170"	-0.000	-0.000	<0.008	-01 -01	10.000	<0.005	-0.06	46	-0.005	<0.005	<0.005	-0.000 -0.005	-0003 -0005	-0.00s	-0.005	-0.005	-0.000	-0.009	-0.000	-0.008	<0.000	-0001 -0000	<0000 <0005
1,4-dichioroberzone	mg/kg	0.005	25,000"	-0.005	<0.005	<0.005	<01	<0.005	<0.005	-0.1	-465	-0.005	-0.005	<0.005	-0.005	<0.005	<0.00s	<0.005	-0.005	-0.005	-0.005	-0.005	<0.005	<0.005	-0.005	<0.005
1,2-dichioroberanne 1,2,4-trichioroberanne	mg/kg mg/kg	0.007	11,000°	-001 -002	<001 <002	-0.01 -0.00	<0.1 <0.1	-0.01	<0.005 <0.007	41	-0.05	-0.005 -0.007	-0.005	<0.005 <0.007	-0.005 -0.007	<0.005 <0.007	-0.005 -0.007	-0.005 -0.007	-0.005 -0.007	-0.01	-001 -002	<001 <002	-0.01 -0.02	<0.01 <0.02	<001 <002	<0.005 <0.007
1,2,3-trichlorobersene	mg/kg	0.01	590° 120°	<0.02	<0.02	<0.02	<0.4	<0.02	40.00	-0.2	<0.1	<001	<0.01	<0.01	<001	<0.01	-0.01	-0.01	40.01	-0.00	<0.02	<0.02	<0.00	<0.02	<0.02	<0.01
Heachlorobergene Halogenated Hydrocarbons	mpfiq	2.1	120"	<0.1	-0.1	-01	-01	-0.1	-0.2	-0.1	-0.1	-0.1	-0.1	<0.1	-0.1	-01	-0.1	-0.1	-0.1	-0.1	-0.1	-0.1	-01	<0.1	-0.1	-0.1
Dichlorodifuoromethane	mg/kg	0.0005	370°	-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
Bromonethane Trichlorofluoromethane	mg/kg mg/kg	0.0001	30° 254,000°	-0.00s	-001 -000F	-0.01 -0.004	-03 -012	-0.01	-0.001 -0.005	-0.00	-0.005	-0.0005	-0.001 -0.0005	-0.001 -0.0005	-0.0001 -0.0005	-0.001 -0.000F	-0.001 -0.0005	-0.000 -0.0005	-0.001 -0.0005	-0.01	-0.00s	-0.005 -0.006	-0.01 -0.004	-0.001 -0.006	-001 -000s	-0.00F
1,2-dibromoethane	mg/kg	0.001	0.16"	<0.01	<001	<0.01	<0.3	4001	<0.001	-0.02	4001	-0.001	<0.001	<0.001	<0.001	<0.001	<0.001	-(0.000	-0.001	-0.01	<0.01	<001	40.01	<0.01	<001	<0.001
Halogenated Phenois 2-chlorophenoi	ing-liq	2.2	5.800"	49.1	-0.1	-01	-01	-0.1	-0.2	-0.1	<0.1	-0.1	-0.1	-01	<0.1	-01	-01	-0.1	-0.1	-0.1	<0.1	-0.1	v0.1	-01	-0.1	-01
2.4-dichiorophonol	mg/kg	2.1	2.500°	<0.1	<0.1	-0.1	<0.1	40.1	-0.2	-0.1	<0.1	<0.1	<0.1	<0.1	-0.1	-01	-0.1	49.1	-0.1	-0.1	<0.1	<0.1	40.1	<0.1	<0.1	-0.1
2,4,5-trichlorophenol 2,4,6-trichlorophenol	ing/kg ing/kg	2.1	82,000° 210°	<0.1	-0.1	-01	-01	-0.1	-0.2	-0.1	<0.1	-0.1	-0.1	<0.1	-0.1 -0.1	-01	-0.1	-0.1	-0.1	-0.1	<0.1	-0.1	<0.1	<0.1	-0.1	-0.1
Pentadriorophenol	mg/kg	2.1	400"	<0.1	<0.1	×0.1	<0.1	-0.1	-0.2	41	<0.1	-0.1	×0.1	<0.1	-0.1	-0.1	-0.1	40.1	-0.1	40.1	40.1	40.1	40.1	<0.1	-0.1	-0.1
Phthalatos SurCorthobosofi shithalata	ing/kg		84,000"	-01	-01		-01	-01	-02	-01	-01	1 01	- 41	-01	-01		-41	-01		-0.1	-01	-01		-01	-01	-01
Butyl beruyl phthalate	mg/kg	2.1	950,000" 15,000"	<0.1	<0.1	-01	<0.1	40.1	-0.2	-0.1	<0.1	40.1	×0.1	<0.1	<0.1	-01	-0.1	49.1	-0.1	-0.1	<0.1	<0.1	40.1	<0.1	<0.1	-0.1
Dire-butyl phthalate Dire-odyl phthalate	mg/kg mg/kg	2.1	15,000°' 99,000°'	<0.1 <0.1	<0.1	-01	<0.1	40.1	-0.2	-0.1	<0.1	-0.1	-0.1	<0.1	-0.1	<0.1	-0.1	40.1	-0.1	<0.1	<0.1 <0.1	<0.1	<0.1	<0.1	-0.1 -0.1	-0.1
Disthylphthalate	mg/kg	21	290,000"	40.1	-0.1	-01	<0.1	40.1	-0.2	41	<0.1	-0.1	-0.1	<0.1	-0.1	-0.1	41	40.1	-0.1	49.1	40.1	40.1	10.1	<0.1	<0.1	-0.1
	mp/kg	2.1		<0.1	-0.1	-01	<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	40.1	<0.1	-0.1	<0.1	<0.1	<0.1	-0.1
Solvents Carbon disulfide	mg/kg	0.001	47"	-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	-(0.000	-0.001	<0.007	-0.007	-0.007	<0.007	<0.007	-0.007	<0.001
Inophorone Metals	mp/kg	ш	2.400"	<0.1	-0.1	-01	<0.1	40.1	-0.2	-0.1	<0.1	-0.1	-0.1	<0.1	<0.1	-0.1	-0.1	-0.1	-0.1	40.1	40.1	-0.1	-0.1	<0.1	<0.1	-0.1
Arsenic	mg/kg	2.6	640°	1.18	4.69	1.44	9.36	14.1	657	9	2.55	1.07	2.39	2.92	1.02	2:31	2.04	2.26	4.72	2.31	2.44	1.12	4.47	2.99	4.11	3.37
