



YEP Property Ltd

Yalding Enterprise Park

**Contamination Risk Assessment
and Strategy**

Phase A and B

March 2022

Contents

- 1.0 Introduction and Background
 - 1.1 Development Plans
- 2.0 Site Details
 - 2.1 Site Location and Description
 - 2.2 Geology and Hydrogeology
 - 2.3 Radon
 - 2.4 Site History and Summary of Remediation Works
 - 2.4.1 Phase Specific Remediation Detail
- 3.0 Phase A and B Current Site Conditions
 - 3.1 Current Site Conditions Investigations, Phase A and B
 - 3.1.1 Land Quality Statement Investigation, July 2019
 - 3.1.2 Additional Conveyance Route Investigation, February 2022
 - 3.1.3 Remaining Above Ground Structures
 - 3.1.4 Existing Below Ground Structures
 - 3.2 Conceptual Model
 - 3.2.1 Sources
 - 3.2.2 Pathways and Receptors
- 4.0 Remediation Strategy
 - 4.1 Unforeseen Contamination
 - 4.2 Validation of Soils for Re-Use
 - 4.3 Off Site Disposal
 - 4.4 Monitoring
 - 4.5 Verification Reporting

Appendices

- Appendix 1 Planning Approval 19/504910/OUT
- Appendix 2 Proposed Site Phasing Plan
- Appendix 3 EDSR Drawing 003
- Appendix 4 EDSR Topographical Survey
- Appendix 5 MBC and KCC Letters of Approval
- Appendix 6 Summary Validation Information for Phase A Conveyance Route
- Appendix 7 LQS SI Borehole Location Plan
- Appendix 8 Drawing number 2210-32 Rev A 'Flood Water Course Setting Out Coordinates'
- Appendix 9 Results of Analysis from Additional Trial Pits
- Appendix 10 EDSR 'Existing Structures' Drawing
- Appendix 11 Results of Analysis: 2021 Annual PRB Gate Monitoring Round

1.0 Introduction and Background

Planning approval has been granted for the YEP site to be developed to a new business park of B1(c), B2 and B8 accommodation with access, parking and infrastructure works, planning approval reference 19/504910/OUT (see Appendix 1). As part of the development, site levels are to be raised by a minimum of 400mm across the entire site, apart from in the conveyance route.

Condition 14 of the planning approval requires a strategy to deal with the potential risks associated with any contamination on the site, including a preliminary risk assessment, site investigation scheme, risk assessment and remediation strategy. The site is to be developed out in phases and this document aims to discharge Condition 14 for Phases A and B (see Appendix 2 for Proposed Site Phasing Plan). Phase A includes the conveyance route running roughly south north.

The YEP site is a former pesticides manufacturing facility that has undergone extensive and meticulous remediation using effective technology and is now ready to be redeveloped. Remediation measures were undertaken to prepare the site to be suitable for a residential end use. The site is in fact to be developed to a commercial end use, therefore remediation measures undertaken were to a higher standard than that required for the now proposed use. In addition to this, treatment gates installed along a passive barrier have continued to successfully treat groundwater exiting the site to pre-agreed treatment criteria.

Remediation was completed 14 years ago and as such soil and groundwater conditions may have altered so the purpose of this risk assessment and strategy is to identify potential sources, conduct investigatory works where required and assess the risks in the context of the proposed construction works and final development.

2.0 Site Details

2.1 Site Location and Description

The YEP Site is part of the former Syngenta manufacturing facility, formerly referred to Area 2, as shown on EDSR Drawing 003 within Appendix 3. The former Area 1, located to the north, has been developed for private housing, Area 3 remains as open land and former agricultural land remains as predominantly orchards or open agricultural land. The Site is centred on 51° 13'25N and 0° 24'50E, located approximately 8km to the south west of Maidstone in Kent and approximately 850m to the west of the village of Yalding and. The Site can be accessed from Hampstead lane, joining the B2015 and B2162.

The Site covers an area of approximately 17 hectares and is bound to the north by Hampstead lane, to the east by a canal, by the railway line to the west and by the 'agricultural land' to the south. Historically the northern half of this area was used as the former manufacturing area and the southern half was partially used for storage and partially undeveloped. The Site is generally vacant, although the 'Technical Building' and former sub-station remain near the Site entrance.

The Site is relatively flat with a slight rise to the north and lies at a level of approximately between 10.5 - 12.0 metres above Ordnance Datum (AOD). To the east and south, the River Medway flows through the narrow valley towards Maidstone. The EDSR final topographic survey of the Site shown in Appendix 4.

2.2 Geology and Hydrogeology

The surface varies across the site, depending on excavation depths during remediation and the type of backfill used. The surface of the site has been backfilled with treated material, validated excavated material or crushed concrete produced from the demolition works. All materials used are indicated to have been compliant with the remediation strategy and placed in accordance with the specification. The depth of remediated surface across the development site varies between 1m and up to 4m within the former effluent lagoons where unforeseen contamination was encountered, and where underground structures were removed. Backfilled material was compacted and geotechnical compliance testing was undertaken on backfilled material in the northern half and south west quadrant. Testing included *in situ* density checks and relative compaction using a nuclear density meter (NDM). All compaction test results met the Highways Agency target of 95%.

The underlying geology comprises Pleistocene and recent drift deposits (Alluvium, Brickearth and 1st Terrace River Gravels) overlying the solid geology. The alluvium is reportedly mainly fine silty sand with occasional gravel and ranges from 0.5 m up to 1.7 m in thickness. The Brickearth reportedly comprises brown, fine, silty clays and ranges from 0.5 m up to 1.5 m in thickness. The River Terrace Gravels has been identified across the majority of the site and is described as being sands with fine to coarse gravels, together with lenses of finer sandy or clayey beds. These beds range in thickness across the Site between 0.25 m and 4.3 m.

The solid geology comprises the Weald Clay Formation (comprises mudstones with subordinate siltstones) overlying the Hastings Group, (comprises sandstones, siltstones and shales).

There are no reported Source Protection Zones within the vicinity of the Site.

The River Terrace Gravels are the main water-bearing stratum (Secondary Undifferentiated). The overlying Alluvium and Brickearth are unsaturated across the Site, with layers comprising clays and silts which have a low permeability and inhibits the vertical migration of precipitation into the gravels.

During historical remedial works, the groundwater across the site was found to lie between 1m and 4m below ground level (7.5m-11.5m AOD), within the River Terrace Gravels. The flow of water in the gravels is reported to be in a north and north easterly direction and largely controlled by the water levels in the River Medway which recharges the gravel aquifer. Groundwater levels are also likely to be influenced by the infiltration of precipitation across the site. Vertical discharge is not considered significant due to the low permeability of the underlying Weald Clay Formation.

2.3 Radon

The site is located within the lowest band of radon potential where less than 1% of homes above the Action Level.

2.4 Site History and Summary of Remediation Works

An overview of the Site's Historical Land use, is presented in Table 1 below. Information for this was drawn from a desk based study undertaken by Halcrow in May 2007.

Table 1: Site History

1872	The majority of the area is shown as open farmland. The railway to the west of the Site is shown, as is the canal to the east. The Hampstead Papermill is shown in the north of the Site. To the west of this is a public house called 'Railway Inn' and beyond this, just offsite are railway sidings.
1885	Little change from previous map edition
1897	Little change from previous edition.
1898	Little change from previous map edition
1908	The railway sidings to the north of the Site have expanded and now include a large goods shed.
1909	Little change from previous map edition
1938	Hampstead Mill has now become disused. A large factory and associated buildings labelled as 'Works' are now located in the northern portion of the Site and on adjacent land to the north of Hampstead lane. This development is believed to be the first buildings of the chemical works.
1961	The number of factory buildings of the 'Works' have increased and a pond can be seen southeast of these buildings, west of the canal. The Hampstead paper mill is no longer labelled as such. The area south of the Works buildings is shown as wooded. A pavilion and tennis courts are now shown in former Area 3.
1976	The works of the development area are now marked as an agricultural chemical works and the pond in the west of the Site has increased in size and is now labelled as a lagoon. Several tanks of unknown/unmarked use can be seen across the Site. A bowling

	green is now shown with the pavilion and tennis courts in former Area 3. The caravan park south of former Area 3 is now labelled.
1989	The chemical works has expanded south, and a very large building is shown in the south west corner of the Site. Several ponded areas are also present across the chemical works
1992/1993	Largely unchanged. The three large ponds across the development area have been marked as lagoons, orchards are now labelled in the south of the Site, to the east of the large building. The Hempstead Marina is now labelled beyond Hempstead lane to the north of the Site. The bowling green is no longer shown in former Area 3.

Following the closure of the plan in 2003, onsite facilities were decontaminated, decommissioned and partially demolished between 2003 and 2004. This work also included various initial intrusive investigations into the ground conditions and the extent of contamination, if any, that existed. These initial investigations were undertaken by Environment Resource Management (ERM) under direct employment of Syngenta. The initial investigations concluded that contamination of impacted soils and groundwater existed and further investigations were required to ascertain the extent and level of contamination.

To enable this work to be undertaken, the remaining manufacturing and storage facilities on site were demolished. Following the subsequent demolition of the facility, EDS limited was commissioned in 2005 as principle contractor, responsible for investigating, designing and implementing the remediation process to remove and treat impacted soils and groundwater. Capita Symonds were engaged to prepare a Detailed Human Health Risk Assessment and derived Site-Specific Assessment Criteria (SSAC) following a tiered approach assessing soil analytical results obtained from previous ground investigations.

Hydrogeological modelling undertaken by Capita Symonds identified potential controlled water receptors to be the River Medway and the Marina. Sources of contamination were found to be Made Ground, sludges associated with former lagoons, and the storm water drainage system; and the groundwater beneath the Site which was found to be locally impacted with chemicals attributed to historical spills and leakages. Site-specific remedial targets were derived for soils and groundwater using the Environment Agency P20 Remedial Targets Methodology.

EDSR was appointed by Syngenta in July 2006 to remediate the Site. A set of documents was produced to comprise the remediation strategy; an overarching remediation strategy discussing the overall aims of the remedial works and area specific remediation strategies detailing the proposed remedial works for each specific area. Soil validation targets for evaluating the potential use of treated soils as backfill were derived using CONSIM Fate and Transport Modelling.

The strategy was approved by the Environment Agency and Maidstone Borough Council, Environmental Health department, and planning consent was granted prior to the commencement of work on Site. All remediation work was carried out by EDSR and independently verified by ERM on behalf of the previous site owners, Syngenta. The works were controlled through conditions from Kent County Council and Maidstone Borough Council. On completion, EDSR were issued letters from Kent County Council and Maidstone Borough Council confirming the remediation had been carried out in accordance with the agreed remediation strategy and that all planning conditions had been discharged. These letters are included in Appendix 5.

Prior to groundwater remedial works, a period of pump and treat was undertaken in selected boreholes to deal with the presence of dense non-aqueous phase liquids (DNAPLs) in the River Terrace Gravels. The pump and treat system comprised a borehole and an abstraction trench that pumped a combined flow in the order of 190m³/day. The abstracted water passed through the water treatment plant for treatment before being utilised onsite.

During the remediation works 2,206m³ and 5,270m³ of water was abstracted from the borehole and trench respectively. Abstraction for both points was maintained until December 2007 when the systems were turned off and decommissioned. Residual contamination was treated through the PRB installed along the northern and eastern boundary of the Site. Construction of the PRB was undertaken between September and November 2006.

Quarterly monitoring of the PRB was undertaken by EDSR for four years following the site remediation. Subsequently to this, periodic monitoring of the water across the PRB gates was continued with gate monitoring continuing to show a reduction in contaminants entering the PRB gates and no exceedances of discharge consents in the outlet waters. Additionally, annual monitoring of the gates has continued for the past three years by YEP, with results submitted to the Environment Agency. Annual monitoring results for 2019, 2020 and 2021 have also shown inlet water concentrations greater than outlet water concentrations, and no exceedances of discharge consents in the outlet waters.

2.4.1 Phase Specific Remediation Detail

Excavations of impacted materials were carried out in accordance with the remediation strategy and generally extended to the top 1m across the site. Deeper excavations were carried out in specific areas such as the former effluent lagoons, and where underground storage tanks and structures were uncovered, or where further excavation was required to meet site specific remediation criteria. Excavations were validated by a representative from both EDSR and ERM, prior to the verification samples being taken.

Excavations across the site were backfilled with treated material, validated excavated material or crushed concrete produced from the demolition works. All materials used are indicated to have been compliant with the remediation strategy and placed in accordance with the specification.

The entire site was validated on a grid by grid square basis, with information on laboratory analysis results and strata encountered at the excavation base recorded. Final excavation depths were surveyed in and final excavation depth drawing produced. Overlaying the validation grid with the Construction Phase drawing reveals the following grids within Phases A and B, shown in Table 2 below:

Table 2: Validation grids within Phase A and B

Grid Square	Phase A	Phase B
J	P38, P39, P40	
K	P36, P37, 38, 39	
L	P20, P33, P34, 35, P36, P37, P38	
M	19, 20, P21, P29, P30, P31, 32, 33, P34, P35	
N	19, 20, 21, P22, P27, P28, 29, 30, P31, P32	

O	17, 18, 19, 20, 21, 22, P23, P24, P25, 26, 27	
P	16, 17, 18, 19, 21, 22, 23, 24, P25, P26, P27	
Q	16, 17, 18, 19, P20, P21, P22, P23, P24	P21
R	16, P17, P18, P19, P22	P18, P19, 20, 21, P22
S	P22, P23	P16, 17, 18, 19, 20, 21, P22
T	P22, P23	17, 18, 19, 20, 21, P22
U	P23, P24	18, 19, 20, 21, 22, P23
V	P24, P25	18, 19, 20, 21, 22, 23, P24
W	P25, P26, P27	19, 20, 21, 22, 23, 24, P25, P26
X	P27, P28	21, 22, 23, 24, 25, P26, P27
Y	P28, 29, 30	22, 23, 24, 25, 26, 27, P28
Z		24, 25, 26, 27, 28, 29
AA		26, 27, 28, 29

Note: P= partial square

Given that site levels are to be raised across the whole site, apart from in the conveyance route area, remediated and validated capping soils will be remaining in-situ. For the only area of cut (the conveyance zone), a summary spreadsheet of grid square validation information has been prepared and is shown in Appendix 6. This demonstrates that remediation excavations within the conveyance area generally proceeded to greater than 1m below finished levels to the base of the unsaturated zone or natural strata, or where criteria were exceeded, into the saturated zone. The northern most tip of the conveyance route, at the northern tip of the site, remediation excavations were to 1m below finished levels and base validation samples met residential site specific criteria.

3.0 Phase A and B Current Site Conditions

3.1 Current Site Conditions Investigations, Phase A and B

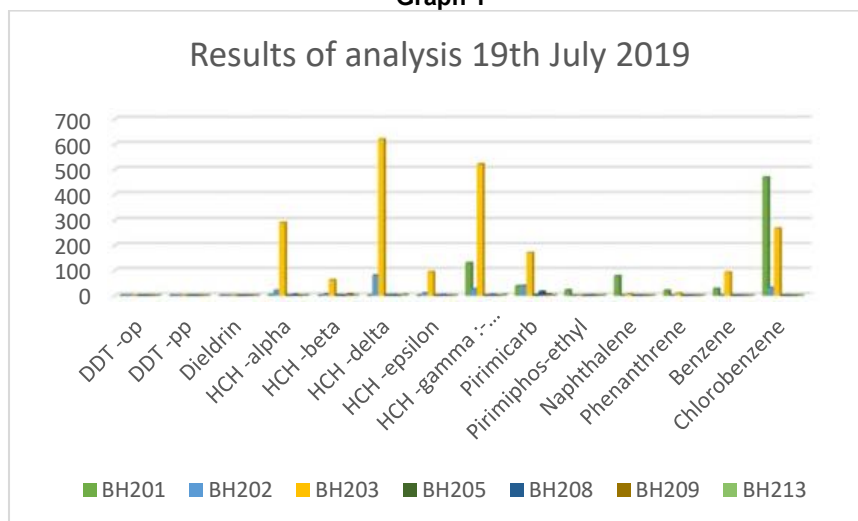
3.1.1 Land Quality Statement Investigation, July 2019

Investigatory and data gathering works for the current site condition were agreed with the EA and undertaken as part of the Land Quality Statement background information gathering exercise in July 2019. Thirteen boreholes were installed by Civils Contracting Ltd, boreholes 201, 202, 203, 204, 205, 206, 207, 208, 212 and 213. A borehole location plan is shown in Appendix 7. Boreholes 201, 204 and 205 are located in Phase A. Boreholes 202 and 208 are located in Phase B. The general sequence of strata encountered during borehole installation works was sands and gravels to between 3m and 4m overlying blue clay.

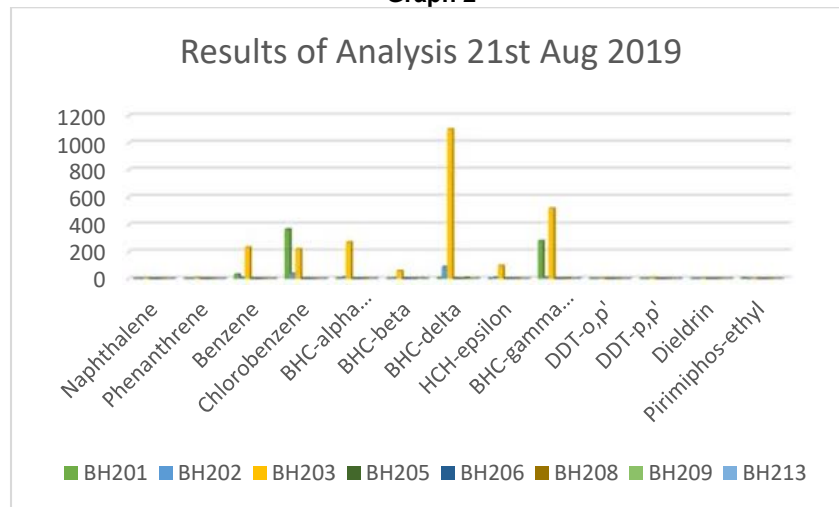
Soil samples were generally taken from a depth of 0.9m below ground level. Results of soil analysis were compared with the site remediation human health remedial targets derived by Capita Symonds for a commercial use, and with the LQM/CIEH S4ULs for Human Health Risk Assessment. All soil results of analysis were below both human health remediation targets and LQM/CIEH S4ULs for Human Health Risk Assessment.

