

11 January 2018

Peter Cunningham
Principal Planning Officer
South Tyneside Council
South Shields Town Hall,
Westoe Road,
South Shields
NE33 2RL

Our Ref: D133185
Your Ref: PP-06651486

Dear Peter,

Planning application for engineering works to allow the relocation of an existing soil berm at Dow Chemical Company Limited, Ellison Street, Jarrow, Tyne and Wear, NE32 3DJ

Context

The site is the former production facility of Dow Chemical Company Ltd, who has been undertaking a phased programme of demolition and remediation since production at the site ceased on 31st May 2016. As part of that programme, Dow require access to a buried basement and gas holders that are located beneath the footprint of an existing soil berm located at the south of the site, to the north of Chaytor Street. Enabling such access will allow the buried structures to be surveyed and inform their means of investigation and remediation. In order to allow access to the structures, the existing soil berm will require relocation to other parts of the site and it is on this basis that the application is made.

Application documents

In addition to this cover letter and the application form, the application is supported by the following:

- Drawing 60560430-P-Figure 1: Site Location Plan
- Drawing 60560430-P-Figure 2: Existing Site Plan
- Drawing 60560430-P-Figure 3: Proposed Site Plan

As is identified by the drawings, the existing soil berm will be relocated to five different locations within the existing Dow site. All locations are further from existing residential properties (compared with the location of the existing berm) and the visual impact of the soils berms will be greatly reduced owing to the volume of the material being spread across five locations.

In respect of part 12 of the application form, it is highlighted that surface water is initially collected in a containment pit on site where it is then tested for contaminants prior to discharge to the River Tyne (under consent of the Environment Agency).

Summary of Works to be Undertaken and Mitigation Measures

The summary below details how the work will be undertaken and what mitigation measures will be put in place:

- Movement of up to 29,000m³ of soil using excavators and dumper trucks;
- All machines movements will be undertaken within the DOW Tyneside Works site boundary and not on public roads. The site boundary is fenced and secure which will prohibit public access;
- All works will be undertaken during working hours of 08:00 to 17:30;

- Work will be undertaken in accordance with the Construction (Design and Management) Regulations 2015 (if applicable) with appropriate risk assessments and method statements undertaken;
- As the soil is currently exposed to the elements it is likely to contain some moisture which will mitigate the amount of dust produced. Further wetting down will be undertaken if required;
- On-site air monitoring for asbestos fibres as detailed below;
- The soil does not contain volatile contaminants so odours are not anticipated. If odours are produced then work will be stopped and the methodology reviewed;
- The closest stockpile to the site boundary (Stockpile 2) is 40m from the boundary at its closest point. This will limit potential impacts to off-site properties, public roadways and footpaths;
- All machines will be cleaned down on site prior to movement off-site at the end of the works;
- Proposed new stockpile locations are shown on Figure 3, with approximate dimensions and material volumes given; and
- The new stockpiles will have slope ratios of 1.5:1.0 which is considered to be stable for this type of material.

Soil quality of the existing berm

The material in the berm comprises brown, very soft, slightly silty, slightly sandy clay with bricks, concrete, burnt shale, coal fragments, clinker and slag.

Analytical results for soil samples taken from the berm have been screened against human health and controlled waters Site Specific Assessment Criteria (SSAC) determined for the wider DOW Jarrow site. Thirty-two sample were analysed for a suite of contaminants including Volatile Organic Compounds, Semi-Volatile Organic Compounds, Total Petroleum Hydrocarbons, Polycyclic Aromatic Hydrocarbons, metals and asbestos. Analytical results for soil samples taken from the berm are included as Table 1 attached to this letter.

The majority of compounds were reported at concentrations below the method reporting limit (MRL). Where concentrations were detected above the MRL, these did not exceed the SSAC. Therefore the material is considered unlikely to pose a potential risk to controlled waters or human health.

Asbestos was reported in six of the eighteen soil samples analysed. Subsequent quantification indicated that three samples contained asbestos below the MRL of <0.001% w/w. The remaining samples contained asbestos lagging (0.0081% w/w), Asbestos Containing Materials (ACM) debris (0.0193% w/w) and loose fibres (0.0041% w/w). The potential risk from asbestos to on-site workers and off-site residents is considered to be low due to the presence of moisture within the material which will inhibit the release of fibres. Further wetting down of the material will be undertaken if required during material movements.

In addition, on-site air monitoring for asbestos fibres will be undertaken during earthworks and compared to baseline conditions. If asbestos fibres are recorded above baseline conditions then further wetting of the material will be undertaken. When material movements have been completed, air monitoring will be undertaken in order to indicate that no additional risks are present from the new stockpiles. Further mitigation on the completed stockpiles may include sheeting, if required.

We would be grateful of the Council's validation of the application and an early discussion with the case officer to identify the means of publicising the application, who is to be consulted, and any other issues which the officer wishes to discuss.