Barlum	mg/kg	15	22,000 th 12 th	0.259	35.9 0.647	27.6 0.38	21.1 0.0436 - 0.044	7.61 0.0457 - 0.046	228 0.198	69.5 0.97	9.24 0.197	30 0.496	0.313	49.9 0.582	190	62.6 0.200	22.1 0.216	23.3 0.317	99.7 0.909	19.6	41.4	22.4	41.1 0.529	12.6 0.132	59.5 0.496	41.3
Borytium Cadnium	ng-kg ng-kg	0.02	410"	0.653	0.769	0.922	0.239	2.76	0.107	1.67	0.546	1.47	0.644	0.681	0.257	0.492	0.571	0.436	0.644	0.493	0.547	0.382	0.93	0.379	0.95	0.56 0.496
Oronke (II-VI)	mg/kg	19	Use either Criti or Criti" 48,000"	4.72 9.20	17.6	14.2	-09 5.04	100 27.5	-0.9	36.1	5.72	34.7	5.72 9.99	11.6	51.6 2.46	9:37 5:72	5.05	5.29	21.5	4.57 2.71	9.74	6.17 4.86	15.1	2.53	14.7	14
Copper Lead	mg-fiq mg-fiq	1.4	48,000° 2,330°	7.21	17.8	7.12	1.65	45.1	-0.7	22.3 18.3	4.06	21.2	9.71	11.9	276	5.72	4.04	5.55	17.1	4.19	7.18	5.34	11.5	2.53 4.46	16.5	7.46
Mercury	mg/kg	0.1	250°	<0.1	<0.1	-0.1	299	-0.1	-0.1 1.95	-0.1 57.0	9.91	<0.1	<0.1	<0.1	-0.1 22.1	-0.1 14.2	10.2	-0.1 12.5	-0.1	40.1 8.85	16.9	10.5	27.3	<0.1 7.80	22.1	-0.1
Selenium	ing-liq ing-liq	ř l	980° 12,000°	17.6	35.9		- 4	4.92	1.09	1.61	<1	42.9	21.9	23.4	- 0	- d	- d	<1	- 0	-cl	<1	<1		- 4	- <1	20.3
Vanadum	ing/kg	12	9,000"	9.54	22	18.5	1.22	159	613	25.4	6.2	17.5	7.95	15.4	35.6	7.74	5.97	8.22	29.0	6.44	12.9	7.85	11.9	294	19.7	12.1
Zirc Chromium (hosevalent)	mg/kg mg/kg	2.6	730,000° 49°	472	105	985	2.35	-0.6	6.29	129	24.9	76.6	489	53 -0.5	91.6	35.1	212	32.5 -0.6	42.6	26.1	32.3	-0.6	515	24.2	-0.6	36.9
Chromium (Trivalent)	ng/kg	10	8,600"	4.72	17.6	14.2	-09	104	-0.9	36.1	5.72	34.7	5.72	11.6	51.6	9.37	5.05	5.29	21.5	4.57	9.74	6.17	15.1	2.57	14.7	14
Organics Organic Matter	h.	0.25		-0.25	0.969	-0.15	70	1.17	2.12	9.65	0.945	2.88	2.95	1.18	2.93	124	1.5	1.51	2.9	2.09	1.59	1.74	6.54	-0.25	12	152
Inorganics																										
Sulphur Cyanido Total	mg/kg mg/kg	200	150°	239 - 240	379 - 380	- 4	340 - 343	1390	4950	4000	650 - 651	- /1	-200	-200	200 - 203	720 - 724	220 - 222	-200	460 - 463	270 - 272	-200	-200	715 - 720	-4	270-273	456 - 660
	mg/kg	62		267 - 270	390 - 391	275 - 290	516 - 520	67.6 - 70		1360	367 - 270	150 - 152	2% - 220	349 - 350	205 - 210	689 - 690	254 - 240	155 - 160	225 - 230	26 - 250	229 - 230	277 - 290	505 - 510	420	100 - 101	290 - 293
Molidare Sulphate (calable)	N.	1.0002		11 0.0145 - 0.015	22 0.025 -0.0251	10	79	13 0.015 - 0.0151	47 00996 - 009	46 0.199	22	26	26 0.027 - 0.0272	16	25 0.004 -0.0062	12 0.0677 - 0.068	17	£1 0.0125 - 0.013	29 00187 - 0019	14 0013	15	22	41 0.0587 -0.059	18	0.021	22 0.029 - 0.0294
pH (Lab)	pr. Units			9.92	7.70	8.58	4.92	7.62	807	7.19	2.46	7.15	8.36	2.11	4.87	2.49	2.45	9.01	222	8.57	2.55	2.65	6.82	2.45	7.62	826
Other Big-chloroisopropy(inther	maska					-01	-0.1	-01	-0.2					-0.1	-0.1	-0.1			-0.1	-0.0	-9.1			-0.1		
Surrogate Tolune-08	F4/93			40.1			- 12.1	100.1		421	10.1		1 101	40.1	1041	1001		46.1		19.1			101	10.1	10.1	92.1
	4			100	99.3	100	95.4	92.1	96.7	97.4	100	85.6	101	99.1	92.7	106	92.6	92.4	91.4	97	99.3	975	95.0	995	92.9	92.5
Chrysene-di2 (surr.) d15Asrephthene (55)	5	\vdash		100 94.3	97.0 94.0	99.2	100	90.2 91.9	97	90.0 91.0	93.2	109 97.2	99.1 93.7	92.4	97.2 92.4	92.1 92.4	103 923	101	100	74.9	91	92.1 97.0	106	94.2	76.7 91.3	93.3 95.7
				94	91.4	91.1	104	84.5	97.5	90.7	91.3	101	92	92.1	39.6	91.2	91.3	90.9	90.5	\$6.4	95	4.66	92.9	94.7	96	29
	16	\vdash																								
d109heranthrene (SS) d8Naphthalene (SS) GBD Surregate	5 5	H		93.2	92.7 160	91.3 103	92.3 61.3	93.1 95.4	95.9 99.7	95.0 70.3	99.1 91.7	99.5 97.3	99.1 137	97.5 93.5	97.9 160	97.9 109	99.3 99.3	80.2 95.5	99.1 99	96.8 91.3	93.E 97.3	96.6	91.9 98.7	92.1 105	92.3 166	99.7 97.4