Two rounds of groundwater sampling and analysis were also undertaken, in July and August 2019. Boreholes 207, 210, 211 and 212 yielded insufficient water for sampling at the time of sampling. Results of analysis from these two rounds revealed elevated concentrations above detection limits of contaminants within the former effluent lagoon and main works areas (boreholes 201, 202 and 203), as shown in graphs 1 and 2 below.

Graph 1



Graph 2



Four rounds of gas monitoring were undertaken between the 21/08/19 and 09/09/19 from all monitoring boreholes BH201, BH202, BH203, BH205, BH206, BH207, BH208, BH209, BH212 and BH213 using Gas Analyser GFM- 436. Monitoring was undertaken during falling pressure on three of the four monitoring rounds, when gas concentrations and flows might be expected to be higher than in rising atmospheric conditions.

Typically methane concentrations were not measured at the monitored borehole with the exception of a very low methane concentration of 0.1% measured at BH212 on two occasions, round 2 and round 3. These methane concentrations are not of significant concern being less than the trigger concentrations of 1% methane as outlined in CIRIA guidance.

Carbon dioxide concentrations were measured at 7 No. boreholes out of the 10 boreholes monitored. The maximum concentrations ranged from 2.6% at BH209 to 0.4%. These concentrations are not considered to be significant given that they are less than the 5% carbon dioxide concentration outlined in CIRIA guidance as a trigger concentration for increasing the characteristic gas situation to one that would require gas protection measures.

Gas flow data was not collected during the monitoring and consequently it is not possible to calculate gas screening values in accordance with CIRIA C665 guidance and relevant British Standard BS8485.

Consideration has also been given to whether there are gas generation sources present on site. The site investigation has typically identified clay soils with some sands and gravels underlain by blue clay. The monitored carbon dioxide concentrations are considered to be representative of natural clay soils. Such soils can produce carbon dioxide concentrations; however they are not normally accompanied by high gas flow rates that would result in the gas regime being characterised as characteristic situation 2 and above. Consequently gas protection measures are not considered necessary.

3.1.2 Additional Conveyance Route Investigation, February 2022

In order to assess the current condition of soils in-situ at the base of the proposed conveyance route within Phase A, ten further trial pits were excavated along the length of the conveyance route on 25th February 2022 by Civils Contracting Ltd. Drawing number 2210-32 Rev A within Appendix 8 gives locations of trial pits at A, B, C, D, E, F, G, H, L and N. Trial pits were excavated to the proposed excavation level of the drainage channel at the proposed location, with sampling undertaken from the base of the trial pit. Depths of samples are shown below in Table 3.

Table 3: Depth of trial pit along conveyance route

Location	Ground level AOD	Excavation level AOD	Depth of pit/ m
A	11.5	10.45	1.05
B	11.86	10.39	1.47
C	11.77	11.35	0.42
D	11.8	10.21	1.59
E	11.7	10.12	1.58
F	11.57	10.03	1.54
G	11.44	9.94	1.5
H	11.385	9.86	1.525
L	11	9.74	1.26
N	9.9	9.6	0.3

Results of analysis are shown in Appendix 9. Results of analysis are all below available LQM/CIEH S4ULs for a commercial use.

3.1.3 Remaining Above Ground Structures

The sub-station near the site entrance within Phase A was originally an annex to a larger building and houses high voltage grid connections feeding the site. Services to the substation have been isolated although remain available and the sub-station will be remaining on site within Phase A.

3.1.4 Remaining Below Ground Structures

The EDSR 'Area 2 Existing Structures' drawing (shown in Appendix 10) shows underground pile structures to remain in both Phase A and B. The cut in Phase A for the conveyance route will not be sufficiently deep for these to be encountered. Remaining piles in Phase B will not be encountered as levels are only to be raised in this area.

3.2 Conceptual Model

3.2.1 Sources

Phase A

Potential sources of soil contamination within Phase A have not been identified. A summary of all soil results of analysis relevant to Phase A, taken from both base of excavation validation samples as part of the remediation works at the site (relevant to the conveyance route), and from more recent current condition samples, is shown within Appendix 11. To assess risks to human health, all results have been screened against available LQM/CIEH S4ULs for a commercial use. None of the results of analysis exceed the LQM/CIEH S4ULs commercial

use criteria. All soil results of analysis for Phase A have also been compared with the Controlled Water Remedial Targets derived for the site remediation works, demonstrating all results to below these criteria also.

Borehole monitoring undertaken in July and August 2019 demonstrates that contaminants residually exist within the groundwater in the vicinity of BH201.

Phase B

Potential sources of soil contamination within Phase B have not been identified. Soil samples taken from BH202 and BH208 within Phase B are all below available LQM/CIEH S4ULs commercial use criteria.

Borehole monitoring undertaken in July and August 2019 demonstrates that contaminants residually exist within the groundwater in the vicinity of BH202. Residual contamination was not identified in BH208.

3.2.2 Pathways- Receptors

Residual groundwater contamination in BH201 and BH202 is a potential source of ongoing contamination. However, the pathway from residual contaminated onsite groundwater to offsite controlled waters has been broken during remediation works by construction of the treatment gates. Any potentially remaining contamination within the groundwater at the site was acknowledged during remediation design, with the PRB gates installed for the specific task of treating groundwater exiting the site.

4.0 Remediation Strategy

No existing pollutant linkages have been identified in Phases A and B of the YEP site, therefore no known remediation is required.

4.1 Unforeseen Contamination

In the event that previously unidentified contamination is uncovered during the subsequent site re development, the following procedure will be implemented in accordance with EA guidance on Land Contamination Risk Management (LCRM):

- The contractor will make the area secure and seek the advice of an appropriately qualified environmental engineer and inform the client or their representative;
- The environmental engineer will inspect the area, develop and implement an investigation to establish the nature and extent of the impacted area, this may include intrusive site investigation and laboratory analysis in accordance with LCRM or other relevant guidance;
- Upon establishing the potential associated risks to the identified receptors and if necessary, an appropriate remedial strategy will be developed and implemented;
- Remedial works will be agreed with the appropriate regulator.

The impacted area will be validated and a report will be prepared in accordance with LCRM.

4.2 Validation of Soils for Re-Use

Any excavated soils from the site (such as from the conveyance route) is to be stockpiled and sampled at a frequency of one sample per 500m³ of material. Results of analysis will be compared with the LQM S4ULs for a commercial use. Stockpiles will be quarantined until it has been demonstrated that results of analysis are below the re-use criteria.

4.3 Off Site Disposal

The disposal of all waste arisings shall be in accordance with the EA's Technical Guidance Note WM3 'Guidance on the Classification and Assessment of Waste' (1st Edition, May 2015).

4.4 Monitoring

Prior to works commencing in Phase A and B, one round of background groundwater monitoring will be undertaken from all available boreholes in Phase A and B (boreholes BH201, BH202, BH204, BH205 and BH208). Background samples will also be retrieved from the PRB gates prior to works commencing in Phase A and B. All samples will be analysed for the criteria required in previous gate monitoring rounds. A copy of the results of analysis from the 2021 annual gate monitoring round is shown in Appendix 11.

Phase A

Monthly monitoring of boreholes BH201, BH204 and BH205, and the PRB gates will be maintained throughout conveyance route excavation works, as long as boreholes are available. It is acknowledged that boreholes will be lost as works progress, however all reasonable efforts should be made to maintain the boreholes for as long as possible. Borehole monitoring is intended as an 'early warning' of potential contaminant remobilisation during excavation works and the increased frequency of gate monitoring is designed to verify that the treatment gates are still working effectively throughout excavation works. Should non-

conformances arise, reference will be made to the 'PRB Gate and Groundwater Monitoring and Maintenance Plan', Section 3.2.1.

During remaining Phase A works, quarterly monitoring of Phase A boreholes (where available) and the PRB gates is to be undertaken. Reference to the 'PRB Gate and Groundwater Monitoring and Maintenance Plan', Section 3.2.1 is to be made should there be any non-conformances.

Phase B

Quarterly monitoring of Phase B boreholes (BH202 and BH208, where available) and the PRB gates is to be undertaken during Phase B works. Reference to the 'PRB Gate and Groundwater Monitoring and Maintenance Plan', Section 3.2.1 is to be made should there be any non-conformances.

4.5 Verification Reporting

Upon satisfactory completion of Phase A and Phase B groundworks, a verification report will be prepared and will comprise the following:

- A background to the construction works and details of the verification process;
- Chemical and laboratory analysis certificates;
- Waste transfer documentation;
- Supporting information including drawings, photographs, material tracking information and any progress reports and consultations with the regulator.

Appendix 1

Planning Approval 19/504910/OUT



Mr Nick Young
C/O DHA Planning
FAO: Mr Matthew Woodhead
Eclipse House
Eclipse Park
Sittingbourne Road
Maidstone
Kent
ME14 3EN

8 October 2021

PLANNING DECISION NOTICE

APPLICANT:	Mr Nick Young
DEVELOPMENT TYPE:	Large Maj Gen.Ind./Storage/Warehousing
APPLICATION REFERENCE:	19/504910/OUT
PROPOSAL:	Outline application for the redevelopment of the former syngenta works site to provide a new business park of up to 46,447 sqm of B1(c), B2 and B8 accommodation with associated access, parking and infrastructure works. (Access only being sought).
ADDRESS:	Former Syngenta Works, Hampstead Lane, Yalding, Kent,

The Council hereby **GRANTS** permission/consent for the proposal referred to above subject to the following Condition(s):

- (1) No phase of the development hereby approved shall commence until approval of the following reserved matters has been obtained in writing from the local planning authority for that phase:
 - a) Scale
 - b) Layout
 - c) Appearance
 - d) Landscaping

MKPS – Working in Partnership with: Maidstone Borough Council

Please Note: All planning related correspondence for MBC should be sent to:

Mid Kent Planning Support, Maidstone House, King Street, Maidstone ME15 6JQ

Email: planningsupport@midkent.gov.uk

Access planning services online at: www.maidstone.gov.uk; or submit an application via www.planningportal.co.uk

Application for approval of the reserved matters shall be made to the local planning authority before the expiration of five years from the date of this permission.

The development hereby permitted shall be begun either before the expiration of five years from the date of this permission, or before the expiration of two years from the date of approval of the last of the reserved matters to be approved, whichever is the later.

Reason: No such details have been submitted and in accordance with the provisions of Section 92 of the Town and Country Planning Act 1990.

- (2) The access points hereby permitted shall be carried out in accordance with drawing no. C11101 RevG including installation of the height barriers which shall be retained thereafter, and the visibility splays kept free of obstruction above a height of 1 metre. The eastern access shall only be used as an entrance to the site and the western access shall only be used as an exit except in times of emergency.

Reason: In the interests of highway safety.

- (3) The layout details submitted pursuant to condition 1 shall show no built form upon the areas defined as 'proposed new and enhancement planting zones', 'existing tree buffers', 'ecology zone', and 'conveyance route' as shown on the approved Constraints Plan (Drawing No.4092/SK04b).

Reason: To ensure the development accords with the site allocation policy, protects and enhances biodiversity, and provides a high-quality design.

- (4) The details of appearance submitted pursuant to condition 1 shall include:
- a) Non-reflective materials and sensitive colouring.
 - b) Active frontages on prominent buildings.
 - c) The use of materials and articulation to break up the massing of buildings.
 - d) The use of vernacular materials including ragstone on either buildings or in boundary treatments.
 - e) High quality surfacing materials.

Reason: To ensure a high-quality appearance to the development.

- (5) The layout and appearance details submitted pursuant to condition 1 shall be designed to minimise the impact of any noise to nearby residential properties and shall demonstrate how they achieve that.

Reason: In the interest of residential amenity.

- (6) The landscape details submitted pursuant to condition 1 shall provide the following:
- a) New native tree and shrub planting within the 'proposed new and enhancement planting zones', and 'existing tree buffers' around the boundaries of the site as shown on the approved Constraints Plan (Drawing No.4092/SK04b).
 - b) Native tree and shrub planting within the development areas to soften buildings and parking areas.

Reason: To ensure the development accords with the site allocation policy and to provide an appropriate setting.

- (7) The details submitted pursuant to condition 1 shall be carried out in accordance with the approved Flood Risk Assessment (FRA) by JBA Consulting, (Final Report dated September 2019 including the Model report dated August 2019) and include the following mitigation measures:
- a) Finished floor levels of any commercial buildings shall be set no lower than 13.70mAOD.
 - b) Provision of the flood conveyance channel including details and final levels.
 - c) Floodable voids beneath buildings.
 - d) Details of flood resilient trunking of utilities.

Reason: To reduce the risk of flooding to the proposed development and off-site.

- (8) No development shall take place until a detailed ecological mitigation and enhancement strategy for the 13ha of land to the south of the site has been submitted to and approved in writing by the Local Planning Authority which shall include the following:
- a) Updated phase 1 survey.
 - b) Updated specific species surveys (if the current surveys are no longer valid).
 - c) Overview of mitigation to be implemented.
 - d) Detailed methodology to implement mitigation.
 - e) Maps identifying the receptor site and areas for the creation of new ponds designed specifically for GCN and reptiles.
 - f) Details for the creation and enhancement of wildlife corridors and hibernacula.
 - g) Details of interim management required until the site-wide management plan is implemented.
 - h) Details of on-going monitoring.
 - i) Timings of proposed works commensurate with any construction works.
 - j) Details of long-term management.

The strategy must be implemented as approved.

Reason: In the interest of biodiversity protection and enhancement.

- (9) No development shall take place until a Construction Management Plan and Code of Construction Practice has been submitted to and approved in writing by the local planning authority. The approved details shall be fully implemented. The construction of the development shall then be carried out in accordance with the approved Code of Construction Practice and BS5228 Noise Vibration and Control on Construction and Open Sites and the Control of dust from construction sites (BRE DTi Feb 2003) unless previously agreed in writing by the Local Planning Authority.

The code shall include:

- a) An indicative programme for carrying out the works.
- b) Measures to minimise the production of dust on the site(s).
- c) Measures to minimise the noise (including vibration) generated by the construction process.
- d) Measures to minimise light intrusion from the site(s).
- e) Management of traffic visiting the site(s) including temporary parking or holding areas.
- f) Provision of off-road parking for all site operatives.

Reason: In view of the scale of the development and in the interests of highway safety and local amenity.

- (10) No development, except for site preparation works, shall take place until a phasing plan for the whole site (development and landscaping) has been submitted to the Local Planning Authority and agreed in writing. The approved phasing plan shall be followed unless otherwise agreed in writing with the Local Planning Authority.

Reason: To ensure a suitable development of the site.

- (11) No development, except for site preparation works, shall take place until a monitoring and maintenance plan in respect of groundwater and the PRB gate sampling points, including a timetable of monitoring and submission of reports has been submitted to and approved in writing by the Local Planning Authority. Reports as specified in the approved plan, including details of any necessary contingency action arising from the monitoring, shall be submitted to, and approved in writing by the Local Planning Authority and the development shall be carried out in accordance with the approved details.

Reason: To ensure that the site does not pose any further risk to human health or the water environment by managing any on-going contamination issues and completing all necessary long-term remediation measures. This is in line with paragraph 174 of the NPPF.

- (12) No development shall take place on any phase of development, except for site preparation works, until details of the proposed slab levels of the buildings and roads together with the existing site levels relating to that phase have been submitted to and approved in writing by the Local Planning Authority, and the development shall be completed strictly in accordance with the approved levels.

Reason: In order to secure a satisfactory form of development.

- (13) No development shall take place on any phase of development, except for site preparation works, until a detailed sustainable surface water drainage scheme site has been submitted to and approved in writing by the local planning authority for that phase. The detailed drainage scheme shall demonstrate that the surface water generated by this development (for all rainfall durations and intensities up to and including the climate change adjusted critical 100-year storm) can be accommodated and disposed of without increase to flood risk on or off-site.

The drainage scheme shall also demonstrate (with reference to published guidance):

- a) That silt and pollutants resulting from the site use can be adequately managed to ensure there is no pollution risk to receiving waters.
- b) Appropriate operational, maintenance and access requirements for each drainage feature or SuDS component are adequately considered, including any proposed arrangements for future adoption by any public body or statutory undertaker.

The drainage scheme shall be implemented in accordance with the approved details.

Reason: To ensure the development is served by satisfactory arrangements for the disposal of surface water and to ensure that the development does not exacerbate the risk of on/off site flooding. These details and accompanying calculations are required prior to the commencement of the development as they form an intrinsic part of the proposal, the approval of which cannot be disaggregated from the carrying out of the rest of the development.

- (14) No development shall take place on any phase of development, except for site preparation works, until a strategy to deal with the potential risks associated with any contamination of the site has been submitted to, and approved in writing by, the Local Planning Authority for that phase. This strategy will include the following components:
1. A preliminary risk assessment which has identified all previous uses potential contaminants associated with those uses a conceptual model of the site indicating sources, pathways and receptors and potentially unacceptable risks arising from contamination at the site.
 2. A site investigation scheme, based on (1) to provide information for a detailed assessment of the risk to all receptors that may be affected, including those off site.
 3. The results of the site investigation and the detailed risk assessment referred to in (2) and, based on these, an options appraisal and remediation strategy giving full details of the remediation measures required and how they are to be undertaken.
 4. A verification plan providing details of the data that will be collected in order to demonstrate that the works set out in the remediation strategy in (3) are complete and identifying any requirements for longer-term monitoring of pollutant linkages, maintenance and arrangements for contingency action.

The scheme shall be implemented as approved and any changes to these components require the written consent of the LPA.

Reason: To ensure that the development does not contribute to, or is not put at unacceptable risk from, or adversely affected by, unacceptable levels of water pollution in line with paragraph 174 of the National Planning Policy Framework (NPPF).