Yours sincerely
for **AECOM**

Matthew Smedley
Associate Planner

Direct Line: +44 (0)113 2045031
matthew.smedley@aecom.com

Analyte	Location		BH211	BH212	BH213	BH214	BH301	BH302	BH303	BH304	BH305	BH306	BH307	BH308	BH309	BH310	DEMO1	DEMO2
	Date		01/04/2007	01/04/2007	01/04/2007	01/04/2007	01/04/2007	01/04/2007	01/04/2007	01/04/2007	01/04/2007	01/04/2007	01/04/2007	01/04/2007	01/04/2007	01/04/2007	12/07/2017	12/07/2017
	Sample Depth		2.4	3.8	3.3	4.2	0.8	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.9		
	SSAC																	
Volatile Organic Compounds	Human Health	Controlled Waters																
1.1.1.2-TETRACHLOROETHANE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
1.1.1-TRICHLOROETHANE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.007	< 0.007
1.1.2.2-TETRACHLOROETHANE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
1.1.2-TRICHLOROETHANE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
1.1-DICHLOROETHANE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.008	< 0.008
1.1-DICHLOROETHENE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
1.1-Dichloropropene			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
1.2.3-Trichlorobenzene			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.02	< 0.02
1.2.3-TRICHLOROPROPANE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.016	< 0.016
1.2.4-TRICHLOROBENZENE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1
1.2.4-TRIMETHYLBENZENE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.009	< 0.009
1.2-DIBROMO-3-CHLOROPROPANE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.014	< 0.014
1.2-DIBROMOETHANE (ETHYLENE DIBROMIDE)			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
1.2-DICHLOROETHANE	2000	--	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.757	0.374
1.2-DICHLOROETHANE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.005	< 0.005
1.2-DICHLOROPROPANE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
1.3.5-TRIMETHYLBENZENE (MESITYLENE)			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.008	< 0.008
1.3-DICHLOROBENZENE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1
1.3-Dichloropropane			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.007	< 0.007
1.4-DICHLOROBENZENE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1
2.2-Dichloropropane			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
2-CHLOROTOLUENE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.009	< 0.009
4-Chlorotoluene			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
BENZENE	27	1507.67	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	0.0304
BROMOBENZENE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
BROMODICHLOROMETHANE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.007	< 0.007
BROMOFORM			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
BROMOMETHANE			-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.01	< 0.01
CARBON DISULFIDE			-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.007	< 0.007
CARBON TETRACHLORIDE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
CHLOROBENZENE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.005	< 0.005
Chlorobromomethane			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
CHLOROETHANE			-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.01	< 0.01
CHLOROFORM			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.008	< 0.008
CHLOROMETHANE			-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.007	< 0.007
CIS-1,2-DICHLOROETHYLENE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.006	< 0.006
CIS-1,3-DICHLOROPROPENE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
DIBROMOCHLOROMETHANE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
Dibromomethane (Methylene Bromide)			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.009	< 0.009
DICHLORODIFLUOROMETHANE			-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.006	< 0.006
DICHLOROETHYLENES			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.16	< 0.16
ETHYLBENZENE	5700	2055.65	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.004	0.00544
HEXACHLOROBUTADIENE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1
ISOPROPYLBENZENE (CUMENE)			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.005	< 0.005
m,p-Xylene	--	--	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	0.025
METHYLENE CHLORIDE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
NAPHTHALENE	190	>Sat	0.13	1.63	0.1	0.27	0.71	0.3	2.54	0.15	0.17	0.07	0.38	0.14	0.22	0.05	0.209	0.312
N-BUTYLBENZENE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.011	< 0.011
N-PROPYLBENZENE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
O-XYLENE (1,2-DIMETHYLBENZENE)	6600	--	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
p-Isopropyltoluene			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
SEC-BUTYLBENZENE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
STYRENE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
T-BUTYLBENZENE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.014	< 0.014
TERT-BUTYL METHYL ETHER	7900	12.06	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.01	< 0.01
TETRACHLOROETHYLENE(PCE)			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.005	< 0.005
TOLUENE	56000	3325.53</																

Table 1
Soil Analytical Data

Analyte	Location		BH211	BH212	BH213	BH214	BH301	BH302	BH303	BH304	BH305	BH306	BH307	BH308	BH309	BH310	DEMO1	DEMO2
	Date		01/04/2007	01/04/2007	01/04/2007	01/04/2007	01/04/2007	01/04/2007	01/04/2007	01/04/2007	01/04/2007	01/04/2007	01/04/2007	01/04/2007	01/04/2007	01/04/2007	12/07/2017	12/07/2017
	Sample Depth	SSAC	2.4	3.8	3.3	4.2	0.8	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.5	0.9	
Chlorobenzenes																		
1,2,3-Trichlorobenzene			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.02	< 0.02
1,2,4-TRICHLORO BENZENE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1
1,2-DICHLORO BENZENE	2000	--	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.757	0.374
1,3-DICHLORO BENZENE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1
1,4-DICHLORO BENZENE	4400	--	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1
CHLORO BENZENE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.005	< 0.005
HEXACHLORO BENZENE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1
Trichlorobenzenes (total)			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.3	< 0.3
Polycyclic Aromatic Hydrocarbons																		
ACENAPHTHENE	84000	>Sat	< 0.05	8.8	< 0.05	< 0.05	0.8	0.06	2.69	0.06	< 0.05	< 0.05	0.09	< 0.05	0.08	0.029	0.169	0.334
ACENAPHTHYLENE	83000	>Sat	< 0.05	0.73	< 0.05	< 0.05	0.26	< 0.05	0.3	< 0.05	< 0.05	< 0.05	0.13	< 0.05	0.13	0.034	0.168	< 0.1
ANTHRACENE	520000	>Sat	0.11	22.7	0.11	0.16	1.71	0.11	7.48	0.26	0.21	0.06	0.46	0.07	0.49	0.118	2.36	1.69
BENZO(A)ANTHRACENE	170	>Sat	0.23	22.1	0.31	0.26	2.43	0.24	9.4	0.63	0.59	0.26	1.5	0.24	1.01	0.478	5.48	4.25
BENZO(A)PYRENE	35	>Sat	0.22	17.4	0.36	0.22	2.25	0.26	7.91	0.65	0.62	0.3	1.49	0.27	0.93	0.345	4.58	3.04
BENZO(B)FLUORANTHENE	44	>Sat	0.25	21	0.52	0.26	3.81	0.5	10.7	0.85	0.88	0.41	2.25	0.38	1.34	0.565	8.55	3.74
BENZO(G,H,I)PERYLENE	3900	>Sat	0.11	9.04	0.28	0.11	1.57	0.23	4.48	0.5	0.48	0.23	1.9	0.23	0.89	0.38	2.89	1.68
BENZO(K)FLUORANTHENE	1200	>Sat	0.09	7.44	0.19	0.09	0.99	0.16	3.81	0.3	0.31	0.14	0.59	0.12	0.43	0.243	2.02	2.36
CHRYSENE	350	>Sat	0.2	19.5	0.36	0.29	3.1	0.33	8.67	0.68	0.67	0.32	1.53	0.28	1.05	0.424	5.57	3.58
DIBENZ(A,H)ANTHRACENE	3.5	>Sat	< 0.05	3.45	0.09	< 0.05	0.36	< 0.05	1.87	0.15	0.15	0.07	0.39	0.07	0.23	0.11	0.972	0.513
FLUORANTHENE	23000	>Sat	0.46	43.1	0.67	0.42	8.23	0.48	20.4	1.12	1.03	0.49	2.11	0.43	1.62	0.968	8.25	9.41
FLUORENE	63000	>Sat	< 0.05	13.7	< 0.05	0.06	0.9	< 0.05	2.68	0.07	< 0.05	< 0.05	0.11	< 0.05	0.22	0.049	0.33	0.496
INDENO(1,2,3-C,D)PYRENE	500	>Sat	0.1	8.8	0.25	0.09	1.33	0.18	3.97	0.43	0.42	0.19	1.5	0.19	0.71	0.403	2.59	1.86
NAPHTHALENE	190	>Sat	0.13	1.63	0.1	0.27	0.71	0.3	2.54	0.15	0.17	0.07	0.38	0.14	0.22	< 0.05	0.209	0.312
PHENANTHRENE	22000	>Sat	0.33	52	0.43	0.71	4.93	0.39	23.1	0.87	0.67	0.35	1.35	0.34	1.3	0.83	4.23	5.75
PYRENE	54000	>Sat	0.32	32.8	0.49	0.32	5.09	0.41	14	0.9	0.87	0.4	2.31	0.34	1.5	0.699	6.61	7.5
PAH 16 EPA (sum)			2.55	284.19	4.16	3.26	38.47	3.65	124	7.62	7.08	3.29	18.09	3.1	12.15	5.68	53.8	33.2
**PAH Total (4) Compounds			0.55	46.28	1.24	0.55	7.7	1.07	22.96	2.08	2.1	0.97	6.24	0.92	3.37	1.591	16.05	9.64
Phenols																		
2,4-DIMETHYLPHENOL			< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.1	< 0.1
2-METHYLPHENOL (O-CRESOL)			< 0.1	< 0.1	< 0.1	< 0.1	< 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 (P-CRESOL)			< 0.1	< 0.1	< 0.1	< 0.1	< 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			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
Chlorophenols																		
2-CHLOROPHENOL			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1
2,4-DICHLOROPHENOL			< 0.1	< 0.1	< 0.1	< 0.1	< 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			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1
2,4,6-TRICHLOROPHENOL			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1
PENTACHLOROPHENOL			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1
4-CHLORO-3-METHYLPHENOL			< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.1	< 0.1
Phthalates																		
BENZYL BUTYL PHTHALATE	940000	--	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.1	< 0.1
BIS(2-ETHYLHEXYL) PHTHALATE	85000	669.04	0.95	1.22	0.59	0.81	0.48	0.66	0.64	0.82	0.55	0.57	0.66	0.51	0.69		< 0.1	< 0.1
DIETHYL PHTHALATE			< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.1	< 0.1
DIMETHYL PHTHALATE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1
DI-N-BUTYL PHTHALATE	15000	--	0.06	0.09	0.04	0.04	0.06	0.05	0.05	0.05	0.06	0.08	0.08	0.06	0.06		< 0.1	< 0.1
DI-N-OCTYL PHTHALATE							< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.1	< 0.1
Semi Volatile Organic Compounds																		
2,4-DINITROPHENOL			< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	-	-
2,4-DINITROTOLUENE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1
2,6-DINITROTOLUENE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1
2-CHLORONAPHTHALENE			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.1	< 0.1
2-METHYLNAPHTHALENE	--	--	< 0.05	4.32	0.1	0.54	0.41	0.19	1.8	0.22	0.22	0.13	0.45	0.23	0.34	-	0.131	< 0.1
2-NITROANILINE			< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.2	< 0.1	< 0.1
2-NITROPHENOL			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
3-NITROANILINE			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
4-BROMOPHENYL PHENYL ETHER			< 0.1	< 0.1	< 0.1	< 0.1	< 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			< 0.1	< 0.1	< 0.1	< 0.1	< 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			< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.0		