Env Stds Comments #1:10M/0EH Stdts 2015 #2:15EFA RSL (NOV 2021) #2:Deba C4SL (2014) #4:EIC/AGS/12:ARE

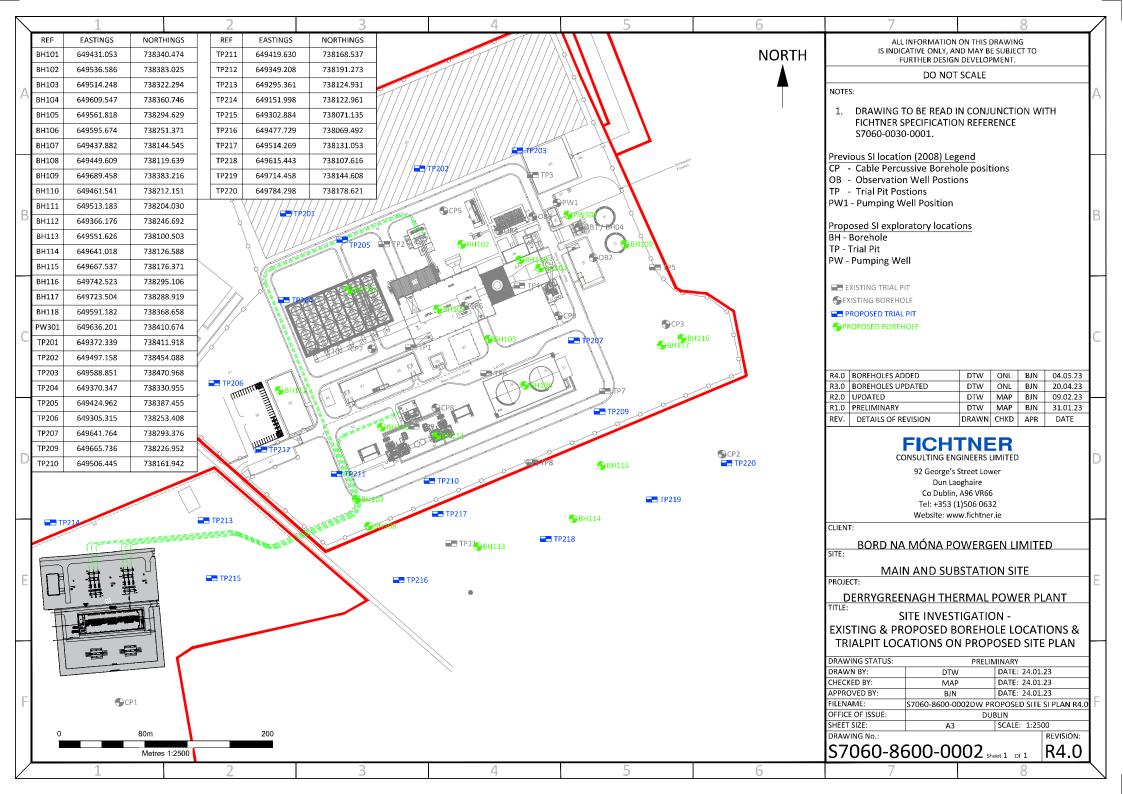
GAC: Generic Assessment Criteria (blank): No assessment criteria as