- (15) No development above slab level of any phase shall take place until a scheme of noise mitigation measures specifically in relation to delivery, loading and unloading has been submitted to and approved by the local planning authority for that phase. The scheme shall be designed to mitigate against the potential impact specified by a realistic assessment. The scheme shall include a noise management plan which shall include but not be limited to the following:
- a) Delivery locations.
 - b) Measures to prevent vehicle idling.
 - c) Measures to minimise the use of reversing beepers.
 - d) Measures relating to the lowering of lorry tail lift flaps.
 - e) The use of plastic or rubber wheels for trolleys.
 - f) Measures to control the behaviour of operatives on site.
 - g) Complaint contact and recording details.
 - h) A review period for the noise mitigation and management measures.

The acoustic assessment approved in the outline planning application shall be revisited as the detailed application progresses to ensure that it remains valid and mitigation is incorporated into the design of the facility. Once approved the mitigation scheme shall be retained and maintained to the satisfaction of the local planning authority.

Reason: In the interest of residential amenity.

- (16) No development above slab level of any phase shall take place until specific air quality mitigation measures, which shall include the type and location of electric vehicle charging infrastructure within parking areas, lorry trailer plug-ins, and cycle parking, have been submitted to and approved in writing by the local planning authority for that phase. The development shall be carried out in accordance with the approved details.

Reason: In the interests of limiting impacts upon air quality.

- (17) Within 3 months of the completion of the flood conveyance channel, a habitat creation plan for the 'ecology zone' as shown on the approved Constraints Plan (Drawing No.4092/SK04b) shall be submitted to and approved in writing by the Local Planning Authority, which shall include the following:
- a) Map showing the habitats to be created.
 - b) Methodology to create and establish the habitats.
 - c) Timetable to create the habitats.
 - d) Details of who will be carrying out the works.
 - e) Details of how the habitats will be protected during construction.

The habitat creation plan must be implemented as approved.

Reason: In the interest of biodiversity enhancement.

- (18) Within 3 months of the completion of the flood conveyance channel, a long-term site-wide management plan for both the 'ecology zone' and for the 13ha of land to the south of the site shall be submitted to and approved in writing by the Local Planning Authority, which shall include the following:
- a) Map showing area to be managed.
 - b) Overview of management to be implemented including aims and objectives.
 - c) Detailed management timetable to meet the aims and objectives.
 - d) Monitoring & review programme.
 - e) Details of who will be implementing management.

The habitat creation plan must be implemented as approved.

Reason: In the interest of biodiversity protection and enhancement.

- (19) The development shall not be occupied until a final 'Delivery & Route Management Strategy' with the aims of deterring and reducing the potential for any large HGV movements through Yalding village centre and to manage long vehicles exiting the site in the interest of safety at the nearby level crossing has been submitted to and approved in writing by the Local Planning Authority in consultation with the Highways Authority and Network Rail. It shall include details of the following:

a) A review of the 'black lorry' industrial estate signs on the A228 (to encourage vehicles to use the Maidstone Road), the B2162 (to keep heavy goods vehicles on the A21/A228), and Hunton Road/Pattenden Lane (to keep vehicles on the A229), to ensure that any large HGV movements through Yalding village centre are reduced/deterred and appropriate routes are signposted including any proposed changes to the signs.

b) Appropriate 'no HGV access' signs to the south and east of Yalding village centre to ensure that any large HGV movements through Yalding village centre are reduced/deterred and appropriate routes are signposted.

c) Site Access Signage - to direct all heavy goods vehicles westbound onto the Maidstone Road.

d) Site Access Signage - clearly stating 'no right turn for HGV's' exiting the site.

e) Measures to manage long vehicles exiting the site in the interest of safety at the nearby level crossing.

Reason: In the interests of highway safety and congestion.

- (20) The development shall not be occupied until a final site-wide 'Delivery Management Strategy' with the aim of minimising any noise and disturbance during night-time hours has been submitted to and approved in writing by the Local Planning Authority.

Reason: In the interests of minimising any impacts of noise to nearby residential properties.

- (21) The development shall not be occupied until the following off-site highways works have been provided in full:
- a) Capacity improvements to the Maidstone Road/Hampstead Lane junction as shown on drawing no. 14949-H-01 RevP3.
 - b) The tactile paved crossing points as shown on drawing no. C11101 RevG.
 - c) Box junction markings at the level crossing.

Reason: In the interest of pedestrian and highway safety and mitigating traffic impacts.

- (22) The development shall not be occupied until site-wide Travel Plan for the development which follows the principles of the Framework Travel Plan has been submitted to and approved in writing by the local planning authority. The Travel Plan shall include objectives and modal-split targets, a programme of implementation and provision for monitoring, review and improvement. Thereafter, the Travel Plan shall be put into action and adhered to throughout the life of the development, or that of the Travel Plan itself, whichever is the shorter.

Reason: To promote sustainable transport use.

- (23) The development shall not be occupied until the extant hazardous substances consent at the application site has been formally revoked.

Reason: In the interests of protecting human health.

- (24) No building on any phase (or within an agreed implementation schedule) of the development hereby permitted shall be occupied until a Verification Report pertaining to the surface water drainage system, carried out by a suitably qualified professional, has been submitted to the Local Planning Authority which demonstrates the suitable modelled operation of the drainage system such that flood risk is appropriately managed, as approved by the Lead Local Flood Authority. The Report shall contain information and evidence (including photographs) of earthworks; details and locations of inlets, outlets and control structures; extent of planting; details of materials utilised in construction including subsoil, topsoil, aggregate and membrane liners; full as built drawings; topographical survey of 'as constructed' features; and an operation and maintenance manual for the sustainable drainage scheme as constructed.

Reason: To ensure that flood risks from development to the future users of the land and neighbouring land are minimised, together with those risks to controlled waters, property and ecological systems, and to ensure that the development as constructed is compliant with and subsequently maintained pursuant to the requirements of paragraph 165 of the National Planning Policy Framework.

- (25) No phase of the development shall be occupied until a verification report demonstrating the completion of works set out in the approved contamination remediation strategy and the effectiveness of the remediation for that phase has been submitted to and approved in writing, by the Local Planning Authority. The report shall include results of sampling and monitoring carried out in accordance with the approved verification plan to demonstrate that the site remediation criteria have been met.

Reason: To ensure that the site does not pose any further risk to human health or the water environment by demonstrating that the requirements of the approved verification plan have been met and that remediation of the site is complete. This is in line with paragraph 174 of the NPPF.

- (26) No building on any phase of the development hereby permitted shall be occupied until details of any plant (including ventilation, refrigeration and air conditioning) or ducting system to be used have been submitted to and approved in writing by the Local Planning Authority for that phase. The development shall be carried out in accordance with the approved details. After installation of the approved plant, no new plant or ducting system shall be used without the prior written consent of the Local Planning Authority.

Reason: In the interests of residential amenity

- (27) No building on any phase of the development hereby permitted shall be occupied until details of measures to deal with the emission of dust, odours or vapours arising from the building/use has been submitted to and approved in writing by the Local Planning Authority for that phase. Any equipment, plant or process provided or undertaken in pursuance of this condition shall be installed prior to the first use of the premises and shall be operated and retained in compliance with the approved scheme.

Reason: In the interests of residential amenity

- (28) No phase of development shall be occupied until a detailed lighting plan has been submitted to and approved in writing for that phase, which shall demonstrate it has been designed to minimise impact on biodiversity and is meeting the lighting principles set out in the Technical Briefing Note; Aspect Ecology; November 2019. The lighting plan must be implemented as approved.

Reason: In the interest of biodiversity protection.

- (29) No phase of the development involving operational buildings/uses shall be occupied until details of flood evacuation plans have been submitted to and approved in writing for that phase. The development shall be carried out in accordance with the approved details.

Reason: In the interests of safety.

- (30) If, during development of any phase, contamination not previously identified is found to be present at the site then no further development of that phase (unless otherwise agreed in writing with the Local Planning Authority) shall be carried out until a remediation strategy detailing how this contamination will be dealt with has been submitted to and approved in writing by the Local Planning Authority. The remediation strategy shall be implemented as approved.

Reason To ensure that the development does not contribute to, or is not put at unacceptable risk from, or adversely affected by, unacceptable levels of water pollution from previously unidentified contamination sources at the development site in line with paragraph 174 of the NPPF.

- (31) No new infiltration of surface water drainage into the ground is permitted other than with the written consent of the Local Planning Authority in consultation with the Environment Agency. The development shall be carried out in accordance with the approved details.

Reason: To ensure that the development does not contribute to, or is not put at unacceptable risk from, or adversely affected by, unacceptable levels of water pollution caused by mobilised contaminants in line with paragraph 174 of the NPPF.

- (32) Foundation designs using deep penetrative methods shall not be permitted other than with the express written consent of the Local Planning Authority in consultation with the Environment Agency, which may be given for those parts of the site where it has been demonstrated by a foundation risk assessment that there is no resultant unacceptable risk to groundwater. The development shall be carried out in accordance with the approved details.

Reason: To ensure that the development does not contribute to, or is not put at unacceptable risk from, or adversely affected by, unacceptable levels of water pollution caused by mobilised contaminants in line with paragraph 174 of the NPPF.

- (33) No lighting should be used within the flood conveyance/open space corridor or vegetated boundary buffers, which shall form light exclusion zones or 'dark corridors' to allow nocturnal/crepuscular fauna to move around the site.

Reason: In the interests of biodiversity protection.

- (34) The details submitted pursuant to condition 1 shall not exceed the following floorspace limits:

B1(c)/Class E(g)(iii) or B2 - no more than 19,943m² combined
B8 uses - 26,504m²

Reason: To comply with the floorspace amounts assessed under the application.

- (35) All buildings shall achieve a Very Good BREEAM UK New Construction 2014 rating. A final certificate shall be issued to the Local Planning Authority for written approval to certify that a Very Good BREEAM UK New Construction 2014 rating has been achieved within 6 months of the first occupation of any building.

Reason: To ensure a sustainable and energy efficient form of development.

- (36) Any buildings and associated land shall only be used for B1(c)/Class E(g)(iii), B2 or B8 uses and for no other purpose (including any other purpose under Class E of the Town and Country Planning (Use Classes) Order 1987 (as amended) or permitted under the provisions of the Town and Country Planning (General Permitted Development) Order 2015 (as amended)) or any statutory instrument revoking and re-enacting those Orders with or without modification;

Reason: To comply with the floorspace types assessed under the application and as other Class E uses may not be suitable at the site.

- (37) The development hereby permitted shall be carried out in accordance with drawing no. C11101 RevG (Site Entrance) and 4092/P100 (Site Location Plan).

Reason: For the purposes of clarity.

- (38) No development shall take place on any phase of development, except for site preparation works, until details of on-site foul drainage to demonstrate that the system will be resilient in times of flood, have been submitted to the Local Planning Authority and agreed in writing. The development shall be carried out in accordance with the approved details.

Reason: To ensure that the development does not result in unacceptable levels of water pollution in line with paragraph 174 of the National Planning Policy Framework (NPPF).

- (39) For the purposes of the above conditions, 'Site Preparation Works' means the following:

Demolition - Which means removal of Headwalls, Bunds, Culverts, Substation, Water Channels and the Eastern Fire Lagoon Structure.

Site Clearance - Which means removal of vegetation excluding that within the 'proposed new and enhancement planting zones', and 'existing tree buffers' around the boundaries of the site as shown on the approved Constraints Plan (Drawing No.4092/SK04b).

Formation of Haul Roads - Which means the laying of mats to run lorries and construction traffic over.

Safety Works - Which means the erection or enhancement of security fencing, hoarding, CCTV poles and any other HSE matters.

Reason: For the purposes of clarity

Informative(s):

- (1) The applicant shall liaise with Network Rail to seek that the new lighting to be provided in the car park at Yalding Railway Station through S106 funding shall be environmentally sensitive so that it does not harmfully impact on neighbours and biodiversity.

The Council's approach to this application:

In accordance with paragraph 38 of the National Planning Policy Framework (NPPF), July 2021 the Council takes a positive and proactive approach to development proposals focused on solutions. We work with applicants/agents in a positive and creative way by offering a pre-application advice service, where possible, suggesting solutions to secure a successful outcome and as appropriate, updating applicants / agents of any issues that may arise in the processing of their application.

In this instance:

The applicant/agent was advised of changes required to the application and these were agreed. The applicant/agent was provided with formal pre-application advice.

The application was considered by the Planning Committee where the applicant/agent had the opportunity to speak to the Committee and promote the application.

R. L. Jarman

**Rob Jarman
Head of Planning Services
Maidstone Borough Council**

Please be advised that irrespective of whether your proposal requires planning permission or not, it may still require Building Regulation Approval. For more information on this please visit our website
<https://www.maidstone.gov.uk/home/primary-services/planning-and-building/primary-areas/building-control>

IMPORTANT - YOUR ATTENTION IS DRAWN TO THE ATTACHED NOTES

NOTIFICATION TO APPLICANT FOLLOWING REFUSAL OF PERMISSION OR GRANT OF PERMISSION SUBJECT TO CONDITIONS

This decision does not give approval or consent that may be required under any act, bylaw, order or regulation other than Section 57 of the Town and Country Planning Act 1990.

Appeals to the Secretary of State

If you are aggrieved by the decision of your local planning authority (LPA) to refuse permission for the proposed development, or to grant it subject to Conditions, then you can appeal to the Secretary of State (SoS) under Section 78 of the Town and Country Planning Act 1990. **Please see “Development Type” on page 1 of the decision notice to identify which type of appeal is relevant.**

- If this is a decision on a planning application relating to the same or substantially the same land and development as is already the subject of an enforcement notice and if you want to appeal against the LPA's decision on your application, then you must do so within **28 days** of the date of this notice.
- If an enforcement notice is served relating to the same or substantially the same land and development as in your application and if you want to appeal against the LPA's decision on your application, then you must do so within **28 days** of the date of service of the enforcement notice, or within **6 months [12 weeks** in the case of a **householder** or **minor commercial** application decision] of the date of this notice, whichever period expires earlier.
- If this is a decision to refuse planning permission for a **Householder** application or a **Minor Commercial** application and you want to appeal the LPA's decision, or any of the conditions imposed, then you must do so within **12 weeks** of the date of this notice.
- In all other cases, you will need to submit your appeal against the LPA's decision, or any of the conditions imposed, within **6 months** of the date of this notice.

Appeals can be made online at: <https://www.gov.uk/planning-inspectorate>.

If you are unable to access the online appeal form, please contact the Planning Inspectorate to obtain a paper copy of the appeal form on tel: 0303 444 5000.

If you intend to submit an appeal that you would like examined by inquiry then you must notify the Local Planning Authority (planningappeals@midkent.gov.uk) and Planning Inspectorate (inquiryappeals@planninginspectorate.gov.uk) at least 10 days before submitting the appeal. [Further details are on GOV.UK.](#)

The SoS can allow a longer period for giving notice of an appeal but will not normally be prepared to use this power unless there are special circumstances which excuse the delay in giving notice of appeal.

The SoS need not consider an appeal if it seems to the SoS that the LPA could not have granted planning permission for the proposed development or could not have granted it without

the conditions they imposed, having regard to the statutory requirements, to the provisions of any development order and to any directions given under a development order.

Appendix 2

Proposed Site Phasing Plan

PROPOSED SITE PHASING

SCALE 1:2000



SITE OFFICE

PRB 04

PRB 03

PRB 02

PRB 01

PRB 05

KEY:

- Phase A
- Phase B
- Phase C
- Phase D
- Phase E
- PRB gate

Appendix 3

EDSR Drawing 003

PHASING/SITE AREAS

Reference

Contours are shown at 1m intervals. Ordnance Survey digital data supplied by Capita Symonds, ©Crown Copyright September 2005. All rights reserved.