Table 1
Soil Analytical Data

Analyte	Location		BH211	BH212	BH213	BH214	BH301	BH302	BH303	BH304	BH305	BH306	BH307	BH308	BH309	BH310	DEMO1	DEMO2
	Date		01/04/2007	01/04/2007	01/04/2007	01/04/2007	01/04/2007	01/04/2007	01/04/2007	01/04/2007	01/04/2007	01/04/2007	01/04/2007	01/04/2007	01/04/2007	01/04/2007	12/07/2017	12/07/2017
	Sample Depth	SSAC	2.4	3.8	3.3	4.2	0.8	0.5	0.5	0.5	0.6	0.5	0.5	0.5	0.5	0.9		
Total Petroleum Hydrocarbons																		
Aliphatics >C5 - C6	3200	>Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.01	0.025
Aliphatics >C6 - C8	7800	>Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0266	0.116
Aliphatics >C8-C10	2000	>Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0222	0.0989
Aliphatics >C10-C12	9700	>Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0144	0.203
Aliphatics >C12-C16	59000	>Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	4.53	4.31
Aliphatics >C16-C21	1600000	>Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	9	8.77
Aliphatics >C21-C35	1600000	>Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	77.7	68.4
Aliphatics >C35-C44	1600000	>Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	26.8	16.2
>C5-EC7 aro	26000	>Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.01	0.0304
Aromatics >C7-C8	56000	>Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.01	0.0217
Sum aromatics C8-C10	3500	>Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.0233	0.104
Aromatics >C10 - C12	16000	>Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	< 0.01	0.136
Aromatics >C12 - C16	36000	>Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	5.79	7.59
Aromatics >EC16-EC21	28000	>Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	34.1	38.6
>EC21-EC35 Aromatics	28000	>Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	150	189
Aromatics >C35-C44	28000	>Sat	-	-	-	-	-	-	-	-	-	-	-	-	-	-	69.5	67.8
TPH >C10-C12 6SPLIT	--	--	< 0	< 0	< 0	< 0	< 0	< 0	24.9	36.7	< 0	< 0	< 0	< 0	45.2	< 0	-	-
BTEX Compounds																		
BENZENE	27	1507.67	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	0.0304
TOLUENE	56000	3325.53	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	0.00777	0.0217
ETHYLBENZENE	5700	2055.65	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.004	0.00544
m,p-Xylene	--	--	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	0.025
O-XYLENE (1,2-DIMETHYLBENZENE)	6600	--	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.01	< 0.01
DIMETHYL BENZENE	5900	2467.48	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.05	< 0.009	0.0326
BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES	--	--	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.25	< 0.024	0.0901
Metals																		
ANTIMONY	7500		< 1.8	< 1.8	< 1.8	8	< 1.8	4.6	< 1.8	8.9	5.5	< 1.8	4.9	< 1.8	2.3	8.9		
ARSENIC	640		22.2	26.1	35.4	8.35	27	31.1	31.5	51.6	20.8	42.2	43.8	33.1	40.4	42.5	6.67	2.78
BERYLLIUM	12		1.6	1.5	1.8	0.8	1.6	1.8	1.7	1.4	1.6	2	2.4	1.9	1.7	1.9		
CADMIUM	190		< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.44	< 0.02	< 0.02
CHROMIUM, HEXAVALENT	33																	
CHROMIUM, TOTAL	8600		49.3	72.3	80.6	14.9	60.4	66.6	63.4	69	60.9	84.5	85.5	51.7	84.5	110	7.33	< 0.9
COPPER	68000		180	154	255	51	130	117	120	134	95.9	126	469	115	182	210	34.4	37.3
LEAD	2300		186	396	282	82.1	405	413	458	376	637	331	449	406	463	520	61.7	44.3
MERCURY	1100		< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	< 0.22	1.03	0.63
NICKEL	980		58.2	65	59.4	23	57.2	60	61.9	62.5	53.9	53.3	94.1	51.8	68.3	67.2	19.1	14.8
SELENIUM	12000		7.9	11	10	2.9	8.5	8.4	9.5	9.8	6.7	11.5	13.2	9.4	11.2	8.6	< 1	< 1
ZINC	730000		256	320	308	113	366	644	380	623	389	322	643	212	478	498	123	79.9
Asbestos																		
Asbestos Quantification - Gravimetric - %			-	-	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	0.0081
Asbestos Quantification - PCOM Evaluation - %			-	-	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	<0.001
Comments			-	-	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	Soil containing debris typical of asbestos lagging
Analysts Comments			-	-	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	N/C
Chrysotile (White) Asbestos			-	-	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	Detected
Amosite (Brown) Asbestos			-	-	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	Not Detected
Asbestos Quantification - Total - %			-	-	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	0.0081
Crocidolite (Blue) Asbestos			-	-	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	Detected
Fibrous Anthophyllite			-	-	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	Not Detected
Fibrous Tremolite			-	-	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	Not Detected
Fibrous Actinolite			-	-	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	Not Detected
Non-Asbestos Fibre			-	-	-	-	-	-	-	-	-	-	-	-	-	-	Not Detected	Not Detected
Other																		
Total Organic Carbon			-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-