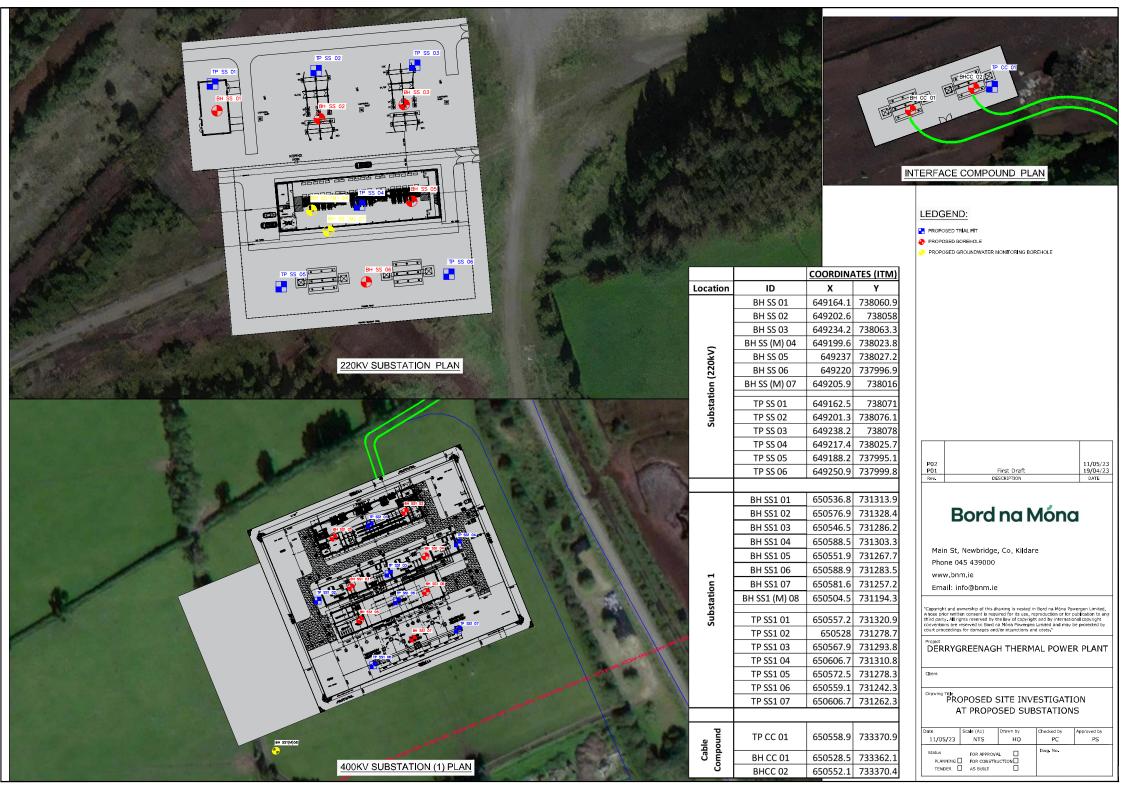
Key Exceedance of HH Sell. Commercial/Industrial Sandy Loam TOC >=3.4