- Proposed activated carbon chamber

PHASE	EXCAVATION AREAS	DURATION (WEEKS)
1	Barrier Walls	0-1E
2	1A, 1B	16-4
3	2A1, 2A2, 2A3, 2A4(DP), 2A4(SH), 2A5	50-6
3A	3A-3D	70-7I
4	2A6-2A7	77-9K
5	2B-2C	96-11

Revisions

Rev. A 1.6.2006

Site

Syngenta Yalding, Kent

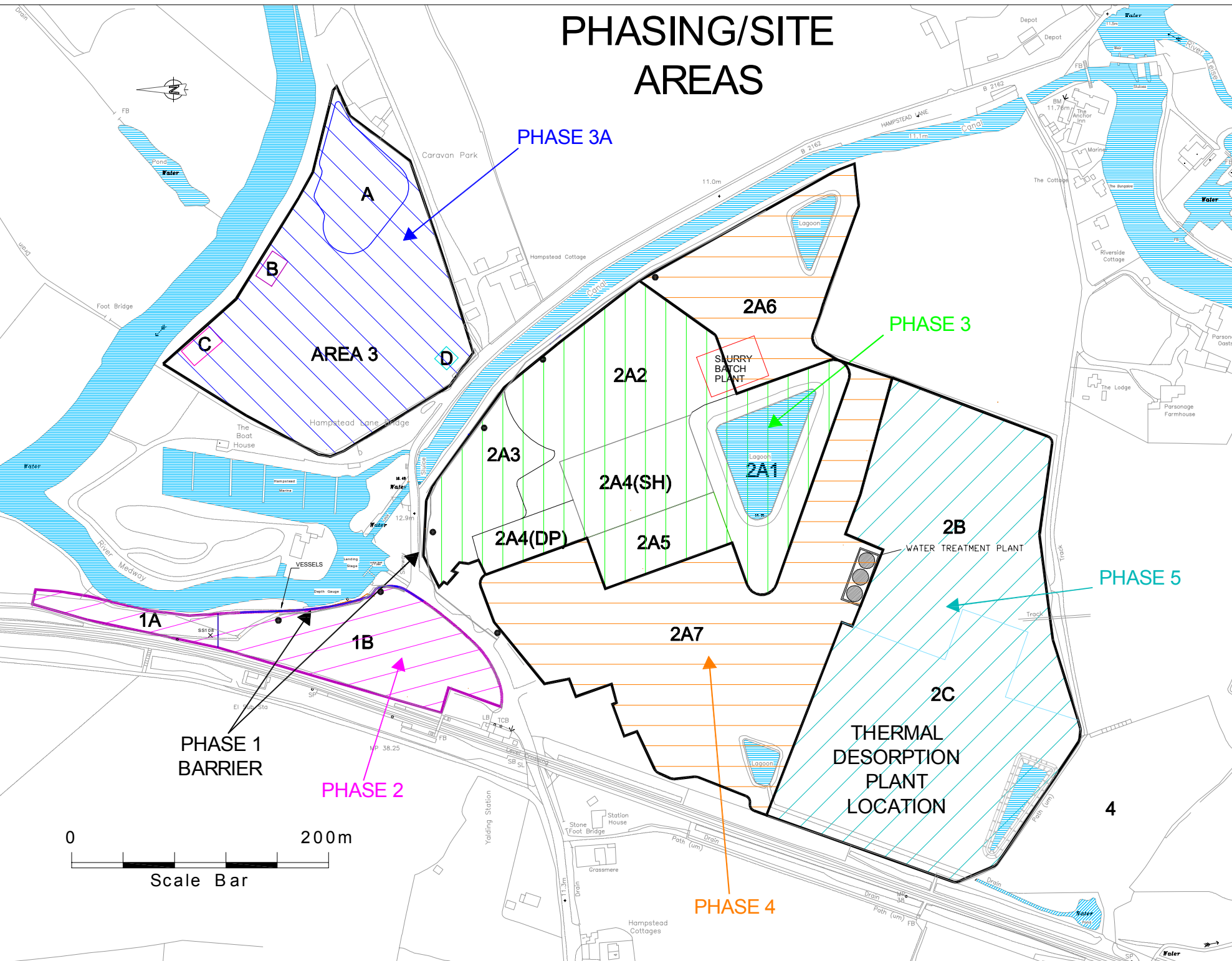
Project

Site Remediation

Plan

003 Remediation Areas and Phases

eds euro dismantling services limited
 Marlowe House, Chaucer Business Park
 Thorne Way, Whitstable, Kent
 Tel: +44 (0) 1227 280287 Fax: +44 (0) 1227 727282
 E-Mail: sales@eurodismantling.co.uk
 Web: www.eurodismantling.co.uk

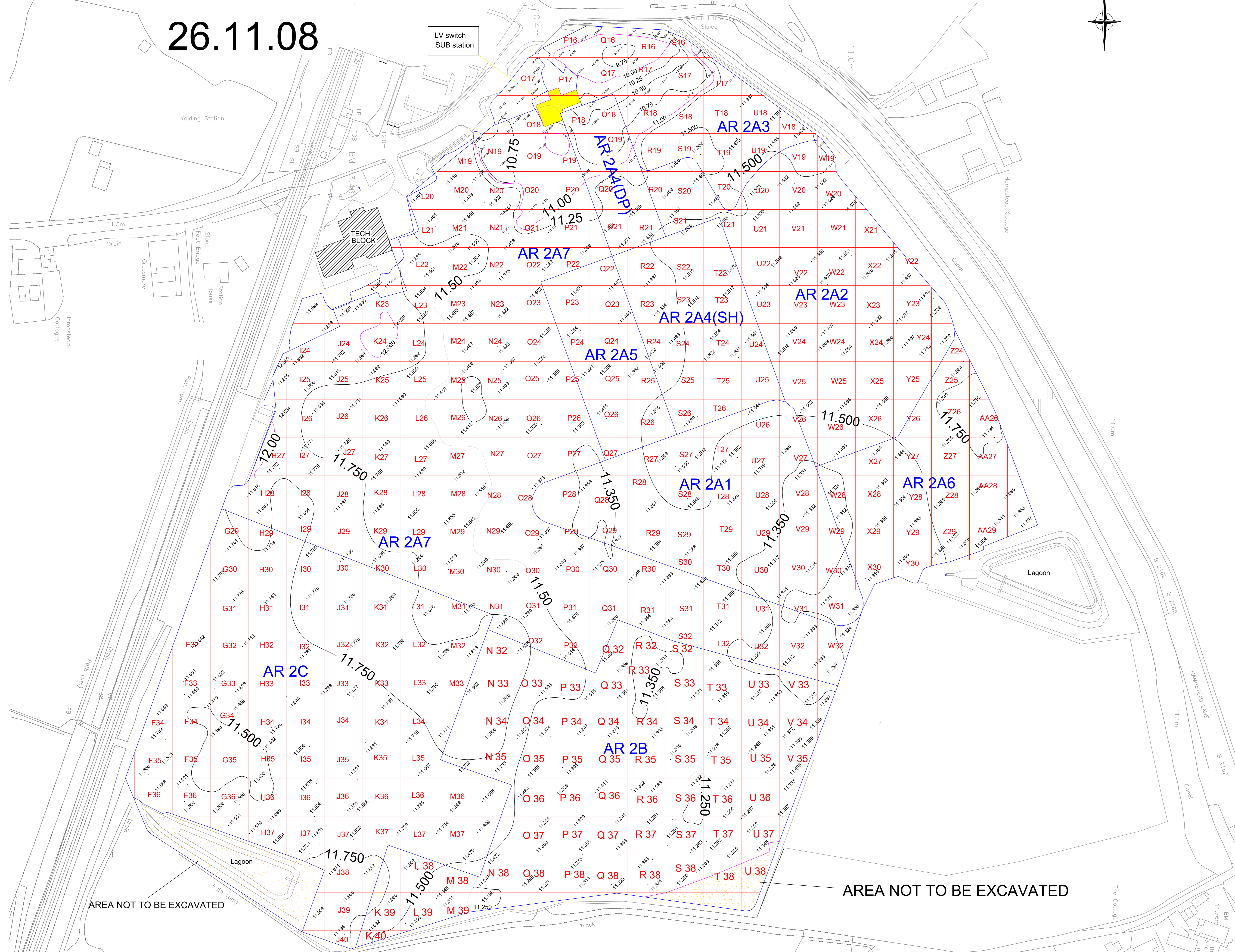
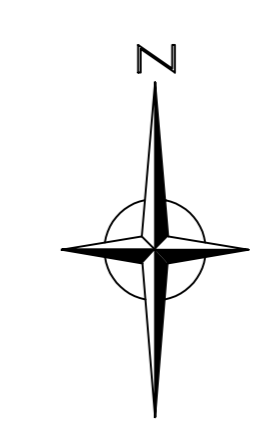


Appendix 4

EDSR Topographical Survey

AR 2A,2B,2C FGL SURVEY

26.11.08



NOTES

All levels are shown in metres above the site datum stations
North arrow relates to the local grid north

EXISTING KEY

- Tree
- Manhole cover - Circular
- Manhole cover - Rectangular
- Spot level
- Survey station location
- Sign post
- Validation Point
- Gully
- Underground obstruction
- Fenceline
- Gate location
- Stop valve
- Stop valve - water
- Walls
- Telegraph pole
- Vehicular safety barrier
- Top of bank
- Bottom of bank
- Contour with value
- Path
- Channel line
- Boundary line
- Building / Structure
- Dimension in metres

ORIGINAL SIZE A1

Rev	By	Chkd	Appd	Date	Description
00	AB	DS	DS	26/11/08	First issue

CLIENT

20 Queen Street
Deal, Kent
CT14 6ET
Tel: 01304 373014
Mob: 07971 272581
Fax: 01304 380772
Email: montana@prodafone.net or d.sellars14@btinternet.com
www.montanalandsurveyors.com

- Topographical Surveys
- 3D Modelling
- Cross Sections
- Volume measures
- (Stockpiles and Reduced level dig)
- Site Control Establishment
- Setting Out

PROJECT

Syngenta-Yalding

DRAWING

**AREA 2A,2B,2C
FINAL FGL SURVEY**

CHECKS

Drawn by: B.Smela Date: 26th November 2008
Checked by: D.Sellars
Approved by: D.Sellars

SCALES

1:700 (1mm = 0.7m)

Dwg No.: R501/SITE FGL/26.11.08 REV. 00

Drawing filename and path:-

Appendix 5

MBC and KCC Letters of Approval



Mr Chris Burns
EDSR
Victory House
Quayside
Chatham Maritime
Chatham
Kent ME4 4QU

RECEIVED

Planning Applications Unit

First Floor, Invicta House
County Hall
Maidstone
Kent ME14 1XX
Tel: 01622 221054
Minicom: 01622 605720
Fax: 01622 221072

Ask for: Mr Mike Clifton
Your Ref:
Our Ref: FAGMC/FAGMA/06/1187
Date: 22 October 2008

Dear Mr Burns

PLANNING PERMISSION TM/06/1397 – REMEDIATION OF THE DECOMMISSIONED SYNGENTA WORKS, HAMPSTEAD LANE, YALDING, MAIDSTONE, KENT.

I refer to the letter from Tom Brankley dated 26 September 2008 which followed our earlier site meeting on 23 September 2008, and to your more recent e mail sent on 8 October 2008 in which you provided an update in respect of the requirements stipulated under the conditions attached to the planning permission.

I hereby confirm that following the completion of the remediation works which were carried out strictly in accordance with the terms of the consent, all of the conditions imposed have been discharged to the extent that the permission has been fully implemented.

Yours faithfully

For Head of Planning Applications



Michael Roper
EDSR
Victory House
Chatham Maritime
Chatham
Kent
ME4 4QU

RECEIVED
21 SEP 2008

David Perford
Chief Executive
Trevor Gasson
Deputy Chief Executive
David Edwards
Director of Change &
Support Services
Alison Broom
Director of Operations

Date: 22nd September 2008
My ref: WK/200810407

Maidstone House
King Street
Maidstone ME15 6JQ
T 01622 602000
W www.digitalmaidstone.co.uk
F Mincem 01622 602224

Dear Mr Roper,

RE: Submission of Area 1 and Area 3 Validation Final Draft Reports for the Yalding Site.

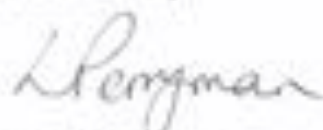
Thank you for your recent letters and reports for the Areas 1 and 3 at the Syngenta site in Yalding, and the subsequent site visit.

This Department is satisfied with the information provided in the reports; they confirm that the Remediation Strategy, which was originally agreed with this Department, has been followed. Extra works were carried out as necessary and have also been reported.

As with past correspondence, we will hold this information on file for use in the future when discharging the contaminated land planning condition for the whole site.

If I can be of any further assistance please contact me.

Yours sincerely



Lynne Perryman
Technical Officer
T 01622 602457 F 01622 602322
E LynnePerryman@maidstone.gov.uk

Appendix 6

Summary of Analysis for Phase A Conveyance Route

Remediation target analytes - Site Guideline Values (mg/kg)

Sample code	Site grid number (base)	Depth below finished level (m)	100	100	30	30	30	30	30	30	30	30	30	30	50	50	50	50	50	50	50
			Antimony	Mercury	Aldrin	DDE	DDT	Dieldrin	HCH-Alpha	HCH-Beta	HCH-Delta	HCH-Epsilon	HCH-Gamma	Heptachlor	Benzo(a) Anthracene	Benzo(a) Pyrene	Benzo(b) Fluoranthene	Chrysene	Dibenzo(ah) Anthracene	Hexachlorobenzene	Indeno (123cd) Pyrene
TPA		1.05		0.2	0.01	0.254	0.119	0.01	0.01	0.033	0.01		0.01	0.01	0.06	0.06	0.09	0.07	0.04	0.01	0.06
TPB		1.47		0.2	0.01	0.01	0.01	0.01	0.01	0.01	0.01		0.01	0.01	0.06	0.04	0.05	0.02	0.04	0.01	0.04
TPC		0.42		0.1	0.01	0.01	0.01	0.01	0.01	0.01	0.01		0.01	0.01	0.06	0.04	0.05	0.02	0.04	0.01	0.04
TPD		1.59		0.1	0.01	0.01	0.01	0.01	0.01	0.01	0.01		0.01	0.01	0.06	0.04	0.05	0.02	0.04	0.01	0.04
TPE		1.58		0.1	0.01	0.01	0.01	0.01	0.01	0.01	0.01		0.01	0.01	0.06	0.04	0.05	0.02	0.04	0.01	0.04
TPF		1.54		0.1	0.01	0.01	0.01	0.01	0.01	0.01	0.01		0.01	0.01	0.06	0.04	0.05	0.02	0.04	0.01	0.04
TPG		1.50		0.1	0.01	0.088	0.02	0.014	0.025	0.08	0.033		0.017	0.01	0.06	0.04	0.05	0.05	0.04	0.01	0.04
TPH		1.525		0.1	0.01	0.031	0.01	0.01	0.01	0.01	0.01		0.01	0.01	0.06	0.04	0.05	0.02	0.04	0.01	0.04
TPL		1.26		0.7	0.01	0.01	0.01	0.01	0.01	0.01	0.01		0.01	0.01	0.06	0.04	0.05	0.02	0.04	0.01	0.04
TPN		0.30		0.1	0.01	0.136	0.068	0.01	0.041	0.146	0.01		0.033	0.01	0.15	0.14	0.24	0.15	0.04	0.01	0.15
4-T2.2-S14-2A7-D>1m-B001-M20-TG-	M20	>1 m	10	0.1	0.003	0.016	0.097	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.02	0.02	0.02	0.03	0.003	0.003	0.03
4-T2.2-S14-2A7-D>1m-B001-LM29-BE-	LM29	>1 m	10	0.168	0.003	0.133	0.121	0.003	0.03	0.015	0.003	0.0035	0.0054	0.003	0.02	0.02	0.025	0.03	0.003	0.003	0.03
4-T2.2-S14-2A7-D>1m-B001-M29/30-BE-	M29/30	>1 m	10	0.1	0.003	0.0092	0.0077	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.02	0.02	0.02	0.03	0.003	0.003	0.03
4-T2.2-S14-2A7-D>1m-B001-NO20-TG-	NO20	>1 m	10	0.618	0.00245	0.04974	0.889	0.0573	0.00231	0.0167	0.0139	0.0137	0.0138	0.00373	0.02	0.02	0.2	0.03	0.003	0.00384	0.03
4-T2.2-S14-2A7-D>1m-B001-N19-TG-060508	N19	>1m	10	0.1	0.003	0.00697	0.006	0.0047	0.00378	0.0217	0.00714	0.00971	0.00447	0.003	0.0519	0.0292	0.118	0.062	0.00891	0.003	0.0467
4-T2.2-S14-2A7-D>SAT-B001-N19-TG-060508	N19	>SAT	10	0.885	0.104	1.1161	0.356	0.152	0.0562	0.325	0.111	0.0959	0.155	0.0157	6.64	7.72	12.7	7.66	1.18	0.00982	5.16
4-T2.2-S14-2A7-D>1m-B001-NO19-BE-	NO19	>1m	10	0.1	0.0125	0.0295	0.0766	0.0265	0.111	0.0616	0.0094	0.0337	0.0832	0.0093	0.0256	0.02	0.0549	0.0333	0.00438	0.003	0.03
4-T2.2-S14-2A7-D>1m-B001-N21nw-BE/GV-	N21nw	>1m	10	0.199	0.003	0.043	0.54	0.016	0.0042	0.026	0.0047	0.003	0.003	0.003	0.02	0.02	0.02	0.03	0.003	0.003	0.03
4-T2.2-S14-2A7-D>1m-B001-N27sw-BE-	N27sw	>1 m	10	0.1	0.003	0.006	0.0116	0.003	0.0031	0.031	0.003	0.006	0.003	0.003	0.02	0.02	0.02	0.03	0.003	0.003	0.03
4-T2.2-S14-2A7-D>1m-B001-NM28n-BE-	NM28n	>1 m	10	0.1	0.003	0.0119	0.0074	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.02	0.02	0.02	0.03	0.003	0.003	0.03