Notes:

All units are in mg/kg unless stated

SSAC- Site Specific Assessment Criteria

Grey values were reported below the Method Reporting Limit

SSAC for total Chromium is based on Chromium Trivalent

'- not analysed

Bold values exceed the human health SSAC**Red** values exceed the controlled waters SSAC

Table 1
Soil Analytical Data

Analyte	Location		DEMO3	DEMO4	DEMO5	DEMO6	DEMO7	DEMO8	DEMO9	DEMO10	DEMO11	LS-A	LS-B	LS-C	LSW-1	LSW-2
	Date	Sample Depth SSAC	12/07/2017	18/08/2017	18/08/2017	18/08/2017	30/08/2017	30/08/2017	30/08/2017	30/08/2017	30/08/2017	14/12/2017	14/12/2017	14/12/2017	22/09/2017	22/09/2017
													0.4	0.4	0.4	0.75
Volatile Organic Compounds			Human Health	Controlled Waters												
1.1.1.2-TETRACHLOROETHANE			< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
1.1.1-TRICHLOROETHANE			< 0.007	< 0.007	< 0.007	< 0.007	-	-	-	-	-	-	-	-	< 0.007	< 0.007
1.1.2.2-TETRACHLOROETHANE			< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
1.1.2-TRICHLOROETHANE			< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
1.1-DICHLOROETHANE			< 0.008	< 0.008	< 0.008	< 0.008	-	-	-	-	-	-	-	-	< 0.008	< 0.008
1.1-DICHLOROETHENE			< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
1.1-Dichloropropene			< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
1.2.3-Trichlorobenzene			< 0.02	< 0.02	< 0.02	< 0.02	-	-	-	-	-	-	-	-	< 0.02	< 0.02
1.2.3-TRICHLOROPROPANE			< 0.016	< 0.016	< 0.016	< 0.016	-	-	-	-	-	-	-	-	< 0.016	< 0.016
1.2.4-TRICHLOROBENZENE			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
1.2.4-TRIMETHYLBENZENE			< 0.009	< 0.009	< 0.009	< 0.009	-	-	-	-	-	-	-	-	< 0.009	< 0.009
1.2-DIBROMO-3-CHLOROPROPANE			< 0.014	< 0.014	< 0.014	< 0.014	-	-	-	-	-	-	-	-	< 0.014	< 0.014
1.2-DIBROMOETHANE (ETHYLENE DIBROMIDE)			< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
1.2-DICHLOROBENZENE	2000	--	< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
1.2-DICHLOROETHANE			< 0.005	< 0.005	< 0.005	< 0.005	-	-	-	-	-	-	-	-	< 0.005	< 0.005
1.2-DICHLOROPROPANE			< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
1.3.5-TRIMETHYLBENZENE (MESITYLENE)			< 0.008	< 0.008	< 0.008	< 0.008	-	-	-	-	-	-	-	-	< 0.008	< 0.008
1.3-DICHLOROBENZENE			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
1.3-Dichloropropane			< 0.007	< 0.007	< 0.007	< 0.007	-	-	-	-	-	-	-	-	< 0.007	< 0.007
1.4-DICHLOROBENZENE			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
2.2-Dichloropropane			< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
2-CHLOROTOLUENE			< 0.009	< 0.009	< 0.009	< 0.009	-	-	-	-	-	-	-	-	< 0.009	< 0.009
4-Chlorotoluene			< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
BENZENE	27	1507.67	< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
BROMOBENZENE			< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
BROMODICHLOROMETHANE			< 0.007	< 0.007	< 0.007	< 0.007	-	-	-	-	-	-	-	-	< 0.007	< 0.007
BROMOFORM			< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
BROMOMETHANE			< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
CARBON DISULFIDE			< 0.007	< 0.007	< 0.007	< 0.007	-	-	-	-	-	-	-	-	< 0.007	< 0.007
CARBON TETRACHLORIDE			< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
CHLOROBENZENE			< 0.005	< 0.005	< 0.005	< 0.005	-	-	-	-	-	-	-	-	< 0.005	< 0.005
Chlorobromomethane			< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
CHLOROETHANE			< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
CHLOROFORM			< 0.008	< 0.008	< 0.008	< 0.008	-	-	-	-	-	-	-	-	< 0.008	< 0.008
CHLOROMETHANE			< 0.007	< 0.007	< 0.007	< 0.007	-	-	-	-	-	-	-	-	< 0.007	< 0.007
CIS-1,2-DICHLOROETHYLENE			< 0.006	< 0.006	< 0.006	< 0.006	-	-	-	-	-	-	-	-	< 0.006	< 0.006
CIS-1,3-DICHLOROPROPENE			< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
DIBROMOCHLOROMETHANE			< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
Dibromomethane (Methylene Bromide)			< 0.009	< 0.009	< 0.009	< 0.009	-	-	-	-	-	-	-	-	< 0.009	< 0.009
DICHLORODIFLUOROMETHANE			< 0.006	< 0.006	< 0.006	< 0.006	-	-	-	-	-	-	-	-	< 0.006	< 0.006
DICHLOROETHYLENES			< 0.16	< 0.16	< 0.16	< 0.16	-	-	-	-	-	-	-	-	< 0.16	< 0.16
ETHYLBENZENE	5700	2055.65	0.00541	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.004	< 0.004
HEXACHLOROBUTADIENE			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
ISOPROPYLBENZENE (CUMENE)			< 0.005	< 0.005	< 0.005	< 0.005	-	-	-	-	-	-	-	-	< 0.005	< 0.005
m,p-Xylene	--	--	0.0173	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
METHYLENE CHLORIDE			< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
NAPHTHALENE	190	>Sat	0.196	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
N-BUTYLBENZENE			< 0.011	< 0.011	< 0.011	< 0.011	-	-	-	-	-	-	-	-	< 0.011	< 0.011
N-PROPYLBENZENE			< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
O-XYLENE (1,2-DIMETHYLBENZENE)	6600	--	< 0.01	0.00321	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
p-Isopropyltoluene			< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
SEC-BUTYLBENZENE			< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
STYRENE			< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
T-BUTYLBENZENE			< 0.014	< 0.014	< 0.014	< 0.014	-	-	-	-	-	-	-	-	< 0.014	< 0.014
TERT-BUTYL METHYL ETHER	7900	12.06	< 0.01	0.00964	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
TETRACHLOROETHYLENE(PCE)			< 0.005	< 0.005	< 0.005	< 0.005	-	-	-	-	-	-	-	-	< 0.005	< 0.005
TOLUENE	56000	3325.53	< 0.007	0.00536	0.00323	0.00444	-	-	-	-	-	-	-	-	< 0.007	< 0.007
TRANS-1,2-DICHLOROETHENE			< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
TRANS-1,3-DICHLOROPROPENE			< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
Trichlorobenzenes (total)			< 0.3	< 0.3	< 0.3	< 0.3	-	-	-	-	-	-	-	-	< 0.3	< 0.3
TRICHLOROETHYLENE (TCE)			< 0.009	< 0.009	< 0.009	< 0.009	-	-	-	-	-	-	-	-	< 0.009	< 0.009
TRICHLOROFLUOROMETHANE			< 0.006	< 0.006	< 0.006	< 0.006	-	-	-	-	-	-	-	-	< 0.006	< 0.006
VINYL CHLORIDE			< 0.006	< 0.006	< 0.006	< 0.006	-	-	-	-	-	-	-	-	< 0.006	< 0.006