			Field_ID	BH101	BH102	BH103	BH104	BH105	BH-106	BH107	BH108	BH110		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	1 1																		
NA		Т																			
CEN 10:1 - Conductivity @ 20 deq.C (diss.fi	lt) 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	µq/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 ^{#1}	<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	µq/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	µq/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	µq/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	µq/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	mq/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

Appendix B – IDL Report Investigation Locations







LEDGEND:

PROPOSED TRIAL PIT

PROPOSED BOREHOLE

PROPOSED GROUNDWATER MONITORING BOREHOLE

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

Bord na Móna

Main St, Newbridge, Co. Kildare Phone 045 439000

www.bnm.ie

Email: info@bnm.ie

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ect

DERRYGREENAGH THERMAL POWER PLANT

ient

PROPOSED SITE INVESTIGATION
AT PROPOSED SUBSTATIONS

cale (A1)	Drawn by	Checked by	Approved by
NTS	но	PC	PS
FOR CONSTRU		Dwg. No.	
	NTS FOR APPROVA	NTS HO FOR APPROVAL FOR CONSTRUCTION	NTS HO PC FOR APPROVAL DOWN NO.



P02		11/05/2
P01	First Draft	19/04/2
Rev.	DESCRIPTION	DATE

Bord na Móna

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DERRYGREENAGH THERMAL POWER PLANT

PROPOSED SITE INVESTIGATION AT PROPOSED PYLONS

11/05/23	Scale (A1) NTS	Drawn by HO	Checked by PC	Approved by PS	
Status PLANNING [TENDER	FOR APPROVA		Dwg. No.		