4-T2.2-S14-2A7-D>1m-B001-NM28/N29-BE-011008	NM28/N29	>1 m	10	0.1	0.003	0.015	0.014	0.003	0.003	0.0049	0.003	0.003	0.003	0.003	0.02	0.02	0.02	0.03	0.003	0.003	0.03
3-T2.2-S14-2A7-D>1m-B001-OP21&O20-BE-071207	OP21/O20	>1 m	10	0.1	0.003	0.0593	0.147	0.013	0.046	0.0071	0.036	0.003	1.2	0.029	0.078	0.031	0.11	0.095	0.0039	0.003	0.03
4-T2.2-S14-2A7-D>1m-B001-O22-TG-240108	O22	>1 m	10	0.75	0.003	0.103	7.77	0.0096	0.0095	0.019	0.011	0.003	0.02	0.003	0.02	0.02	0.02	0.03	0.003	0.0039	0.03
4-T2.2-S14-2A7-D>1m-B001-O23-BE-280108	O23	>1 m	10	0.393	0.003	0.0991	0.242	0.003	0.01	0.043	0.084	0.023	0.048	0.003	0.02	0.02	0.022	0.03	0.003	0.0056	0.03
4-T2.2-S14-2A7-D>1m-B001-NO24-TG-	NO24	>1 m	10	0.209	0.003	0.006	0.0715	0.003	0.003	0.003	0.003	0.003	0.015	0.003	0.02	0.02	0.02	0.036	0.003	0.003	0.03
4-T2.2-S14-2A7-D>1m-B001-O24-BE-010208	O24	>1 m	10	0.1	0.003	0.006	0.006	0.003	0.003	0.0144	0.00735	0.00686	0.003	0.003	0.02	0.02	0.02	0.03	0.003	0.003	0.03
4-T2.2-S14-2A7-D>1m-B001-O24-TG-010208	O24	>1 m	10	0.1	0.003	0.006	0.00681	0.003	0.00386	0.00446	0.00601	0.00327	0.0172	0.003	0.02	0.02	0.02	0.03	0.003	0.003	0.03
4-T2.2-S14-2A7-D>1m-B001-O25-TG-040208	O25	>1 m	10	0.1	0.003	0.00687	0.0272	0.0454	0.00943	0.0957	0.167	0.047	0.0139	0.003	0.02	0.02	0.02	0.03	0.003	0.003	0.03
4-T2.2-S14-2A7-D>1m-B001-O25-BE-040208	O25	>1 m	10	0.1	0.003	0.006	0.0208	0.003	0.003	0.003	0.003	0.003	0.003	0.003	0.02	0.02	0.02	0.03	0.003	0.003	0.03
4-T2.2-S14-2A7-D>1m-B001-O26-BE-060208	O26	>1 m	10	0.231	0.003	0.02	0.021	0.003	0.0038	0.11	0.0055	0.0078	0.0034	0.003	0.02	0.02	0.02	0.03	0.003	0.003	0.03
4-T2.2-S14-2A7-D>SAT-B001-O26-TG-060208	O26	>SAT	10	0.1	0.003	0.0081	0.0075	0.003	0.012	0.0071	0.0033	0.0045	0.0062	0.003	0.02	0.02	0.02	0.03	0.003	0.003	0.03
4-T2.2-S14-2A7-D>1m-B001-NO26-TG-	NO26	>1 m	10	0.209	0.003	0.006	0.006	0.003	0.0035	0.019	0.0052	0.0051	0.003	0.003	0.02	0.02	0.02	0.03	0.003	0.003	0.03
4-T2.2-S14-2A7-D>1m-B001-O21e-TG-	O21e	>1 m	10	2	0.005	0.0845	2.53	0.026	0.094	0.052	0.42	0.093	0.25	0.0061	0.03	0.02	0.2	0.031	0.004	0.0048	0.03
4-T2.2-S14-2A7-D>1m-B001-NO19-BE-	NO19	>1m	10	0.1	0.0125	0.0295	0.0766	0.0265	0.111	0.0616	0.0094	0.0337	0.0832	0.0093	0.0256	0.02	0.0549	0.0333	0.00438	0.003	0.03
4-T2.2-S14-2A7-D>1m-B001-O20-BE/GV-	O20	>1m	10	0.1	0.003	0.0065	0.068	0.003	0.003	0.013	0.003	0.003	0.003	0.003	0.02	0.02	0.02	0.03	0.003	0.003	0.03
4-T2.2-S14-2A7-D>1m-B001-O20-BE/GV-	O20	>1m	10	0.1	0.003	0.0065	0.068	0.003	0.003	0.013	0.003	0.003	0.003	0.003	0.02	0.02	0.02	0.03	0.003	0.003	0.03
4-T2.2-S14-2A7-D>1m-B001-O27e-BE-	O27e	>1 m	10	0.127	0.003	0.015	0.018	0.003	0.003	0.0088	0.003	0.003	0.003	0.003	0.02	0.02	0.02	0.03	0.003	0.003	0.03

4-T2.2-S14-2A4(DP)-D>1m-B001-PQ19-GV-190808	PQ19	>1 m	10	0.875	0.11	0.637	1.12	0.19	0.46	0.83	0.39	0.22	1.8	0.17	7.9	2.5	6.2	7.2	0.28	0.026	1
4-T2.2-S14-2A4(DP)-D>1m-B001-P18/19-TG-270808	P18/19	>1 m	10	0.1	0.0068	0.0934	0.75	0.012	0.017	0.075	0.013	0.016	0.022	0.003	0.06	0.037	0.14	0.069	0.013	0.003	0.078
3-T2.2-S14-2A4(DP)-D>SAT-B001-PQ19-TG-210508	PQ19	>SAT	10	0.274	0.11	0.117	0.48	0.052	0.97	0.53	0.24	0.17	0.72	0.0057	0.5	0.253	0.548	0.468	0.0315	0.0061	0.145
4-T2.2-S14-2A4(DP)-D>SAT-B001-P18/19-TG-270808	P18/19	>SAT	10	6.3	0.01	0.663	1.02	0.15	1.6	0.38	0.32	0.043	1.1	0.01	0.58	0.43	1.1	0.57	0.097	0.023	0.71
3-T2.2-S14-2A4(DP)-D>SAT-B001-PQ19-TG-210508	PQ19	>1 m	10	0.274	0.11	0.117	0.48	0.052	0.97	0.53	0.24	0.17	0.72	0.0057	0.5	0.253	0.548	0.468	0.0315	0.0061	0.145
3-T2.2-S14-2A4(DP)-D>SAT-B001-P18-GV-020608	P18	>1 m	10	0.1	0.003	0.006	0.043	0.0039	0.003	0.014	0.003	0.003	0.003	0.003	0.02	0.02	0.02	0.03	0.003	0.003	0.03
4-T2.2-S14-2A4(DP)-D>1m-B001-PQ19-GV-190808	PQ19	>1 m	10	0.875	0.11	0.637	1.12	0.19	0.46	0.83	0.39	0.22	1.8	0.17	7.9	2.5	6.2	7.2	0.28	0.026	1
4-T2.2-S14-2A4(DP)-D>1m-B001-P18/19-TG-270808	P18/19	>1 m	10	0.1	0.0068	0.0934	0.75	0.012	0.017	0.075	0.013	0.016	0.022	0.003	0.06	0.037	0.14	0.069	0.013	0.003	0.078
4-T2.2-S14-2A4(DP)-D>SAT-B001-P18/19-TG-270808	P18/19	>SAT	10	6.3	0.01	0.663	1.02	0.15	1.6	0.38	0.32	0.043	1.1	0.01	0.58	0.43	1.1	0.57	0.097	0.023	0.71
3-T2.2-S14-2A7-D>1m-B001-P19s-BE-	P19s	>1 m	10	0.165	0.003	0.612	0.163	0.071	0.11	0.063	0.74	0.15	1.3	0.003	0.31	0.097	0.34	0.3	0.01	0.003	0.046
3-T2.2-S14-2A7-D>1m-B001-OP21&O20-BE-071207	OP21/O20	>1 m	10	0.1	0.003	0.0593	0.147	0.013	0.046	0.0071	0.036	0.003	1.2	0.029	0.078	0.031	0.11	0.095	0.0039	0.003	0.03
3-T2.2-S14-2A7-D>1m-B001-P22n-TG-	P22n	>1 m	10	0.593	0.003	2.51	0.599	0.003	0.95	25	1.6	1	16	0.003	0.031	0.02	0.122	0.035	0.0034	0.018	0.03
4-T2.2-S14-2A7-D>1m-B001-P24w-TG-	P24w	>1 m	10	0.1	0.003	0.01078	0.02358	0.0047	0.395	0.0995	0.468	0.0686	1.85	0.003	0.101	0.0575	0.144	0.111	0.0146	0.003	0.0735
4-T2.2-S14-2A7-D>1m-B001-P27n-BE-	P27n	>1 m	10	0.174	0.003	0.0226	0.006	0.003	0.033	0.00474	0.0091	0.003	0.0507	0.003	0.0245	0.02	0.0355	0.03	0.00342	0.003	0.03

4-T2.2-S14-2A7-D>1m-B001-P26-BE-070208	P26	>1 m	10	0.119	0.003	0.0279	0.006	0.005	0.0316	0.0409	0.0101	0.00991	0.0791	0.003	0.02	0.02	0.02	0.03	0.003	0.003	0.03
4-T2.2-S14-2A7-D>1m-B001-P25w-TG-	P25w	>1 m	10	0.141	1.56	0.00898	0.00891	0.0686	0.458	0.122	0.147	0.0587	0.895	0.003	0.0863	0.02	0.116	0.0989	0.0121	0.003	0.0499
4-T2.2-S14-2A7-D>1M-B001-P21-BE-220208	P21	>1 m	10	2	0.0087	0.152	2.89	0.014	0.27	0.073	0.56	0.27	2.4	0.009	0.14	0.034	0.2	0.15	0.0057	0.0035	0.03
4-T2.2-S14-2A7-D>1M-B001-P22-BE-220208	P22	>1 m	10	2	0.01	0.264	11.3	0.0089	0.11	0.078	0.66	0.13	0.0048	0.002	0.031	0.021	0.2	0.036	0.0063	0.0009	0.03
4-T2.2-S14-2A7-D>1m-B001-P27c-BE-	P27c	>1 m	10	0.1	0.003	0.0123	0.0091	0.003	0.0035	0.003	0.003	0.003	0.003	0.003	0.02	0.02	0.02	0.03	0.003	0.003	0.03
3-T2.2-S14-2A7-D>1m-B001-P20-BE-071207	P20	>1 m	10	0.1	0.029	1.364	0.44	0.017	0.72	0.06	1.6	0.25	98	0.003	0.63	0.15	0.5	0.55	0.012	0.003	0.051
3-T2.2-S14-2A5/7-D>SAT-B001-P22-TG-	P22	>SAT	10	0.2	0.003	0.564	0.321	0.003	0.17	1.2	1.7	1.2	0.94	0.003	0.042	0.055	0.14	0.03	0.003	0.02	0.03
4-T2.2-S14-2A7-D>SAT-B001-P22-TG-210208	P22	>SAT	10	2	0.0089	0.28	1.364	0.0078	0.36	0.055	2.8	0.017	1.5	0.002	0.054	0.02	0.2	0.058	0.01	0.019	0.03
4-T2.2-S14-2A7-D>SAT-B001-P21-TG-210208	P21	>SAT	10	2	0.0074	0.0513	0.986	0.0068	0.33	0.22	5.5	0.014	0.57	0.002	0.084	0.029	0.2	0.084	0.003	0.0009	0.03
4-T2.2-S14-2A7-D>SAT-W001-P21-TG-210208	P21	>SAT	10	6.03	0.0045	1.081	30.69	0.016	0.84	0.15	1.4	0.31	2.6	0.006	0.59	0.15	0.21	0.45	0.016	0.0009	0.064
4-T2.2-S14-2A7-D>SAT-B001-PO27-TG-	PO27	>SAT	10	0.184	0.003	0.237	0.0069	0.003	0.003	0.0069	0.003	0.003	0.003	0.003	0.02	0.02	0.02	0.03	0.003	0.003	0.03
3-T2.2-S14-2A4(DP)-D>1m-B001-Q20se-BE-061107	Q20se	>1 m	10	0.1	0.003	0.033	0.25	0.003	0.11	0.03	0.085	0.03	0.04	0.003	0.02	0.02	0.05	0.03	0.003	0.006	0.03
3-T2.2-S14-2A4(DP)-D>1m-B001-Q21ne-BE-061107	Q21ne	>1 m	10	0.1	0.003	0.023	0.36	0.003	0.04	0.02	0.04	0.009	0.02	0.003	0.03	0.02	0.02	0.04	0.003	0.009	0.03
3-T2.2-S14-2A4(DP)-D>1m-B001-Q19n-TG-210508	Q19n	>1 m	10	0.115	0.0038	0.017	0.156	0.0065	0.12	0.19	0.058	0.046	0.089	0.003	0.034	0.02	0.044	0.032	0.003	0.003	0.03
3-T3.2-S14-2A4(DP)/2A3-D>1m-Q18-BE-300508	Q18	>1 m	10	2	0.002	0.0098	0.043	0.002	0.027	0.16	0.0046	0.016	0.0034	0.002	0.02	0.02	0.2	0.03	0.003	0.0009	0.03
4-T2.2-S14-2A4(DP)-D>1m-B001-PQ19-GV-190808	PQ19	>1 m	10	0.875	0.11	0.637	1.12	0.19	0.46	0.83	0.39	0.22	1.8	0.17	7.9	2.5	6.2	7.2	0.28	0.026	1

4-T2.2-S14-2A4(DP)-D>1m-B001-Q20w-GV-190808	Q20	>1 m	10	0.193	0.003	0.092	0.06	0.077	0.55	0.13	0.63	0.17	0.54	0.003	10	1.8	5.4	9.3	0.13	0.011	0.38
4-T2.2-S14-2A4(DP)-D>1m-B001-Q21c-GV-190808	Q21	>1 m	10	0.12	0.018	0.287	0.02	0.054	0.012	0.032	0.045	0.028	0.043	0.003	0.66	0.19	0.51	0.67	0.02	0.003	0.084
3-T2.2-S14-2A4(DP)-D>SAT-B001-Q19s-GV-301007	Q19s	>SAT	10	0.1	0.003	0.006	0.006	0.003	1.61	0.445	9.6	2.15	2.31	0.003	29.3	3.55	11.7	23.1	0.04	0.003	0.49
3-T2.2-S14-2A4(DP)-D>SAT-B001-QR19-GV-311007	QR19	>SAT	10	0.1	0.003	0.023	0.029	0.003	0.414	0.1	0.349	0.06	0.04	0.003	0.3	0.2	0.4	0.3	0.01	0.003	0.1
3-T2.2-S14-2A4(DP)-D>SAT-B001-Q20n-GV-311007	Q20n	>SAT	10	0.1	0.003	0.006	0.013	0.003	0.03	0.02	0.336	0.07	0.02	0.003	0.44	0.09	0.2	0.35	0.004	0.003	0.03
3-T2.2-S14-2A4(DP)-D>SAT-B001-Q20e-GV-011107	Q20e	>SAT	10	0.1	0.003	0.11	0.043	0.003	0.067	0.04	0.424	0.1	0.248	0.003	0.37	0.09	0.26	0.3	0.004	0.003	0.03
3-T2.2-S14-2A4(DP)-D>SAT-B001-QR20-GV-021107	QR20	>SAT	10	0.27	0.003	0.43	0.532	0.04	0.56	0.22	0.615	0.2	0.655	0.003	1.42	0.66	1.4	1.22	0.05	0.02	0.2
3-T2.2-S14-2A4(DP)-D>1m-B001-Q19n-TG-210508	Q19n	>1 m	10	0.115	0.0038	0.017	0.156	0.0065	0.12	0.19	0.058	0.046	0.089	0.003	0.034	0.02	0.044	0.032	0.003	0.003	0.03
3-T2.2-S14-2A4(DP)-D>SAT-B001-PQ19-TG-210508	PQ19	>1 m	10	0.274	0.11	0.117	0.48	0.052	0.97	0.53	0.24	0.17	0.72	0.0057	0.5	0.253	0.548	0.468	0.0315	0.0061	0.145
3-T3.2-S14-2A4(DP)/2A3-D>1m-Q18-BE-300508	Q18	>1 m	10	2	0.002	0.0098	0.043	0.002	0.027	0.16	0.0046	0.016	0.0034	0.002	0.02	0.02	0.2	0.03	0.003	0.0009	0.03
4-T2.2-S14-2A4(DP)-D>1m-B001-PQ19-GV-190808	PQ19	>1 m	10	0.875	0.11	0.637	1.12	0.19	0.46	0.83	0.39	0.22	1.8	0.17	7.9	2.5	6.2	7.2	0.28	0.026	1
4-T2.2-S14-2A4(DP)-D>1m-B001-Q20w-GV-190808	Q20	>1 m	10	0.193	0.003	0.092	0.06	0.077	0.55	0.13	0.63	0.17	0.54	0.003	10	1.8	5.4	9.3	0.13	0.011	0.38
4-T2.2-S14-2A4(DP)-D>1m-B001-Q21c-GV-190808	Q21	>1 m	10	0.12	0.018	0.287	0.02	0.054	0.012	0.032	0.045	0.028	0.043	0.003	0.66	0.19	0.51	0.67	0.02	0.003	0.084

4-T2.2-S14-2A7-D>1m-B001-Q20/21-BE-	Q20/21	>1 m	10	0.1	0.003	0.0414	0.0102	0.012	0.0068	0.0098	0.0049	0.003	0.004	0.003	0.02	0.02	0.02	0.03	0.003	0.003	0.03
2-T2.2-S14-2A2/4-D>1m-B0001-R/S20-	R/S20	>1 m	10	0.1	0.022	0.0809	0.245	0.0054	8.4	0.93	0.08	0.18	0.28	0.003	0.022	0.02	0.047	0.03	0.003	0.003	0.03
3-T2.2-S14-2A4(DP)-D>1m-B001-R20w-GV-061107	R20w	>1 m	10	0.1	0.003	0.023	0.273	0.004	0.207	0.05	0.4	0.07	0.277	0.003	0.02	0.02	0.027	0.03	0.003	0.003	0.03
3-T2.2-S14-2A4(DP)-D>1m-B001-R21w-BE-061107	R21w	>1 m	10	0.13	0.003	0.008	0.04	0.003	0.152	0.03	0.178	0.02	0.166	0.003	0.03	0.03	0.09	0.04	0.0004	0.003	0.03
3-T2.2-S14-2A4(DP)-D>1m-B001-R22nw-GV-061107	R22nw	>1 m	10	0.1	0.006	0.023	0.13	0.005	0.217	0.07	0.319	0.07	0.13	0.003	0.1	0.09	0.26	0.1	0.01	0.003	0.06

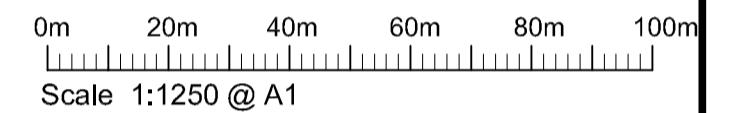
Appendix 7

LQS Site Investigation Borehole Location Plan



DO NOT SCALE.

Note
 Use figured dimensions only.
 All dimensions are to be checked on site prior to construction or fabrication and any discrepancies reported to the author.
 Copyright : This drawing is not to be re-issued loaned or copied without the prior consent of the author.
 All building materials, components and workmanship to comply with current construction legislation, Building Regulations, Codes of Practice and where appropriate manufacturers recommendations.
 This drawing is to be read in conjunction with all related drawing issues.