Analyte	Location		DEMO3	DEMO4	DEMO5	DEMO6	DEMO7	DEMO8	DEMO9	DEMO10	DEMO11	LS-A	LS-B	LS-C	LSW-1	LSW-2
	Date	Sample Depth SSAC	12/07/2017	18/08/2017	18/08/2017	18/08/2017	30/08/2017	30/08/2017	30/08/2017	30/08/2017	30/08/2017	14/12/2017	14/12/2017	14/12/2017	22/09/2017	22/09/2017
													0.4	0.4	0.4	0.75
Chlorobenzenes																
1,2,3-Trichlorobenzene			< 0.02	< 0.001	< 0.001	< 0.001	-	-	-	-	-	-	-	-	< 0.02	< 0.02
1,2,4-TRICHLOROBENZENE			< 0.1	< 0.001	< 0.001	< 0.001	-	-	-	-	-	-	-	-	< 0.1	< 0.1
1,2-DICHLOROBENZENE	2000	--	< 0.1	0.323	0.256	1.29	-	-	-	-	-	-	-	-	< 0.1	< 0.1
1,3-DICHLOROBENZENE			< 0.1	< 0.001	< 0.001	< 0.001	-	-	-	-	-	-	-	-	< 0.1	< 0.1
1,4-DICHLOROBENZENE	4400	--	< 0.1	< 0.001	< 0.001	0.134	-	-	-	-	-	-	-	-	< 0.1	< 0.1
CHLOROBENZENE			< 0.005	< 0.005	< 0.005	< 0.005	-	-	-	-	-	-	-	-	< 0.005	< 0.005
HEXACHLOROBENZENE			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
Trichlorobenzenes (total)			< 0.3	< 0.3	< 0.3	< 0.3	-	-	-	-	-	-	-	-	< 0.3	< 0.3
Polycyclic Aromatic Hydrocarbons																
ACENAPHTHENE	84000	>Sat	< 0.1	0.775	0.152	0.115	-	-	-	-	-	-	-	-	0.184	< 0.1
ACENAPHTHYLENE	83000	>Sat	< 0.1	0.249	0.205	0.204	-	-	-	-	-	-	-	-	0.153	0.0255
ANTHRACENE	520000	>Sat	0.312	5.35	0.75	0.689	-	-	-	-	-	-	-	-	0.634	0.0634
BENZO(A)ANTHRACENE	170	>Sat	0.913	16.7	3.4	3.85	-	-	-	-	-	-	-	-	2.87	0.394
BENZO(A)PYRENE	35	>Sat	0.796	12.3	3.32	3.73	-	-	-	-	-	-	-	-	2.43	0.316
BENZO(B)FLUORANTHENE	44	>Sat	1.21	18.8	5.21	4.06	-	-	-	-	-	-	-	-	3.42	0.446
BENZO(G,H,I)PERYLENE	3900	>Sat	0.764	6.48	2.29	2.56	-	-	-	-	-	-	-	-	1.56	0.212
BENZO(K)FLUORANTHENE	1200	>Sat	0.646	7.44	2.12	2.06	-	-	-	-	-	-	-	-	1.36	0.195
CHRYSENE	350	>Sat	0.917	13.5	3.81	3.33	-	-	-	-	-	-	-	-	2.38	0.29
DIBENZ(A,H)ANTHRACENE	3.5	>Sat	0.23	2.17	0.585	0.832	-	-	-	-	-	-	-	-	0.472	0.0749
FLUORANTHENE	23000	>Sat	1.46	36.7	6.46	5.66	-	-	-	-	-	-	-	-	4.38	0.514
FLUORENE	63000	>Sat	< 0.1	1.49	0.214	0.203	-	-	-	-	-	-	-	-	0.239	0.0134
INDENOL(1,2,3-C,D)PYRENE	500	>Sat	0.541	5.95	2	2.23	-	-	-	-	-	-	-	-	1.44	0.187
NAPHTHALENE	190	>Sat	0.196	0.428	0.429	0.259	-	-	-	-	-	-	-	-	0.256	0.0785
PHENANTHRENE	22000	>Sat	0.825	18.1	2.88	2.3	-	-	-	-	-	-	-	-	1.72	0.224
PYRENE	54000	>Sat	1.2	26.6	5.24	4.72	-	-	-	-	-	-	-	-	3.89	0.394
PAH 16 EPA (sum)			8.94	173.03	39.7	36.8	-	-	-	-	-	-	-	-	27.39	3.42
**PAH Total (4) Compounds			3.161	-	-	-	-	-	-	-	-	-	-	-	-	-
Phenols																
2,4-DIMETHYLPHENOL			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
2-METHYLPHENOL (O-CRESOL)			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
4-METHYLPHENOL (P-CRESOL)			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
PHENOL			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
Chlorophenols																
2-CHLOROPHENOL			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
2,4-DICHLOROPHENOL			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
2,4,5-TRICHLOROPHENOL			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
2,4,6-TRICHLOROPHENOL			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
PENTACHLOROPHENOL			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
4-CHLORO-3-METHYLPHENOL			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
Phthalates																
BENZYL BUTYL PHTHALATE	940000	--	< 0.1	0.225	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
BIS(2-ETHYLHEXYL) PHTHALATE	85000	669.04	< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
DIETHYL PHTHALATE			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
DIMETHYL PHTHALATE			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
DI-N-BUTYL PHTHALATE	15000	--	< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
DI-N-OCTYL PHTHALATE			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
Semi Volatile Organic Compounds																
2,4-DINITROPHENOL			-	-	-	-	-	-	-	-	-	-	-	-	-	-
2,4-DINITROTOLUENE			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
2,6-DINITROTOLUENE			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
2-CHLORONAPHTHALENE			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
2-METHYLNAPHTHALENE	--	--	< 0.1	0.21	0.172	0.249	-	-	-	-	-	-	-	-	< 0.1	< 0.1
2-NITROANILINE			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
2-NITROPHENOL			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
3-NITROANILINE			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
4-BROMOPHENYL PHENYL ETHER			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
4-CHLOROANILINE			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
4-CHLOROPHENYL PHENYL ETHER			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
4-NITROANILINE			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
4-NITROPHENOL			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
AZO BENZENE			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
BIS(2-CHLOROETHOXY) METHANE			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
BIS(2-CHLOROETHYL) ETHER (2-CHLOROETHYL ETHER)			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
BIS(2-CHLOROISOPROPYL) ETHER			-	-	-	-	-	-	-	-	-	-	-	-	-	-
CARBAZOLE			< 0.1	0.236	0.198	0.219	-	-	-	-	-	-	-	-	< 0.1	< 0.1
DIBENZOFURAN	--	--	< 0.1	0.194	0.183	0.199	-	-	-	-	-	-	-	-	< 0.1	< 0.1
HEXACHLOROBUTADIENE			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
HEXACHLOROCYCLOPENTADIENE			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
HEXACHLOROETHANE			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
ISOPHORONE			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
NITROBENZENE			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
N-NITROSODI-N-PROPYLAMINE			< 0.1	< 0.1	< 0.1	< 0.1	-	-	-	-	-	-	-	-	< 0.1	< 0.1
N-NITROSODIPHENYLAMINE			-	-	-	-	-	-	-	-	-	-	-	-	-	-