LEDGEND:

PROPOSED TRIAL PIT

PROPOSED SLIT TRENCH

Doo		44/05/22
P02 P01	First Draft	11/05/23 19/04/23
Rev.	DESCRIPTION	DATE

Bord na Móna

Main St, Newbridge, Co. Kildare

Phone 045 439000

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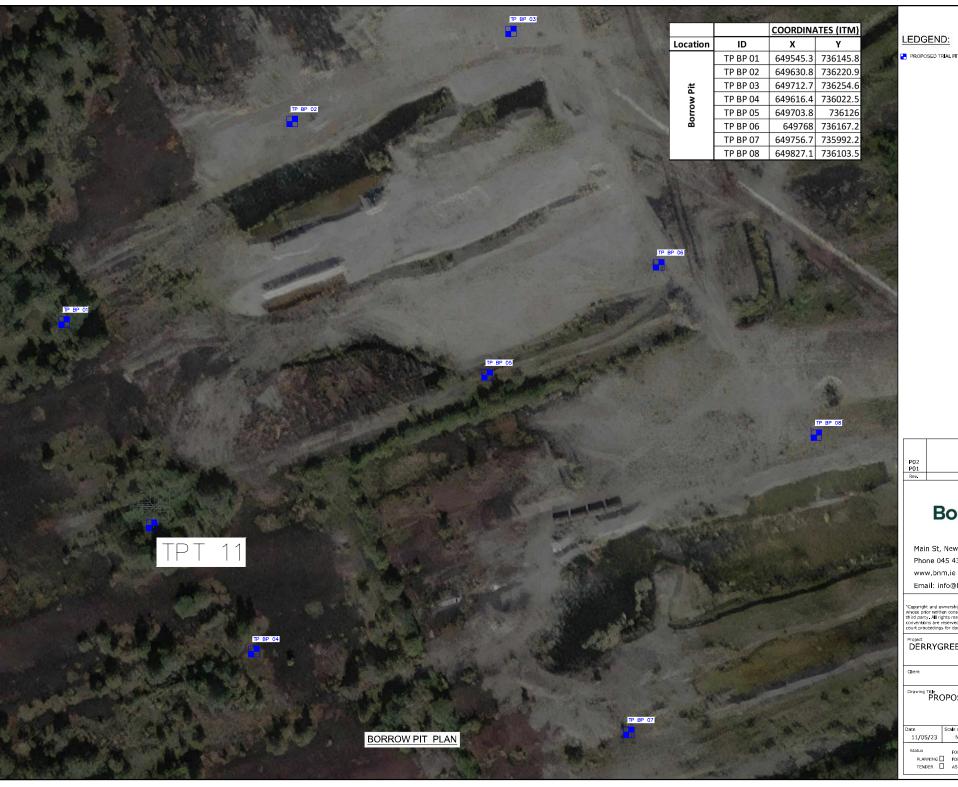
DERRYGREENAGH THERMAL POWER PLANT

PROPOSED SITE INVESTIGATION UNDERGROUND CABLE ROUTE

Date	Scale (A1)	Drawn by	Checked by	Approved by
11/05/23	NTS	но	PC	PS
Status		Dwg. No.		
PLANNING [FOR APPROV		_	
		COCIDON		
TENDER	AS BUILT	Ш		



11/05/23 19/04/23 DATE



PROPOSED TRIAL PIT

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

Bord na Móna

Main St, Newbridge, Co. Kildare

Phone 045 439000

Email: info@bnm.ie

DERRYGREENAGH THERMAL POWER PLANT

PROPOSED SITE INVESTIGATION BORROW PIT AREA

Date Scale (A(1) Drawn by Checked by Approved by 11/05/23 NTS HO PS PS							
Status FOR APPROVAL Dwg. No.	Date	Scale (A1)	Drawn by	Checked by	Approved by		
FOR APPROVAL	11/05/23	NTS	но	PS	PS		
				Dwg. No.			