Rev	Description	Drn	Date
-	First Issue	RJB	05.07.19
A	Updated with proposed site layout	RJB	14.08.19

Project
Yalding

Drawing Title
**Site Plan
 S.I. Locations**



Scale
 1:1250 @ A1

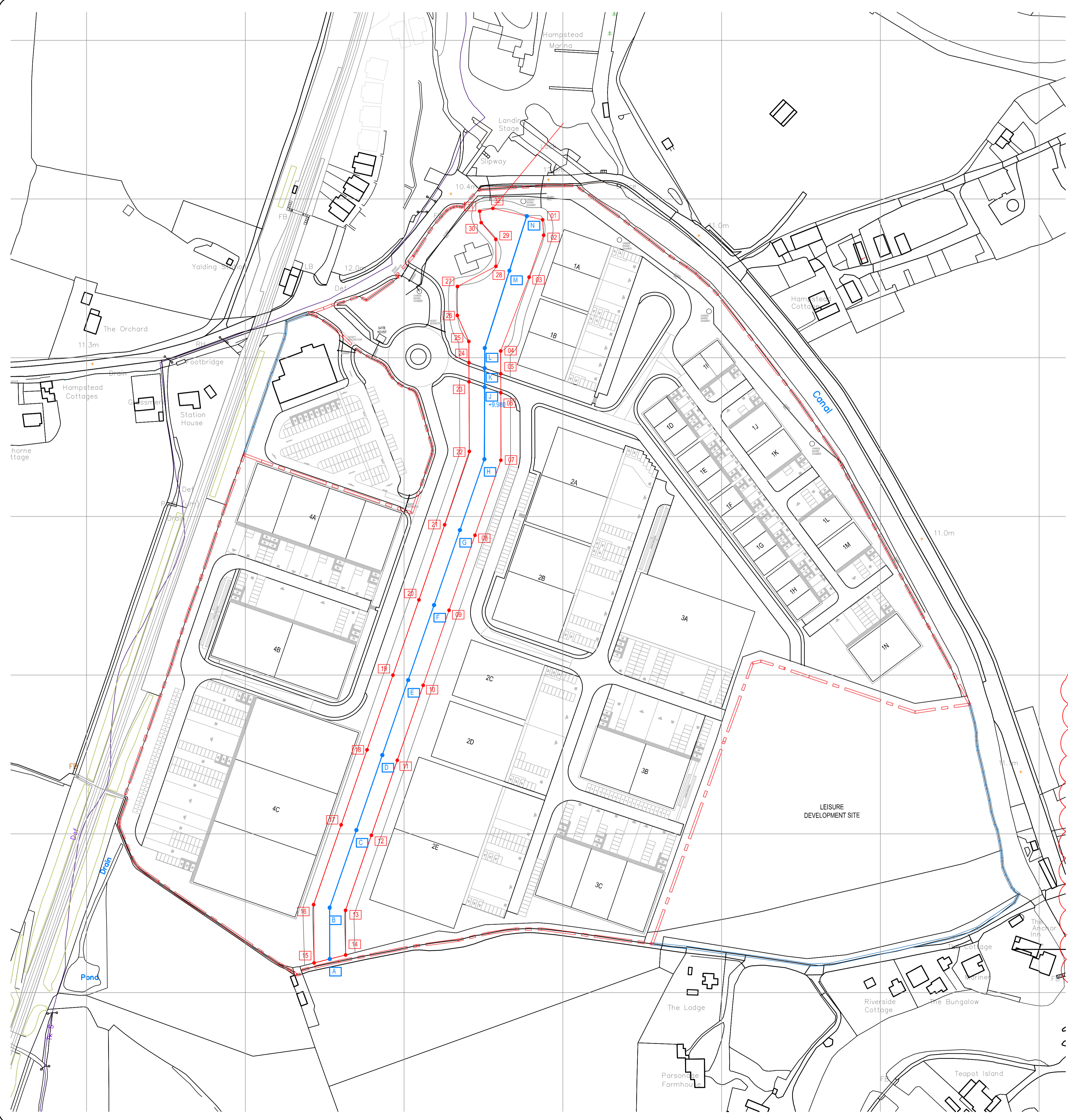
Date
 July 2019

Drawing No
2210 - 31

Rev
A

Appendix 8

Drawing No. 2210-32 RevA 'Flood Water Course Setting Out Coordinates'



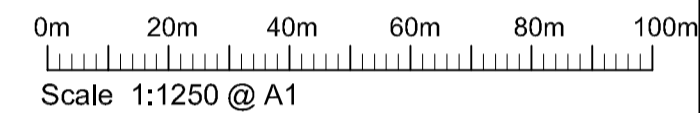
ORDNANCE SURVEY SETTING OUT CO-ORDINATES

REF.	NORTHING	EASTING
01	150 286.953 N	568 687.300 E
02	150 277.219 N	568 687.973 E
03	150 250.759 N	568 678.779 E
04	150 204.272 N	568 660.868 E
05	150 189.929 N	568 660.935 E
06	150 177.946 N	568 660.991 E
07	150 135.414 N	568 660.988 E
08	150 088.148 N	568 644.693 E
09	150 040.881 N	568 628.387 E
10	149 993.614 N	568 612.082 E
11	149 946.348 N	568 595.777 E
12	149 899.081 N	568 579.471 E
13	149 851.815 N	568 563.166 E
14	149 823.676 N	568 563.322 E
15	149 818.650 N	568 543.369 E
16	149 855.394 N	568 543.048 E
17	149 905.663 N	568 560.391 E
18	149 529.930 N	568 576.697 E
19	150 000.000 N	568 593.033 E
20	150 047.423 N	568 609.425 E
21	150 094.730 N	568 625.613 E
22	150 140.972 N	568 641.164 E
23	150 184.856 N	568 640.959 E
24	150 196.888 N	568 640.902 E
25	150 210.260 N	568 640.840 E
26	150 226.646 N	568 633.602 E
27	150 244.894 N	568 633.683 E
28	150 257.607 N	568 657.905 E
29	150 274.600 N	568 657.817 E
30	150 285.147 N	568 648.642 E
31	150 292.203 N	568 647.654 E
32	150 294.129 N	568 655.966 E

ORDNANCE SURVEY SETTING OUT CO-ORDINATES	EXISTING LEVEL	PROPOSED LEVEL		
REF. A	149 821.146 N	568 553.227 E	+ 11.500 m	+ 10.650 m
B	149 843.481 N	568 553.163 E	+ 11.860 m	+ 10.590 m
C	149 902.342 N	568 570.018 E	+ 11.770 m	+ 10.550 m
D	149 949.609 N	568 586.323 E	+ 11.800 m	+ 10.410 m
E	149 996.876 N	568 602.629 E	+ 11.700 m	+ 10.320 m
F	150 044.142 N	568 618.934 E	+ 11.570 m	+ 10.230 m
G	150 091.409 N	568 635.239 E	+ 11.440 m	+ 10.140 m
H	150 136.051 N	568 650.639 E	+ 11.385 m	+ 10.060 m
J	150 181.464 N	568 650.792 E	+ 11.440 m	+ 9.980 m
K	150 193.404 N	568 650.832 E	+ 11.500 m	+ 9.960 m
L	150 206.086 N	568 650.874 E	+ 11.000 m	+ 9.940 m
M	150 254.086 N	568 666.391 E	+ 10.530 m	+ 9.860 m
N	150 289.233 N	568 6770.347 E	+ 9.900 m	+ 9.800 m

DO NOT SCALE.

Note
 Use figured dimensions only.
 All dimensions are to be checked on site prior to construction or fabrication and any discrepancies reported to the author.
 Copyright : This drawing is not to be re-issued, loaned or copied without the prior consent of the author.
 All building materials, components and workmanship to comply with current construction legislation, Building Regulations, Codes of Practice and where appropriate manufacturers recommendations.
 This drawing is to be read in conjunction with all related drawing issues.



Revisions

Rev	Description	Drn	Date
-	First Issue	R:RB	22.07.19
A	Proposed Levels (& co-ordinates) of Flood Conveyance Route added	R:RB	25.07.19

Project
Yalding

Drawing Title
Flood Water Course Setting Out Co-Ordinates



Scale
 1:1250 @ A1

Date
 July 2019

Drawing No
2210 - 32

Rev
A

Appendix 9

Results of Analysis from Additional Trial Pits

Fortitude Environmental
38B Loughbrickland Road
Rathriland
Co Down
Ireland
BT34 5AF



Attention : Elizabeth Newbold
Date : 22nd February, 2022
Your reference : YEP Yalding Enterprise Park
Our reference : Test Report 22/1262 Batch 1
Location : Yalding Enterprise Park
Date samples received : 27th January, 2022
Status : Final Report
Issue : 1

Twelve samples were received for analysis on 27th January, 2022 of which ten were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.

All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Authorised By:

A handwritten signature in black ink, appearing to read 'Bruce Leslie', with a long horizontal stroke extending to the right.

Bruce Leslie
Project Manager

Please include all sections of this report if it is reproduced

Element Materials Technology

Client Name: Fortitude Environmental
Reference: YEP Yalding Enterprise Park
Location: Yalding Enterprise Park
Contact: Elizabeth Newbold
EMT Job No: 22/1262

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-6	7-12	13-18	19-24	25-30	31-36	37-42	43-48	49-54	55-60	Please see attached notes for all abbreviations and acronyms		
	Sample ID	TPA	TPB	TPC	TPD	TPE	TPF	TPG	TPH	TPL			
Depth	1.05	1.47	0.42	1.59	1.58	1.54	1.50	1.525	1.26	0.30			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	LOD/LOR	Units	Method No.
Arsenic #	7.5	14.8	21.7	21.2	7.9	22.4	16.5	17.3	18.7	7.2	<0.5	mg/kg	TM30/PM15
Cadmium #	0.1	0.2	0.8	0.3	<0.1	0.1	0.5	0.3	0.2	0.2	<0.1	mg/kg	TM30/PM15
Chromium #	89.3	65.5	63.0	69.8	57.5	67.8	69.0	76.5	60.3	50.4	<0.5	mg/kg	TM30/PM15
Copper #	20	15	16	15	16	18	17	16	78	24	<1	mg/kg	TM30/PM15
Lead #	29	16	15	15	13	17	17	13	62	28	<5	mg/kg	TM30/PM15
Mercury #	0.2	0.2	<0.1	0.1	<0.1	0.1	0.1	0.1	0.7	0.1	<0.1	mg/kg	TM30/PM15
Nickel #	27.8	26.0	37.5	37.3	25.1	36.9	42.6	39.6	24.0	27.0	<0.7	mg/kg	TM30/PM15
Selenium #	<1	<1	2	<1	<1	<1	1	<1	<1	<1	<1	mg/kg	TM30/PM15
Zinc #	86	46	82	82	43	84	84	70	156	91	<5	mg/kg	TM30/PM15
PAH MS													
Naphthalene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.05	<0.04	<0.04	mg/kg	TM4/PM8
Acenaphthylene	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	<0.03	mg/kg	TM4/PM8
Acenaphthene #	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	mg/kg	TM4/PM8
Fluorene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Phenanthrene #	0.05	<0.03	<0.03	<0.03	<0.03	<0.03	0.05	<0.03	0.15	0.08	<0.03	mg/kg	TM4/PM8
Anthracene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.06	<0.04	<0.04	0.06	<0.04	mg/kg	TM4/PM8
Fluoranthene #	0.09	<0.03	<0.03	<0.03	<0.03	<0.03	0.10	<0.03	0.09	0.22	<0.03	mg/kg	TM4/PM8
Pyrene #	0.09	<0.03	<0.03	<0.03	<0.03	<0.03	0.09	<0.03	0.05	0.20	<0.03	mg/kg	TM4/PM8
Benzo(a)anthracene #	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	<0.06	0.15	<0.06	mg/kg	TM4/PM8
Chrysene #	0.07	<0.02	<0.02	<0.02	<0.02	<0.02	0.05	<0.02	0.02	0.15	<0.02	mg/kg	TM4/PM8
Benzo(k)fluoranthene #	0.13	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	<0.07	0.33	<0.07	mg/kg	TM4/PM8
Benzo(a)pyrene #	0.06	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.14	<0.04	mg/kg	TM4/PM8
Indeno(123cd)pyrene #	0.06	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.15	<0.04	mg/kg	TM4/PM8
Dibenzo(ah)anthracene #	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	mg/kg	TM4/PM8
Benzo(ghi)perylene #	0.06	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	<0.04	0.13	<0.04	mg/kg	TM4/PM8
PAH 16 Total	0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	<0.6	1.6	<0.6	mg/kg	TM4/PM8
Benzo(b)fluoranthene	0.09	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	<0.05	0.24	<0.05	mg/kg	TM4/PM8
Benzo(k)fluoranthene	0.04	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	<0.02	0.09	<0.02	mg/kg	TM4/PM8
PAH Surrogate % Recovery	96	97	94	96	97	96	90	95	101	89	<0	%	TM4/PM8
Methyl Tertiary Butyl Ether #													
Methyl Tertiary Butyl Ether #	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
Benzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Toluene #	<3	<3	<3	<3	<3	<3	<3	<3	13	<3	<3	ug/kg	TM15/PM10
Ethylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3	7	<3	<3	ug/kg	TM15/PM10
m/p-Xylene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
o-Xylene #	<3	<3	<3	<3	<3	<3	<3	<3	7	<3	<3	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	102	103	100	99	99	105	97	101	89	94	<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	92	99	96	99	97	98	92	97	61	88	<0	%	TM15/PM10
SVOC TICs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		None	TM16/PM8

Element Materials Technology

Client Name: Fortitude Environmental
Reference: YEP Yalding Enterprise Park
Location: Yalding Enterprise Park
Contact: Elizabeth Newbold
EMT Job No: 22/1262

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-6	7-12	13-18	19-24	25-30	31-36	37-42	43-48	49-54	55-60	Please see attached notes for all abbreviations and acronyms		
Sample ID	TPA	TPB	TPC	TPD	TPE	TPF	TPG	TPH	TPL	TPN			
Depth	1.05	1.47	0.42	1.59	1.58	1.54	1.50	1.525	1.26	0.30			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	LOD/LOR	Units	Method No.
Pesticides													
Organochlorine Pesticides													
Aldrin	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Alpha-HCH (BHC)	<10	<10	<10	<10	<10	<10	25	<10	<10	41	<10	ug/kg	TM42/PM8
Beta-HCH (BHC)	33	<10	<10	<10	<10	<10	80	<10	<10	146	<10	ug/kg	TM42/PM8
Chlorothalonil	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
cis-Chlordane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Delta-HCH (BHC)	<10	<10	<10	<10	<10	<10	33	<10	<10	<10	<10	ug/kg	TM42/PM8
Dieldrin	<10	<10	<10	<10	<10	<10	14	<10	<10	<10	<10	ug/kg	TM42/PM8
Endosulphan I	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Endosulphan II	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Endosulphan sulphate	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Endrin	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Gamma-HCH (BHC)	<10	<10	<10	<10	<10	<10	17	<10	<10	33	<10	ug/kg	TM42/PM8
Heptachlor	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Heptachlor Epoxide	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Hexachlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Isodrin	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
o,p'-DDE	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
o,p'-DDT	111	<10	<10	<10	<10	<10	79	454	<10	47	<10	ug/kg	TM42/PM8
o,p'-Methoxychlor	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
o,p'-TDE	41	<10	<10	<10	<10	<10	24	111	<10	14	<10	ug/kg	TM42/PM8
p,p'-DDE	254	<10	<10	<10	<10	<10	88	31	<10	136	<10	ug/kg	TM42/PM8
p,p'-DDT	119	<10	<10	<10	<10	<10	20	<10	<10	68	<10	ug/kg	TM42/PM8
p,p'-Methoxychlor	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
p,p'-TDE	112	<10	<10	<10	<10	<10	79	455	<10	47	<10	ug/kg	TM42/PM8
Pendimethalin	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Permethrin I	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Permethrin II	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Quintozene (PCNB)	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Tecnazene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Telodrin	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
trans-Chlordane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Triadimefon	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Triallate	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8
Trifluralin	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM42/PM8

Element Materials Technology

Client Name: Fortitude Environmental
Reference: YEP Yalding Enterprise Park
Location: Yalding Enterprise Park
Contact: Elizabeth Newbold
EMT Job No: 22/1262

Report : Solid

Solids: V=60g VOC jar, J=250g glass jar, T=plastic tub

EMT Sample No.	1-6	7-12	13-18	19-24	25-30	31-36	37-42	43-48	49-54	55-60	Please see attached notes for all abbreviations and acronyms		
Sample ID	TPA	TPB	TPC	TPD	TPE	TPF	TPG	TPH	TPL	TPN			
Depth	1.05	1.47	0.42	1.59	1.58	1.54	1.50	1.525	1.26	0.30			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	LOD/LOR	Units	Method No.
TPH CWG													
Aliphatics													
>C5-C6 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C6-C8 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C8-C10	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>C10-C12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TMS/PM8/PM16
>C12-C16 #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TMS/PM8/PM16
>C16-C21 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/PM8/PM16
>C21-C35 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/PM8/PM16
Total aliphatics C5-35	<19	<19	<19	<19	<19	<19	<19	<19	<19	<19	<19	mg/kg	TMS/PM8/PM16/PM12/PM10
Aromatics													
>C5-EC7 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC7-EC8 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC8-EC10 #	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	mg/kg	TM36/PM12
>EC10-EC12 #	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	<0.2	mg/kg	TMS/PM8/PM16
>EC12-EC16 #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	mg/kg	TMS/PM8/PM16
>EC16-EC21 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/PM8/PM16
>EC21-EC35 #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	mg/kg	TMS/PM8/PM16
Total aromatics C5-35 #	<19	<19	<19	<19	<19	<19	<19	<19	<19	<19	<19	mg/kg	TMS/PM8/PM16/PM12/PM10
Total aliphatics and aromatics(C5-35)	<38	<38	<38	<38	<38	<38	<38	<38	<38	<38	<38	mg/kg	TMS/PM8/PM16/PM12/PM10
Natural Moisture Content	16.4	17.4	12.0	13.5	19.1	14.7	13.8	15.2	21.6	18.0	<0.1	%	PM4/PM0

Client Name: Fortitude Environmental
Reference: YEP Yalding Enterprise Park
Location: Yalding Enterprise Park
Contact: Elizabeth Newbold
EMT Job No: 22/1262