Table 1
Soil Analytical Data

Analyte	Location		DEMO3	DEMO4	DEMO5	DEMO6	DEMO7	DEMO8	DEMO9	DEMO10	DEMO11	LS-A	LS-B	LS-C	LSW-1	LSW-2
	Date		12/07/2017	18/08/2017	18/08/2017	18/08/2017	30/08/2017	30/08/2017	30/08/2017	30/08/2017	30/08/2017	14/12/2017	14/12/2017	14/12/2017	22/09/2017	22/09/2017
	Sample Depth	SSAC										0.4	0.4	0.4	0.75	0.75
Total Petroleum Hydrocarbons																
Aliphatics >C5 - C6	3200	>Sat	< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
Aliphatics >C6 - C8	7800	>Sat	0.0206	0.0482	0.0172	0.0189	-	-	-	-	-	-	-	-	0.0111	0.0171
Aliphatics >C8-C10	2000	>Sat	0.0725	0.0225	0.0194	0.0167	-	-	-	-	-	-	-	-	< 0.01	0.0232
Aliphatics >C10-C12	9700	>Sat	0.107	0.0139	0.014	<10	-	-	-	-	-	-	-	-	< 0.01	0.0671
Aliphatics >C12-C16	59000	>Sat	1.33	7.92	2.76	3.87	-	-	-	-	-	-	-	-	25.3	< 0.1
Aliphatics >C16-C21	1600000	>Sat	2.4	7.44	14	11.3	-	-	-	-	-	-	-	-	133	< 0.1
Aliphatics >C21-C35	1600000	>Sat	15.4	56.5	152	129	-	-	-	-	-	-	-	-	2260	< 0.1
Aliphatics >C35-C44	1600000	>Sat	2.31	13.3	29.4	33.8	-	-	-	-	-	-	-	-	2230	< 0.1
>C5-EC7 aro	26000	>Sat	< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
Aromatics >C7-C8	56000	>Sat	< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
Sum aromatics C8-C10	3500	>Sat	0.0779	0.0236	0.0162	0.0178	-	-	-	-	-	-	-	-	< 0.01	15.9
Aromatics >C10 - C12	16000	>Sat	0.0714	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	45.1
Aromatics >C12 - C16	36000	>Sat	3.26	10	3.5	5.33	-	-	-	-	-	-	-	-	6.87	0.275
Aromatics >EC16-EC21	28000	>Sat	11.1	68.5	26.5	50.8	-	-	-	-	-	-	-	-	82	0.809
>EC21-EC35 Aromatics	28000	>Sat	50.4	203	150	265	-	-	-	-	-	-	-	-	823	6.05
Aromatics >C35-C44	28000	>Sat	17.4	64.8	60.6	106	-	-	-	-	-	-	-	-	659	5.51
TPH >C10-C12 6SPLIT	--	--	-	22.1	21.9	41.8	-	-	-	-	-	-	-	-	293	2.47
BTEX Compounds																
BENZENE	27	1507.67	< 0.01	< 0.01	< 0.01	< 0.01	-	-	-	-	-	-	-	-	< 0.01	< 0.01
TOLUENE	56000	3325.53	< 0.007	0.00536	0.00323	0.00444	-	-	-	-	-	-	-	-	0.00555	< 0.002
ETHYLBENZENE	5700	2055.65	0.00541	< 0.003	< 0.003	< 0.003	-	-	-	-	-	-	-	-	< 0.003	< 0.003
m,p-Xylene	--	--	0.0173	< 0.006	< 0.006	< 0.006	-	-	-	-	-	-	-	-	< 0.006	< 0.006
O-XYLENE (1,2-DIMETHYLBENZENE)	6600	--	< 0.01	0.00321	< 0.003	< 0.003	-	-	-	-	-	-	-	-	< 0.003	< 0.003
DIMETHYL BENZENE	5900	2467.48	0.0238				-	-	-	-	-	-	-	-	-	-
BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES	--	--	0.0325				-	-	-	-	-	-	-	-	-	-
Metals																
ANTIMONY	7500						-	-	-	-	-	-	-	-	-	-
ARSENIC	640		6.96	10.4	13.1	22.2	-	-	-	-	-	-	-	-	22.1	29.8
BERYLLIUM	12						-	-	-	-	-	-	-	-	-	-
CADMIUM	190		0.0298	<0.02	<0.02	<0.02	-	-	-	-	-	-	-	-	0.719	0.812
CHROMIUM, HEXAVALENT	33						-	-	-	-	-	<0.6	<0.6	<0.6	-	-
CHROMIUM, TOTAL	8600		12.8	145	8.6	<0.9	-	-	-	-	-	-	-	-	30.9	168
COPPER	68000		23.4	57.3	80.6	57	-	-	-	-	-	-	-	-	95.3	67.7
LEAD	2300		40.9	152	285	176	-	-	-	-	-	-	-	-	268	453
MERCURY	1100		1.61	1.1	1.53	1.42	-	-	-	-	-	-	-	-	0.947	0.831
NICKEL	980		7.35	21.8	25	24.6	-	-	-	-	-	-	-	-	40.8	37.9
SELENIUM	12000		1.32	1.21	<1	<1	-	-	-	-	-	-	-	-	2.05	2.25
ZINC	730000		43	250	310	232	-	-	-	-	-	-	-	-	285	280
Asbestos																
Asbestos Quantification - Gravimetric - %			Not Detected	<0.001	0.0192	0.0027	<0.001	Not Detected	Not Detected	<0.001	Not Detected	-	-	-	Not Detected	Not Detected
Asbestos Quantification - PCOM Evaluation - %			Not Detected	<0.001	<0.001	0.0014	<0.001	Not Detected	Not Detected	<0.001	Not Detected	-	-	-	Not Detected	Not Detected
Comments			Not Detected	Loose fibres in soil	Soil containing ACM debris	Loose fibres in soil	Loose fibres in soil.	Not Detected	Not Detected	Loose fibres in soil.	Not Detected	-	-	-	Not Detected	Not Detected
Analysts Comments			Not Detected	N/C	N/C	N/C	N/C	Not Detected	Not Detected	N/C	Not Detected	-	-	-	Not Detected	Not Detected
Chrysotile (White) Asbestos			Not Detected	Detected	Detected	Not Detected	Detected	Not Detected	Not Detected	Trace	Not Detected	-	-	-	Not Detected	Not Detected
Amosite (Brown) Asbestos			Not Detected	Not Detected	Not Detected	Detected	Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-	-	Not Detected	Not Detected
Asbestos Quantification - Total - %			Not Detected	<0.001	0.0193	0.0041	<0.001	Not Detected	Not Detected	<0.001	Not Detected	-	-	-	Not Detected	Not Detected
Crocidolite (Blue) Asbestos			Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-	-	Not Detected	Not Detected
Fibrous Anthophyllite			Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-	-	Not Detected	Not Detected
Fibrous Tremolite			Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-	-	Not Detected	Not Detected
Fibrous Actinolite			Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-	-	Not Detected	Not Detected
Non-Asbestos Fibre			Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	-	-	-	Not Detected	Not Detected
Other																
Total Organic Carbon			-	-	-	-	-	-	-	-	-	1.18	2.31	6.39	-	-