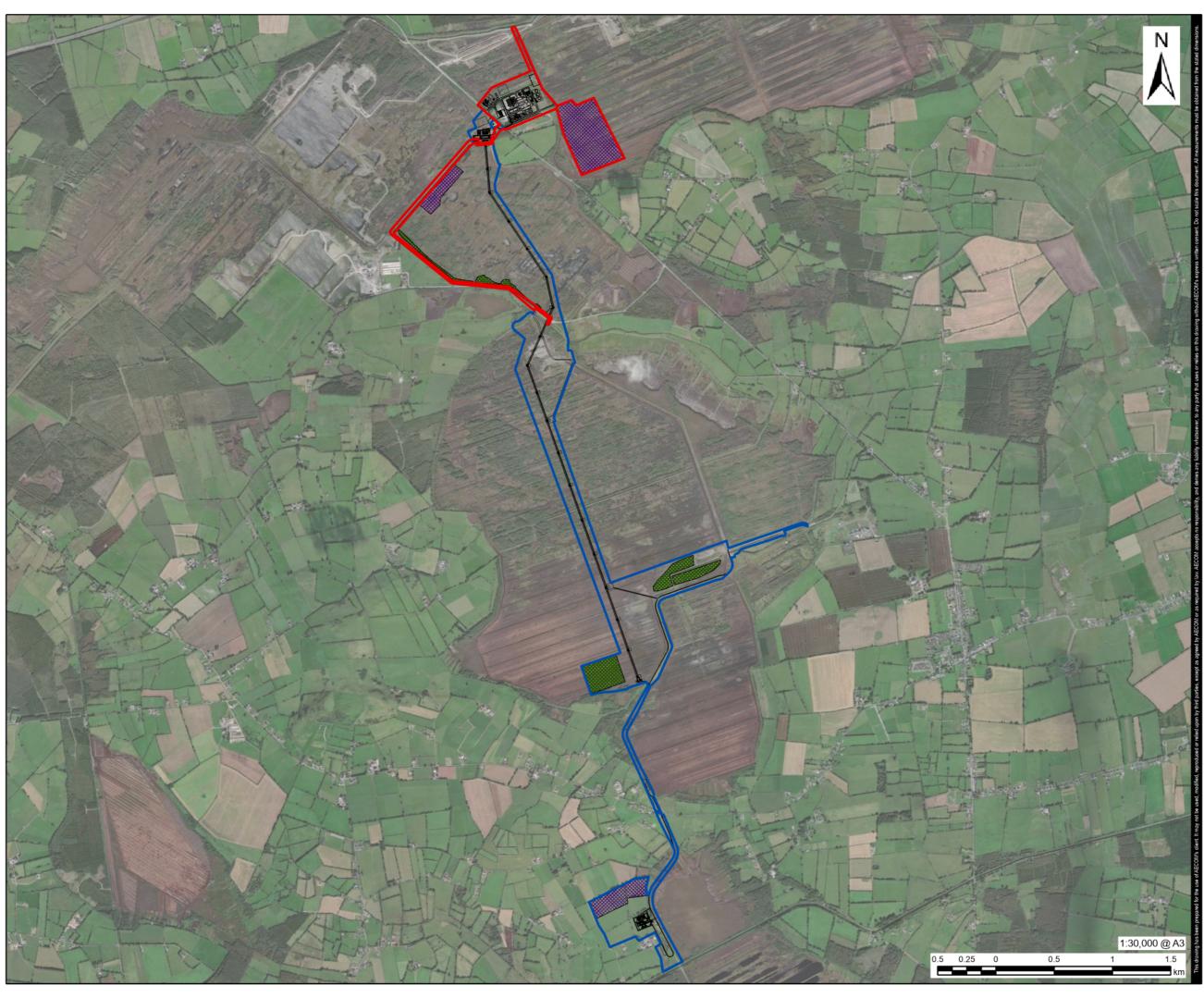








Appendix C – Figures



AECOM

Proposed Derrygreenagh Power Project

CLIENT

Bord na Móna

CONSULTANT

AECOM Limited 10th Floor The Clarence West Building 2 Clarence St W, Belfast BT2 7GP Tel: +44 (0)28 9060 7200

www.aecom.com

LEGEND

Power Plant Area Boundary

Electricity Grid Connection Boundary Project Elements

Project Layout

Tree Replanting Area

Peat Deposition Area

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Maxar, Microsoft, Esri UK, Esri, TomTom, Garmin, FAO, NOAA, USGS

ISSUE PURPOSE

FOR ISSUE

PROJECT NUMBER

60699676

FIGURE TITLE

Proposed Development and Overall Project Layout

FIGURE NUMBER

AECOM Limited 9th Floor, The Clarence West Building 2 Clarence Street West Belfast BT2 7GP United Kingdom

T: +44 28 9060 7200