SVOC Report : Solid

EMT Sample No.	1-6	7-12	13-18	19-24	25-30	31-36	37-42	43-48	49-54	55-60	Please see attached notes for all abbreviations and acronyms		
Sample ID	TPA	TPB	TPC	TPD	TPE	TPF	TPG	TPH	TPL	TPN			
Depth	1.05	1.47	0.42	1.59	1.58	1.54	1.50	1.525	1.26	0.30			
COC No / misc													
Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	LOD/LOR	Units	Method No.
SVOC MS													
Phenols													
2-Chlorophenol #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Methylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Nitrophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dichlorophenol #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dimethylphenol	<10	<10	<10	<10	<10	<10	<10	41	<10	<10	<10	ug/kg	TM16/PM8
2,4,5-Trichlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4,6-Trichlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chloro-3-methylphenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Methylphenol	<10	<10	<10	<10	<10	<10	<10	23	<10	<10	<10	ug/kg	TM16/PM8
4-Nitrophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Pentachlorophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Phenol #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
PAHs													
2-Chloronaphthalene #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2-Methylnaphthalene #	<10	<10	<10	<10	<10	<10	<10	<10	19	<10	<10	ug/kg	TM16/PM8
Phthalates													
Bis(2-ethylhexyl) phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Butylbenzyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Di-n-butyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Di-n-Octyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Diethyl phthalate	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Dimethyl phthalate #	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/kg	TM16/PM8
Other SVOCs													
1,2-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
1,2,4-Trichlorobenzene #	<10	<10	<10	<10	<10	<10	<10	<10	62	<10	<10	ug/kg	TM16/PM8
1,3-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	13	<10	<10	ug/kg	TM16/PM8
1,4-Dichlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	28	<10	<10	ug/kg	TM16/PM8
2-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,4-Dinitrotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
2,6-Dinitrotoluene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
3-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Bromophenylphenylether #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chloroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Chlorophenylphenylether	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
4-Nitroaniline	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Azobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Bis(2-chloroethoxy)methane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Bis(2-chloroethyl)ether	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Carbazole	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Dibenzofuran #	<10	<10	<10	<10	<10	<10	44	<10	24	<10	<10	ug/kg	TM16/PM8
Hexachlorobenzene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachlorobutadiene #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachlorocyclopentadiene	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Hexachloroethane	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Isophorone #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
N-nitrosodi-n-propylamine #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Nitrobenzene #	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/kg	TM16/PM8
Surrogate Recovery 2-Fluorobiphenyl	104	106	103	102	104	106	104	102	110	106	<0	%	TM16/PM8
Surrogate Recovery p-Terphenyl-d14	98	102	102	98	97	102	104	101	107	104	<0	%	TM16/PM8

Element Materials Technology

Client Name: Fortitude Environmental
Reference: YEP Yalding Enterprise Park
Location: Yalding Enterprise Park
Contact: Elizabeth Newbold
EMT Job No: 22/1262

VOC Report : Solid

EMT Sample No.	1-6	7-12	13-18	19-24	25-30	31-36	37-42	43-48	49-54	55-60	Please see attached notes for all abbreviations and acronyms		
Sample ID	TPA	TPB	TPC	TPD	TPE	TPF	TPG	TPH	TPL	TPN			
Depth	1.05	1.47	0.42	1.59	1.58	1.54	1.50	1.525	1.26	0.30			
COC No / misc Containers	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T	V J T			
Sample Date	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022	25/01/2022			
Sample Type	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil	Soil			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	27/01/2022	LOD/LOR	Units	Method No.
VOC MS													
Dichlorodifluoromethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
Methyl Tertiary Butyl Ether #	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
Chloromethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Vinyl Chloride	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15_A/PM10
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/kg	TM15/PM10
Chloroethane #	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
Trichlorofluoromethane #	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
1,1-Dichloroethene (1,1 DCE) #	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
Dichloromethane (DCM) #	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
trans-1-2-Dichloroethene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1-Dichloroethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
cis-1-2-Dichloroethene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
2,2-Dichloropropane	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Bromochloromethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Chloroform #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,1-Trichloroethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1-Dichloropropene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Carbon tetrachloride #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dichloroethane #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Benzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Trichloroethene (TCE) #	<3	<3	<3	<3	<3	<3	<3	<3	4	<3	<3	ug/kg	TM15/PM10
1,2-Dichloropropane #	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
Dibromomethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Bromodichloromethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
cis-1-3-Dichloropropene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Toluene #	<3	<3	<3	<3	<3	<3	<3	<3	13	<3	<3	ug/kg	TM15/PM10
trans-1-3-Dichloropropene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,2-Trichloroethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Tetrachloroethene (PCE) #	<3	<3	<3	<3	<3	<3	<3	<3	<3	6	<3	ug/kg	TM15/PM10
1,3-Dichloropropane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Dibromochloromethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,2-Dibromoethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Chlorobenzene #	<3	<3	<3	<3	<3	<3	10	<3	18	<3	<3	ug/kg	TM15/PM10
1,1,1,2-Tetrachloroethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Ethylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3	7	<3	<3	ug/kg	TM15/PM10
m/p-Xylene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
o-Xylene #	<3	<3	<3	<3	<3	<3	<3	<3	7	<3	<3	ug/kg	TM15/PM10
Styrene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15_A/PM10
Bromoform	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Isopropylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,1,2,2-Tetrachloroethane #	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
Bromobenzene	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/kg	TM15/PM10
1,2,3-Trichloropropane #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Propylbenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
2-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
1,3,5-Trimethylbenzene #	<3	<3	<3	<3	<3	<3	<3	<3	19	<3	<3	ug/kg	TM15/PM10
4-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/kg	TM15/PM10
tert-Butylbenzene #	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/kg	TM15/PM10
1,2,4-Trimethylbenzene #	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	<6	ug/kg	TM15/PM10
sec-Butylbenzene #	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
4-Isopropyltoluene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,3-Dichlorobenzene #	<4	<4	<4	<4	<4	<4	<4	<4	5	<4	<4	ug/kg	TM15/PM10
1,4-Dichlorobenzene #	<4	<4	<4	<4	<4	<4	16	<4	13	<4	<4	ug/kg	TM15/PM10
n-Butylbenzene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2-Dichlorobenzene #	<4	<4	<4	<4	<4	<4	<4	<4	5	<4	<4	ug/kg	TM15/PM10
1,2-Dibromo-3-chloropropane	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
1,2,4-Trichlorobenzene	<7	<7	<7	<7	<7	<7	22	<7	47	<7	<7	ug/kg	TM15/PM10
Hexachlorobutadiene	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/kg	TM15/PM10
Naphthalene	<27	<27	<27	<27	<27	<27	<27	<27	<27	<27	<27	ug/kg	TM15/PM10
1,2,3-Trichlorobenzene	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	<7	ug/kg	TM15/PM10
Surrogate Recovery Toluene D8	102	103	100	99	99	105	97	101	89	94	<0	%	TM15/PM10
Surrogate Recovery 4-Bromofluorobenzene	92	99	96	99	97	98	92	97	61	88	<0	%	TM15/PM10

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 22/1262

SOILS and ASH

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary. Asbestos samples are retained for 6 months.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C. Ash samples are dried at 37°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overestimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

STACK EMISSIONS

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation for Dioxins and Furans and Dioxin like PCBs has been performed on XAD-2 Resin, only samples which use this resin will be within our MCERTS scope.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

Laboratory records are kept for a period of no less than 6 years.

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

Customer Provided Information

Sample ID and depth is information provided by the customer.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

EMT Job No: 22/1262

Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/S ANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
PM4	Gravimetric measurement of Natural Moisture Content and % Moisture Content at either 35°C or 105°C. Calculation based on ISO 11465:1993(E) and BS1377-2:1990.	PM0	No preparation is required.			AR	
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM4	Modified USEPA 8270D v5:2014 method for the solvent extraction and determination of PAHs by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes
TM5	Modified 8015B v2:1996 method for the determination of solvent Extractable Petroleum Hydrocarbons (EPH) within the range C8-C40 by GCFID. For waters the solvent extracts dissolved phase plus a sheen if present.	PM8/PM16	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required/Fractionation into aliphatic and aromatic fractions using a Rapid Trace SPE.	Yes		AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details			AR	Yes
TM5/TM36	please refer to TM5 and TM36 for method details	PM8/PM12/PM16	please refer to PM8/PM16 and PM12 for method details	Yes		AR	Yes
TM15	Modified USEPA 8260B v2:1996. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM15	Modified USEPA 8260B v2:1996. Quantitative Determination of Volatile Organic Compounds (VOCs) by Headspace GC-MS.	PM10	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM16	Modified USEPA 8270D v5:2014. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM16	Modified USEPA 8270D v5:2014. Quantitative determination of Semi-Volatile Organic compounds (SVOCs) by GC-MS.	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.	Yes		AR	Yes

EMT Job No: 22/1262




Test Method No.	Description	Prep Method No. (if appropriate)	Description	ISO 17025 (UKAS/S ANAS)	MCERTS (UK soils only)	Analysis done on As Received (AR) or Dried (AD)	Reported on dry weight basis
TM30	Determination of Trace Metals by ICP-OES (Inductively Coupled Plasma – Optical Emission Spectrometry); WATERS by Modified USEPA Method 200.7, Rev. 4.4, 1994; Modified EPA Method 6010B, Rev.2, Dec 1996; Modified BS EN ISO 11885:2009: SOILS by Modified USEP 6010B, Rev.2, Dec.1996; Modified EPA Method 3050B, Rev.2, Dec.1996	PM15	Acid digestion of dried and ground solid samples using Aqua Regia refluxed at 112.5 °C. Samples containing asbestos are not dried and ground.	Yes		AD	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested.	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes
TM36	Modified US EPA method 8015B v2:1996. Determination of Gasoline Range Organics (GRO) in the carbon chain range of C4-12 by headspace GC-FID. MTBE by GCFID co-elutes with 3-methylpentane if present and therefore can give a false positive. Positive MTBE results will be re-run using GC-MS to double check, when requested.	PM12	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.	Yes		AR	Yes
TM42	Modified US EPA method 8270D v5:2014. Pesticides and herbicides by GC-MS	PM8	End over end extraction of solid samples for organic analysis. The solvent mix varies depending on analysis required.			AR	Yes
TM15_A	Modified USEPA 8260B v2:1996. Quantitative Determination of Volatile Organic Compounds, Vinyl Chloride & Styrene by Headspace GC-MS.	PM10	Modified US EPA method 5021A v2:2014. Preparation of solid and liquid samples for GC headspace analysis.			AR	Yes

Appendix 10

EDSR 'Existing Structures' Drawing

Notes:

-  Manhole cover - Clear
-  Tree
-  Spot level
-  Survey station location
-  Sign post
-  Validation Point
-  Gully
-  Underground obstruction
-  Fenceline
-  Gate location
-  Stop valve
-  Stop valve - water
-  Wall
-  Telegraph pole
-  Vehicular safety barrier

-  Surface Water
-  Public sewer
-  Sewer pipe
-  Block off point



Revision: Date: 3.10.08

Revision by:

Site:

Syngenta
Yielding

Project:

Remediation

Date: 3.10.08

Title: AREA 2A
Excavation
works

Drawn by: ELSMELA

Checked by: L.DIBBURY

Drawn by: ELSMELA

Checked by: L.DIBBURY

Drawn by: ELSMELA

Checked by: L.DIBBURY

Drawn by: ELSMELA

Checked by: L.DIBBURY

Drawn by: ELSMELA

Checked by: L.DIBBURY

Drawn by: ELSMELA

Checked by: L.DIBBURY

Drawn by: ELSMELA

Checked by: L.DIBBURY

Drawn by: ELSMELA

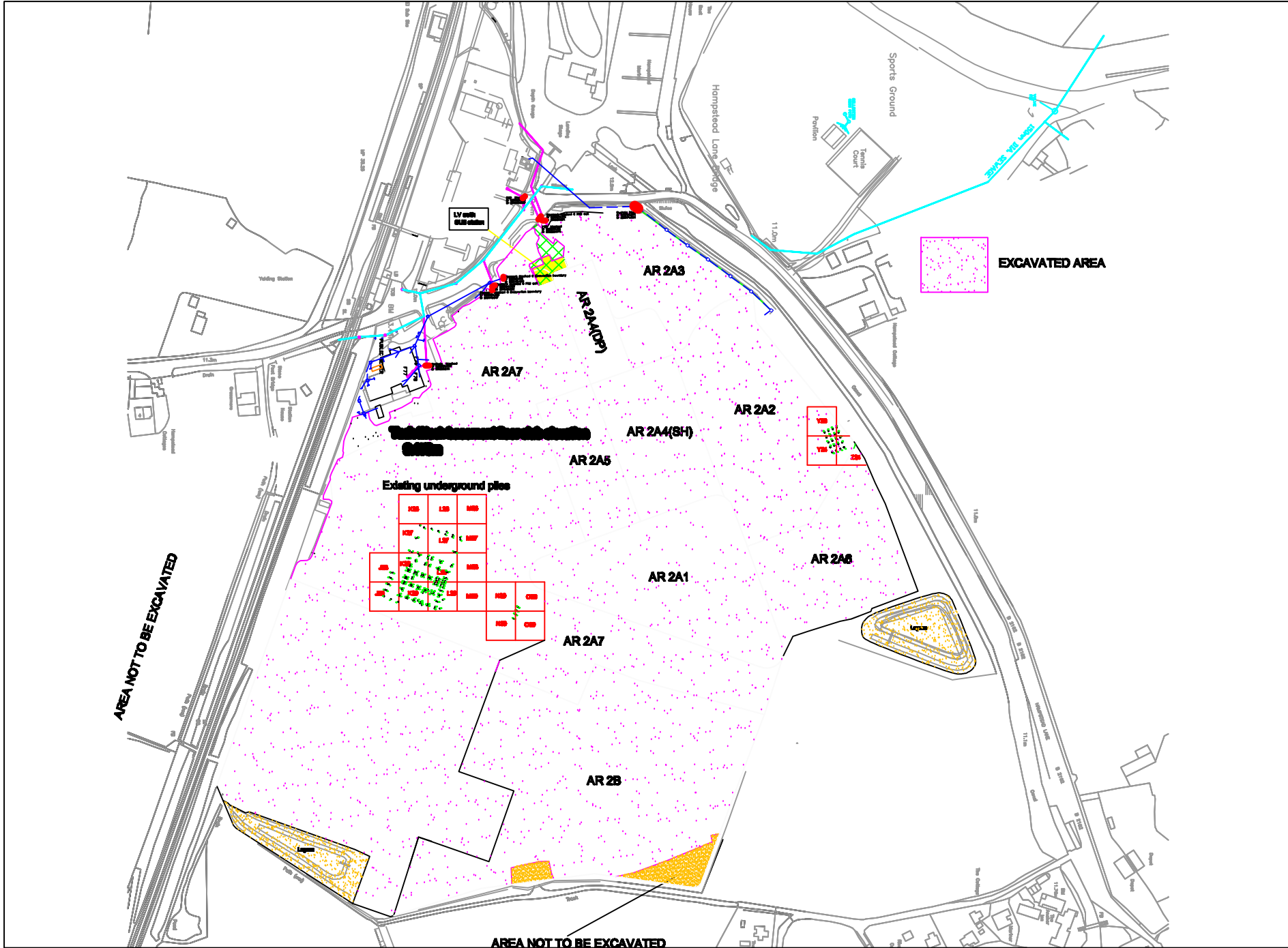
Checked by: L.DIBBURY

Drawn by: ELSMELA

Checked by: L.DIBBURY

Drawn by: ELSMELA

Checked by: L.DIBBURY



AREA NOT TO BE EXCAVATED

AREA NOT TO BE EXCAVATED

EXCAVATED AREA

Appendix 11

Results of Analysis: 2021 Annual PRB Gate Monitoring Round

Fortitude Environmental
38B Loughbrickland Road
Rathriland
Co Down
Ireland
BT34 5AF

Attention : Elizabeth Newbold
Date : 10th January, 2022
Your reference : YEP
Our reference : Test Report 21/20047 Batch 1
Location : YEP
Date samples received : 15th December, 2021
Status : Final Report
Issue : 1

Ten samples were received for analysis on 15th December, 2021 of which ten were scheduled for analysis. Please find attached our Test Report which should be read with notes at the end of the report and should include all sections if reproduced. Interpretations and opinions are outside the scope of any accreditation, and all results relate only to samples supplied.

All analysis is carried out on as received samples and reported on a dry weight basis unless stated otherwise. Results are not surrogate corrected.