Notes:

All units are in mg/kg unless stated

SSAC- Site Specific Assessment Criteria

Grey values were reported below the Method Reporting Limit

SSAC for total Chromium is based on Chromium Trivalent

'- not analysed

Bold values exceed the human health SSAC**Red** values exceed the controlled waters SSAC

Analyte	Location		LSW-3	LSW-4	LSW-5	LSW-6	OR-TP115	OR-TP116	OR-TP118	OR-TP121	OR-TP122	OR-TP123
	Date	Sample Depth SSAC	22/09/2017	25/09/2017	25/09/2017	25/09/2017	13/06/2017	13/06/2017	13/06/2017	14/06/2017	14/06/2017	14/06/2017
			0.75	0.75	0.75	0.75	1.25	1.25	1.25			
Human Health			Controlled Waters									
Volatile Organic Compounds												
1,1,1,2-TETRACHLOROETHANE			< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1,1-TRICHLOROETHANE			< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007
1,1,2,2-TETRACHLOROETHANE			< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1,2-TRICHLOROETHANE			< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1-DICHLOROETHANE			< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008
1,1-DICHLOROETHENE			< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,1-Dichloropropene			< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2,3-Trichlorobenzene			< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02	< 0.02
1,2,3-TRICHLOROPROPANE			< 0.016	< 0.016	< 0.016	< 0.016	< 0.016	< 0.016	< 0.016	< 0.016	< 0.016	< 0.016
1,2,4-TRICHLOROBENZENE			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,2,4-TRIMETHYLBENZENE			< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009
1,2-DIBROMO-3-CHLOROPROPANE			< 0.014	< 0.014	< 0.014	< 0.014	< 0.014	< 0.014	< 0.014	< 0.014	< 0.014	< 0.014
1,2-DIBROMOETHANE (ETHYLENE DIBROMIDE)			< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,2-DICHLOROETHANE	2000	--	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	0.31
1,2-DICHLOROETHANE			< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
1,2-DICHLOROPROPANE			< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
1,3,5-TRIMETHYLBENZENE (MESITYLENE)			< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008
1,3-DICHLOROETHENE			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
1,3-Dichloropropane			< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007
1,4-DICHLOROETHANE			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
2,2-Dichloropropane			< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
2-CHLOROTOLUENE			< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	0.311
4-Chlorotoluene			< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
BENZENE	27	1507.67	< 0.01	< 0.01	< 0.01	< 0.01	0.0164	0.0293	0.0165	< 0.01	< 0.01	< 0.01
BROMOBENZENE			< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
BROMODICHLOROMETHANE			< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007
BROMOFORM			< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
BROMOMETHANE			< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
CARBON DISULFIDE			< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007
CARBON TETRACHLORIDE			< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
CHLOROETHANE			< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
Chlorobromomethane			< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
CHLOROETHANE			< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
CHLOROFORM			< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008	< 0.008
CHLOROMETHANE			< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007
CIS-1,2-DICHLOROETHYLENE			< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006
CIS-1,3-DICHLOROPROPENE			< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
DIBROMOCHLOROMETHANE			< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Dibromomethane (Methylene Bromide)			< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009
DICHLORODIFLUOROMETHANE			< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006
DICHLOROETHYLENES			< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16	< 0.16
ETHYLBENZENE	5700	2055.65	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004
HEXACHLOROBUTADIENE			< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1	< 0.1
ISOPROPYLBENZENE (CUMENE)			< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
m,p-Xylene	--	--	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
METHYLENE CHLORIDE			< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
NAPHTHALENE	190	>Sat	< 0.01	< 0.01	< 0.01	< 0.01	0.134	0.133	0.192	0.19	0.211	0.316
N-BUTYLBENZENE			< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011	< 0.011
N-PROPYLBENZENE			< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
O-XYLENE (1,2-DIMETHYLBENZENE)	6600	--	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
p-Isopropyltoluene			< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
SEC-BUTYLBENZENE			< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
STYRENE			< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
T-BUTYLBENZENE			< 0.014	< 0.014	< 0.014	< 0.014	< 0.014	< 0.014	< 0.014	< 0.014	< 0.014	< 0.014
TERT-BUTYL METHYL ETHER	7900	12.06	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
TETRACHLOROETHYLENE(PCE)			< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005	< 0.005
TOLUENE	56000	3325.53	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	0.149
TRANS-1,2-DICHLOROETHENE			< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
TRANS-1,3-DICHLOROPROPENE			< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Trichlorobenzenes (total)			< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3	< 0.3
TRICHLOROETHYLENE (TCE)			< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009
TRICHLOROFLUOROMETHANE			< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006
VINYL CHLORIDE			< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006	< 0.006