Authorised By:



Bruce Leslie
Project Manager

Please include all sections of this report if it is reproduced

Element Materials Technology

Client Name: Fortitude Environmental
 Reference: YEP
 Location: YEP
 Contact: Elizabeth Newbold
 EMT Job No: 21/20047

Report : Liquid

Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle
 H=H₂SO₄, Z=ZnAc, N=NaOH, HN=HNO₃

EMT Sample No.	1-4	5-8	9-12	13-16	17-20	21-24	25-28	29-32	33-36	37-40	Please see attached notes for all abbreviations and acronyms		
Sample ID	PRB 1 INLET	PRB 1 OUTLET	PRB 2 INLET	PRB 2 OUTLET	PRB 3 INLET	PRB 3 OUTLET	PRB 4 INLET	PRB 4 OUTLET	PRB 5 INLET	PRB 5 OUTLET			
Depth													
COC No / misc													
Containers	V G	V G	V G	V G	V G	V G	V G	V G	V G	V G			
Sample Date	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021			
Sample Type	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	LOD/LOR	Units	Method No.
SVOC TICs	ND	ND	ND	ND	ND	ND	ND	ND	ND	ND		None	TM16/PM30
Pirimicarb	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/l	TM16/PM30
Pirimiphos-ethyl	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	<100	ug/l	TM16/PM30
Pesticides													
Organochlorine Pesticides													
Aldrin	0.07	0.01	0.01	<0.01	0.02	<0.01	<0.01	<0.01	0.03	<0.01	<0.01	ug/l	TM149/PM30
Alpha-HCH (BHC)	0.15	0.02	0.06	<0.01	0.08	0.03	0.02	<0.01	0.07	<0.01	<0.01	ug/l	TM149/PM30
Beta-HCH (BHC)	6.66	0.03	4.97	0.03	1.23	0.11	0.54	<0.01	4.76	0.02	<0.01	ug/l	TM149/PM30
Chlorothalonil	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
cis-Chlordane	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Delta-HCH (BHC)	0.14	0.05	<0.01	<0.01	0.40	0.05	0.21	<0.01	0.02	<0.01	<0.01	ug/l	TM149/PM30
Dieldrin	0.47	0.01	0.19	<0.01	0.20	<0.01	0.04	<0.01	0.23	<0.01	<0.01	ug/l	TM149/PM30
Endosulphan I	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Endosulphan II	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Endosulphan sulphate	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Endrin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Gamma-HCH (BHC)	0.18	0.01	<0.01	<0.01	0.07	<0.01	<0.01	<0.01	0.06	<0.01	<0.01	ug/l	TM149/PM30
Heptachlor	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Heptachlor Epoxide	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.01	<0.01	<0.01	ug/l	TM149/PM30
Hexachlorobenzene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Isodrin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
o,p'-DDE	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
o,p'-DDT	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
o,p'-Methoxychlor	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
o,p'-TDE	0.09	<0.01	0.09	<0.01	0.01	<0.01	<0.01	<0.01	0.03	<0.01	<0.01	ug/l	TM149/PM30
p,p'-DDE	<0.01	<0.01	0.05	<0.01	<0.01	<0.01	<0.01	<0.01	0.03	0.01	<0.01	ug/l	TM149/PM30
p,p'-DDT	0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.02	0.03	<0.01	ug/l	TM149/PM30
p,p'-Methoxychlor	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
p,p'-TDE	0.27	0.03	0.12	<0.01	0.04	<0.01	<0.01	<0.01	0.07	0.03	<0.01	ug/l	TM149/PM30
Pendimethalin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Permethrin I	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Permethrin II	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Quintozene (PCNB)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Tecnazene	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	0.23	<0.01	<0.01	ug/l	TM149/PM30
Telodrin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
trans-Chlordane	0.05	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Triadimefon	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Triallate	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Trifluralin	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30

Element Materials Technology

Client Name: Fortitude Environmental
 Reference: YEP
 Location: YEP
 Contact: Elizabeth Newbold
 EMT Job No: 21/20047

Report : Liquid

Liquids/products: V=40ml vial, G=glass bottle, P=plastic bottle
 H=H₂SO₄, Z=ZnAc, N=NaOH, HN=HNO₃

EMT Sample No.	1-4	5-8	9-12	13-16	17-20	21-24	25-28	29-32	33-36	37-40	Please see attached notes for all abbreviations and acronyms		
Sample ID	PRB 1 INLET	PRB 1 OUTLET	PRB 2 INLET	PRB 2 OUTLET	PRB 3 INLET	PRB 3 OUTLET	PRB 4 INLET	PRB 4 OUTLET	PRB 5 INLET	PRB 5 OUTLET			
Depth													
COC No / misc													
Containers	V G	V G	V G	V G	V G	V G	V G	V G	V G	V G			
Sample Date	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021			
Sample Type	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	LOD/LOR	Units	Method No.
Pesticides													
Organophosphorus Pesticides													
Azinphos ethyl	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Azinphos methyl	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Carbophenothion	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Chlorfenvinphos	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Chlorpyrifos	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Chlorpyrifos-methyl	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Diazinon	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Dichlorvos	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Disulfoton	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Dimethoate	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Ethion	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Ethyl Parathion (Parathion)	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Etrimphos	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Fenitrothion	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Fenthion	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Malathion	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Methyl Parathion	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Mevinphos	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Phosalone	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Pirimiphos Methyl	0.02	<0.01	0.12	<0.01	<0.01	<0.01	<0.01	<0.01	0.06	<0.01	<0.01	ug/l	TM149/PM30
Propetamphos	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30
Triazophos	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	<0.01	ug/l	TM149/PM30

Element Materials Technology

Client Name: Fortitude Environmental
Reference: YEP
Location: YEP
Contact: Elizabeth Newbold
EMT Job No: 21/20047

SVOC Report : Liquid

EMT Sample No.	1-4	5-8	9-12	13-16	17-20	21-24	25-28	29-32	33-36	37-40	Please see attached notes for all abbreviations and acronyms		
Sample ID	PRB 1 INLET	PRB 1 OUTLET	PRB 2 INLET	PRB 2 OUTLET	PRB 3 INLET	PRB 3 OUTLET	PRB 4 INLET	PRB 4 OUTLET	PRB 5 INLET	PRB 5 OUTLET			
Depth													
COC No / misc Containers	V G	V G	V G	V G	V G	V G	V G	V G	V G	V G			
Sample Date	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021			
Sample Type	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	LOD/LOR	Units	Method No.
SVOC MS													
Phenols													
2-Chlorophenol	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
2-Methylphenol	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
2-Nitrophenol	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
2,4-Dichlorophenol	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
2,4-Dimethylphenol	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
2,4,5-Trichlorophenol	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
2,4,6-Trichlorophenol	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
4-Chloro-3-methylphenol	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
4-Methylphenol	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
4-Nitrophenol	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	<10	ug/l	TM16/PM30
Pentachlorophenol	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Phenol	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
PAHs													
2-Chloronaphthalene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
2-Methylnaphthalene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Naphthalene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Acenaphthylene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Acenaphthene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Fluorene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Phenanthrene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Anthracene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Fluoranthene	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Pyrene	<0.5	<0.5	0.7	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Benzo(a)anthracene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Chrysene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Benzo(bk)fluoranthene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Benzo(a)pyrene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Indeno(123cd)pyrene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Dibenzo(ah)anthracene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Benzo(ghi)perylene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Phthalates													
Bis(2-ethylhexyl) phthalate	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/l	TM16/PM30
Butylbenzyl phthalate	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Di-n-butyl phthalate	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	<1.5	ug/l	TM16/PM30
Di-n-Octyl phthalate	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Diethyl phthalate	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Dimethyl phthalate	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30

Element Materials Technology

Client Name: Fortitude Environmental
Reference: YEP
Location: YEP
Contact: Elizabeth Newbold
EMT Job No: 21/20047

SVOC Report : Liquid

EMT Sample No.	1-4	5-8	9-12	13-16	17-20	21-24	25-28	29-32	33-36	37-40	Please see attached notes for all abbreviations and acronyms		
Sample ID	PRB 1 INLET	PRB 1 OUTLET	PRB 2 INLET	PRB 2 OUTLET	PRB 3 INLET	PRB 3 OUTLET	PRB 4 INLET	PRB 4 OUTLET	PRB 5 INLET	PRB 5 OUTLET			
Depth													
COC No / misc Containers	V G	V G	V G	V G	V G	V G	V G	V G	V G	V G			
Sample Date	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021			
Sample Type	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid			
Batch Number	1	1	1	1	1	1	1	1	1	1			
Date of Receipt	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	LOD/LOR	Units	Method No.
SVOC MS													
Other SVOCs													
1,2-Dichlorobenzene	<1	<1	2	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
1,2,4-Trichlorobenzene	<1	<1	8	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
1,3-Dichlorobenzene	<1	<1	7	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
1,4-Dichlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
2-Nitroaniline	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
2,4-Dinitrotoluene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
2,6-Dinitrotoluene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
3-Nitroaniline	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
4-Bromophenylphenylether	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
4-Chloroaniline	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
4-Chlorophenylphenylether	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
4-Nitroaniline	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Azobenzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Bis(2-chloroethoxy)methane	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Bis(2-chloroethyl)ether	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Carbazole	1.2	<0.5	1.9	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Dibenzofuran	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Hexachlorobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Hexachlorobutadiene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Hexachlorocyclopentadiene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Hexachloroethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Isophorone	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
N-nitrosodi-n-propylamine	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM16/PM30
Nitrobenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM16/PM30
Surrogate Recovery 2-Fluorobiphenyl	144 ^{SV}	121	89	127	135 ^{SV}	137 ^{SV}	135 ^{SV}	131 ^{SV}	98	132 ^{SV}	<0	%	TM16/PM30
Surrogate Recovery p-Terphenyl-d14	158 ^{SV}	129	101	139 ^{SV}	155 ^{SV}	149 ^{SV}	150 ^{SV}	133 ^{SV}	109	144 ^{SV}	<0	%	TM16/PM30

Element Materials Technology

Client Name: Fortitude Environmental
Reference: YEP
Location: YEP
Contact: Elizabeth Newbold
EMT Job No: 21/20047

VOC Report : Liquid

EMT Sample No.	1-4	5-8	9-12	13-16	17-20	21-24	25-28	29-32	33-36	37-40	Please see attached notes for all abbreviations and acronyms			
	Sample ID	PRB 1 INLET	PRB 1 OUTLET	PRB 2 INLET	PRB 2 OUTLET	PRB 3 INLET	PRB 3 OUTLET	PRB 4 INLET	PRB 4 OUTLET	PRB 5 INLET				PRB 5 OUTLET
Depth														
COC No / misc Containers	V G	V G	V G	V G	V G	V G	V G	V G	V G	V G				
Sample Date	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021	09/12/2021				
Sample Type	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid	Liquid				
Batch Number	1	1	1	1	1	1	1	1	1	1				
Date of Receipt	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021	15/12/2021				
											LOD/LOR	Units	Method No.	
VOC MS														
Dichlorodifluoromethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10	
Methyl Tertiary Butyl Ether	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ug/l	TM15/PM10	
Chloromethane	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10	
Vinyl Chloride	0.2	<0.1	0.2	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	<0.1	ug/l	TM15/PM10	
Bromomethane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM15/PM10	
Chloroethane	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10	
Trichlorofluoromethane	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10	
1,1-Dichloroethene (1,1 DCE)	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10	
Dichloromethane (DCM)	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10	
trans-1-2-Dichloroethene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10	
1,1-Dichloroethane	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10	
cis-1-2-Dichloroethene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10	
2,2-Dichloropropane	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM15/PM10	
Bromochloromethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10	
Chloroform	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10	
1,1,1-Trichloroethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10	
1,1-Dichloropropene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10	
Carbon tetrachloride	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10	
1,2-Dichloroethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10	
Benzene	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	<0.5	ug/l	TM15/PM10	
Trichloroethene (TCE)	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10	
1,2-Dichloropropane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10	
Dibromomethane	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10	
Bromodichloromethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10	
cis-1-3-Dichloropropene	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10	
Toluene	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	<5	ug/l	TM15/PM10	
trans-1-3-Dichloropropene	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10	
1,1,2-Trichloroethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10	
Tetrachloroethene (PCE)	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10	
1,3-Dichloropropane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10	
Dibromochloromethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10	
1,2-Dibromoethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10	
Chlorobenzene	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10	
1,1,1,2-Tetrachloroethane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10	
Ethylbenzene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM15/PM10	
m/p-Xylene	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10	
o-Xylene	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	<1	ug/l	TM15/PM10	
Styrene	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10	
Bromoform	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10	
Isopropylbenzene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10	
1,1,2,2-Tetrachloroethane	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	<4	ug/l	TM15/PM10	
Bromobenzene	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10	
1,2,3-Trichloropropane	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10	
Propylbenzene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10	
2-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10	
1,3,5-Trimethylbenzene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10	
4-Chlorotoluene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10	
tert-Butylbenzene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10	
1,2,4-Trimethylbenzene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10	
sec-Butylbenzene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10	
4-Isopropyltoluene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10	
1,3-Dichlorobenzene	<3	<3	11	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10	
1,4-Dichlorobenzene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10	
n-Butylbenzene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10	
1,2-Dichlorobenzene	<3	<3	4	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10	
1,2-Dibromo-3-chloropropane	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10	
1,2,4-Trichlorobenzene	<3	<3	17	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10	
Hexachlorobutadiene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10	
Naphthalene	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	<2	ug/l	TM15/PM10	
1,2,3-Trichlorobenzene	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	<3	ug/l	TM15/PM10	
Surrogate Recovery Toluene D8	105	106	108	107	106	107	108	107	108	109	<0	%	TM15/PM10	
Surrogate Recovery 4-Bromofluorobenzene	94	93	93	93	92	94	94	94	93	94	<0	%	TM15/PM10	

Please include all sections of this report if it is reproduced

NOTES TO ACCOMPANY ALL SCHEDULES AND REPORTS

EMT Job No.: 21/20047

SOILS

Please note we are only MCERTS accredited (UK soils only) for sand, loam and clay and any other matrix is outside our scope of accreditation.

Where an MCERTS report has been requested, you will be notified within 48 hours of any samples that have been identified as being outside our MCERTS scope. As validation has been performed on clay, sand and loam, only samples that are predominantly these matrices, or combinations of them will be within our MCERTS scope. If samples are not one of a combination of the above matrices they will not be marked as MCERTS accredited.

It is assumed that you have taken representative samples on site and require analysis on a representative subsample. Stones will generally be included unless we are requested to remove them.

All samples will be discarded one month after the date of reporting, unless we are instructed to the contrary.

If you have not already done so, please send us a purchase order if this is required by your company.

Where appropriate please make sure that our detection limits are suitable for your needs, if they are not, please notify us immediately.

All analysis is reported on a dry weight basis unless stated otherwise. Limits of detection for analyses carried out on as received samples are not moisture content corrected. Results are not surrogate corrected. Samples are dried at 35°C ±5°C unless otherwise stated. Moisture content for CEN Leachate tests are dried at 105°C ±5°C.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

Where a CEN 10:1 ZERO Headspace VOC test has been carried out, a 10:1 ratio of water to wet (as received) soil has been used.

% Asbestos in Asbestos Containing Materials (ACMs) is determined by reference to HSG 264 The Survey Guide - Appendix 2 : ACMs in buildings listed in order of ease of fibre release.

Sufficient amount of sample must be received to carry out the testing specified. Where an insufficient amount of sample has been received the testing may not meet the requirements of our accredited methods, as such accreditation may be removed.

Negative Neutralization Potential (NP) values are obtained when the volume of NaOH (0.1N) titrated (pH 8.3) is greater than the volume of HCl (1N) to reduce the pH of the sample to 2.0 - 2.5. Any negative NP values are corrected to 0.

The calculation of Pyrite content assumes that all oxidisable sulphides present in the sample are pyrite. This may not be the case. The calculation may be an overestimate when other sulphides such as Barite (Barium Sulphate) are present.

WATERS

Please note we are not a UK Drinking Water Inspectorate (DWI) Approved Laboratory .

ISO17025 accreditation applies to surface water and groundwater and usually one other matrix which is analysis specific, any other liquids are outside our scope of accreditation.

As surface waters require different sample preparation to groundwaters the laboratory must be informed of the water type when submitting samples.

Where Mineral Oil or Fats, Oils and Grease is quoted, this refers to Total Aliphatics C10-C40.

DEVIATING SAMPLES

All samples should be submitted to the laboratory in suitable containers with sufficient ice packs to sustain an appropriate temperature for the requested analysis. The temperature of sample receipt is recorded on the confirmation schedules in order that the client can make an informed decision as to whether testing should still be undertaken.

SURROGATES

Surrogate compounds are added during the preparation process to monitor recovery of analytes. However low recovery in soils is often due to peat, clay or other organic rich matrices. For waters this can be due to oxidants, surfactants, organic rich sediments or remediation fluids. Acceptable limits for most organic methods are 70 - 130% and for VOCs are 50 - 150%. When surrogate recoveries are outside the performance criteria but the associated AQC passes this is assumed to be due to matrix effect. Results are not surrogate corrected.

DILUTIONS

A dilution suffix indicates a dilution has been performed and the reported result takes this into account. No further calculation is required.

BLANKS

Where analytes have been found in the blank, the sample will be treated in accordance with our laboratory procedure for dealing with contaminated blanks.

NOTE

Data is only reported if the laboratory is confident that the data is a true reflection of the samples analysed. Data is only reported as accredited when all the requirements of our Quality System have been met. In certain circumstances where all the requirements of the Quality System have not been met, for instance if the associated AQC has failed, the reason is fully investigated and documented. The sample data is then evaluated alongside the other quality control checks performed during analysis to determine its suitability. Following this evaluation, provided the sample results have not been effected, the data is reported but accreditation is removed. It is a UKAS requirement for data not reported as accredited to be considered indicative only, but this does not mean the data is not valid.

Where possible, and if requested, samples will be re-extracted and a revised report issued with accredited results. Please do not hesitate to contact the laboratory if further details are required of the circumstances which have led to the removal of accreditation.

Please include all sections of this report if it is reproduced

REPORTS FROM THE SOUTH AFRICA LABORATORY

Any method number not prefixed with SA has been undertaken in our UK laboratory unless reported as subcontracted.

Measurement Uncertainty

Measurement uncertainty defines the range of values that could reasonably be attributed to the measured quantity. This range of values has not been included within the reported results. Uncertainty expressed as a percentage can be provided upon request.

ABBREVIATIONS and ACRONYMS USED

#	ISO17025 (UKAS Ref No. 4225) accredited - UK.
SA	ISO17025 (SANAS Ref No.T0729) accredited - South Africa
B	Indicates analyte found in associated method blank.
DR	Dilution required.
M	MCERTS accredited.
NA	Not applicable
NAD	No Asbestos Detected.
ND	None Detected (usually refers to VOC and/SVOC TICs).
NDP	No Determination Possible
SS	Calibrated against a single substance
SV	Surrogate recovery outside performance criteria. This may be due to a matrix effect.
W	Results expressed on as received basis.
+	AQC failure, accreditation has been removed from this result, if appropriate, see 'Note' on previous page.
>>	Results above calibration range, the result should be considered the minimum value. The actual result could be significantly higher.
*	Analysis subcontracted to an Element Materials Technology approved laboratory.
AD	Samples are dried at 35°C ±5°C
CO	Suspected carry over
LOD/LOR	Limit of Detection (Limit of Reporting) in line with ISO 17025 and MCERTS
ME	Matrix Effect
NFD	No Fibres Detected
BS	AQC Sample
LB	Blank Sample
N	Client Sample
TB	Trip Blank Sample
OC	Outside Calibration Range