[illegible]

Table 1
Soil Analytical Data

Analyte	Location		LSW-3	LSW-4	LSW-5	LSW-6	OR-TP115	OR-TP116	OR-TP118	OR-TP121	OR-TP122	OR-TP123
	Date		22/09/2017	25/09/2017	25/09/2017	25/09/2017	13/06/2017	13/06/2017	13/06/2017	14/06/2017	14/06/2017	14/06/2017
	Sample Depth SSAC		0.75	0.75	0.75	0.75	1.25	1.25	1.25			
Total Petroleum Hydrocarbons												
Aliphatics >C5 - C6	3200	>Sat	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
Aliphatics >C6 - C8	7800	>Sat	0.0181	< 0.01	< 0.01	0.0112	0.0105	< 0.01	< 0.01	< 0.01	0.0123	0.0281
Aliphatics >C8-C10	2000	>Sat	0.0147	< 0.01	< 0.01	< 0.01	0.0117	< 0.01	< 0.01	< 0.01	< 0.01	0.181
Aliphatics >C10-C12	9700	>Sat	0.0124	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.0507
Aliphatics >C12-C16	59000	>Sat	< 0.1	1.08	0.547	1.54	2.47	< 0.1	< 0.1	1.44	2.07	5.71
Aliphatics >C16-C21	1600000	>Sat	< 0.1	3.4	2.76	12	9.21	8.32	3.88	3.68	5.04	7.89
Aliphatics >C21-C35	1600000	>Sat	< 0.1	26	50.4	101	146	115	53.1	36.1	40.1	48.5
Aliphatics >C35-C44	1600000	>Sat	< 0.1	9.74	37.3	60.8	29.7	19.1	7.02	10.9	16.5	10.3
>C5-EC7 aro	26000	>Sat	< 0.01	< 0.01	< 0.01	< 0.01	0.0164	0.0293	0.0165	< 0.01	< 0.01	< 0.01
Aromatics >C7-C8	56000	>Sat	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.0388
Sum aromatics C8-C10	3500	>Sat	12.4	< 0.01	< 0.01	< 0.01	0.0105	< 0.01	< 0.01	< 0.01	< 0.01	0.124
Aromatics >C10 - C12	16000	>Sat	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	0.0334
Aromatics >C12 - C16	36000	>Sat	0.399	0.293	1.24	1.65	2.37	1.07	1.15	1.05	3.19	6.64
Aromatics >EC16-EC21	28000	>Sat	1.96	2.88	7.81	11.1	8.74	5.39	5.1	3.54	28.2	26.3
>EC21-EC35 Aromatics	28000	>Sat	12.6	29.3	70.3	77.6	120	92.8	43.1	22.5	101	114
Aromatics >C35-C44	28000	>Sat	7.73	17.3	34	42.9	59	22.9	18.3	5.74	33.4	48.4
TPH >C10-C12 6SPLIT	--	--	3.26	8.85	15.3	21.7	-	-	-	-	-	-
BTEX Compounds												
BENZENE	27	1507.67	< 0.01	< 0.01	< 0.01	< 0.01	0.0164	0.0293	0.0165	< 0.01	< 0.01	< 0.01
TOLUENE	56000	3325.53	< 0.002	< 0.002	< 0.002	< 0.002	< 0.007	< 0.007	< 0.007	< 0.007	< 0.007	0.149
ETHYLBENZENE	5700	2055.65	< 0.003	< 0.003	< 0.003	< 0.003	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004	< 0.004
m,p-Xylene	--	--	< 0.006	< 0.006	< 0.006	< 0.006	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
O-XYLENE (1,2-DIMETHYLBENZENE)	6600	--	< 0.003	< 0.003	< 0.003	< 0.003	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01	< 0.01
DIMETHYL BENZENE	5900	2467.48	-	-	-	-	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009	< 0.009
BENZENE, TOLUENE, ETHYLBENZENE, AND XYLENES	--	--	-	-	-	-	< 0.024	0.0315	< 0.024	< 0.024	< 0.024	0.0388
Metals												
ANTIMONY	7500		-	-	-	-	-	-	-	-	-	-
ARSENIC	640		31.5	29.5	31.2	35.5	17.8	8.84	37.4	34.2	52.8	18.4
BERYLLIUM	12		-	-	-	-	-	-	-	-	-	-
CADMIUM	190		1.83	0.568	1.8	0.318	0.31	0.042	0.0475	< 0.02	< 0.02	0.117
CHROMIUM, HEXAVALENT	33		-	-	-	-	-	-	-	-	-	-
CHROMIUM, TOTAL	8600		39.4	32.9	122	27.9	14.4	13.8	16.8	43.6	150	8.48
COPPER	68000		170	134	85.2	99	366	36.4	72.8	152	115	82.4
LEAD	2300		201	264	200	308	575	93.6	225	604	146	261
MERCURY	1100		<1.4	1.32	1.45	1.26	1.97	1.45	0.889	1.04	0.221	1.12
NICKEL	980		51.9	33.7	68	35.3	35.1	8.62	29.9	43.5	44.9	21.5
SELENIUM	12000		10.2	<1	<10	1.58	1.18	< 1	< 1	< 1	5.42	< 1
ZINC	730000		72.3	292	130	332	458	86.8	171	346	200	293
Asbestos												
Asbestos Quantification - Gravimetric - %			Not Detected	<0.001	Not Detected	<0.001	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
Asbestos Quantification - PCOM Evaluation - %			Not Detected	<0.001	Not Detected	<0.001	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
Comments			Not Detected	Soil containing ACM debris.	Not Detected	Loose fibres in soil.	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
Analysts Comments			Not Detected	N/C	Not Detected	N/C	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
Chrysotile (White) Asbestos			Not Detected	Detected	Not Detected	Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
Amosite (Brown) Asbestos			Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
Asbestos Quantification - Total - %			Not Detected	<0.001	Not Detected	<0.001	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
Crocidolite (Blue) Asbestos			Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
Fibrous Anthophyllite			Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
Fibrous Tremolite			Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
Fibrous Actinolite			Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
Non-Asbestos Fibre			Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected	Not Detected
Other												
Total Organic Carbon			-	-	-	-	-	-	-	-	-	-

Notes:

All units are in mg/kg unless stated

SSAC- Site Specific Assessment Criteria

Grey values were reported below the Method Reporting Limit

SSAC for total Chromium is based on Chromium Trivalent

'- not analysed

Bold values exceed the human health SSAC**Red** values exceed the controlled waters SSAC