

Remediation Confirmation and Verification Report

Former Clyne Primary School, Clyne.

Introduction

The purpose of this report is to validate the Remediation Strategy that was implemented to protect future site users from volatile contamination. The contamination was identified in the Supplementary Geoenvironmental Investigation produced by Terraforma dated 12th December 2020 for the Former Clyne Primary School, Clyne. This Verification Report summarises the remediation works undertaken and demonstrates that the site has been remediated to an acceptable standard.

Findings from the Supplementary Geoenvironmental Investigation

Contaminants identified as part of the investigation are summarised in Table 4.4:

Table 4.4 Contaminants of Concern

Location	Depth	Contaminant
TP-A	1.50	Naphthalene

The required Mitigation and Remedial Measures are identified in Section 4.3.1.1 Contaminated Soils:

'The impacted soils encountered in TP-A at 1.50m should be excavated and removed for off-site disposal. Additional soils samples should then be taken and tested to confirm the contamination has been suitably removed. Once removed there is negligible risk to site end users from volatile contamination.'

A description of the remediation works undertaken

We designed and implement a Remediation Strategy to eliminate the risk posed by the contaminated soil.

Firstly we produced a Risk Assessment and Method Statement to ensure the safety of Site Engineers working on the project. To support this we demarcated the TP-A area where Naphthalene was detected. The photograph below shows this excavated area demarcated by orange fencing on site.



We reduced the impacted made ground and removed this contaminated soil off site. The contaminated soil was transported by a licenced waste transfer contractor John Jones & Son Ltd. Duty of Care Waste Transfer Note can be found in Appendix A.

The soil was transported and disposed of at a Licenced Waste Disposal Site (Site Licence EPR/VP3095F6). The Waste Transfer Note showing successful disposal can be found in APPEDIX B.

The results of validation testing

Once the reduced impacted made ground was removed off site, we retested the ground. Two separate soil samples were taken in the area. Results from this Soil Sample Tests completed by Decus Research Limited can be found in APPENDIX C.

The test results validates that after the reduced impacted made ground was removed from site. The TP-A area denoted by the Supplementary Geoenvironmental Investigation showed no further Naphthalene present. Therefore the Remediation Strategy had been successful.

Conclusion

The Decus Research Limited Soil Test Results confirms that the site has been remediated to an acceptable standard to protect future site users from volatile contamination . The validation soil testing results demonstrate that remediation has been successful and that the site is now safe for its intended use.

APPENDIX A - Duty of Care Waste Transfer Note

JOHN JONES & SON LTD

HAULAGE CONTRACTORS

Tycroes Farm, Llandello Road, Gorslas, Nr. Llanelli, Carmarthenshire SA14 7LW
Tel: 01269 845106 Fax: 01269 832855 Mobile: 07836 375174

DUTY OF CARE WASTE TRANSFER NOTE

WASTE CARRIER - John Jones & Son Ltd
Tycroes Farm, Llandello Road, Gorslas, Llanelli, Carmarthenshire SA14 7LW
Waste Carrier's Reg. No: CBDU13021

WASTE PRODUCER - Name of Company: _____
Address: STERLING

FIRST TRANSFER POINT (Address where waste is generated) -
CLYNE PRIMARY SCHOOL

TIPPING DESTINATION - Name of Site:
Address: NEAL SOILS CARDIFF

Tip organised by customer? ☐ Y ☐ N

DESCRIPTION OF WASTE - (Material carried loose)

Waste Codes	Quantity	Lorry Reg:	SIC Codes	Quantity
oil & Stones	17-05-04 ☒	CU23BUP	Construction of Buildings	41-20 ☐
and core	17-01-07 ☐		Road Construction & Repair	42-11 ☐
crete	17-01-01 ☐		Excavation	45-11 ☐
ac	17-03-02 ☐		Foundations (Construction)	45-25 ☐
Non Hazardous			Other	<u>5</u>

TRANSFER OF WASTE - By signing below I confirm that I have fulfilled my duty to apply the waste hierarchy as required by Regulation 12 of the Waste (England & Wales) Regulations 2011.

25.1.24 Multiple Transfer From _____ To _____

Name & Company: _____ Signature: _____

Name & Company: _____ Signature: _____

Name & Company: _____ Signature: _____

JOHN JONES & SON LTD

HAULAGE CONTRACTORS

Waste Carrier No. CBDU13021
Tycroes Farm, Llandello Road, Gorslas, Nr. Llanelli
Carmarthenshire SA14 7LW
T: 01269 845106 F: 01269 832855 M: 07836 375174 / 07800 965058
E: info@haulage-plant-hire.co.uk

DELIVERY NOTE DUTY OF CARE TRANSFER NOTE

No. 72098

Driver: Robinson Date: 25.1.24
Reg. No. CU23BUP

Customer: STERLING

Collect Site: CLYNE PRIMARY SCHOOL

Delivery Site: NEALS SOILS

	TIME START	BREAK	TIME FINISH	TRAVELLING TIME	TOTAL TIME
TOP SOIL					
RECYCLED AGGREGATE					
OTHER					

No. of Loads: 1x8 Material: NON HAZ SOIL/STONES

Signature: [Signature] Print Name: _____

Standing Time: _____

APPENDIX B - Waste Transfer Note

NEAL
SOIL SUPPLIERS LTD

Advice/Transfer Note/Waste Description
NEAL SOIL SUPPLIERS LIMITED
Neal Soil Suppliers Limited, Atlantic Ecopark,
Newton Road Rumney
Cardiff
CF3 2EJ
Site Licence : EPR/VP3095F5
Phone : 02920 797635
Web : WWW.NEAL-SOILS.CO.UK
SIC Code 2007 : 38110

VAT Reg No.: 661906106
Ticket No.: 386387
In / Out: In
Ticket Date: 25/01/2024 14:45:48
Vehicle Reg: CU23BNF
Vehicle Type:
Haulier Name: OWN
Carrier Reg: CBDU
Container:
Account Addr: NS-JOHNJ
John Jones & Son Ltd
SPERLING
NE PRIMARY SCHOOL, CLYNE
SA114BW

2007):
Contact Name:
Contact Tel:
Order No:
Transfer No: 72098
Skip Ticket:
Area: Neath Port Talbot
Products: Unit Qty
NON-HAZARDOUS SOIL AND KG 16.1
STONE
17.05.04

	Weight	Seq. No.	Date	Time
Gross	29320		25/01/2024	14:45
Tare	13203		25/01/2024	14:45
Net	16120			

I confirm that I have fulfilled my duty to apply the
waste hierarchy as required by Regulation 12 of
the waste regulations 2011

Driver Name

Weightbridge Operator JohnH

APPENDIX C - Soil Sample Test completed by Decus Research Limited



Jac Cullen
Sterling Construction Ltd
Llys y Barcud
Heol Parc Mawr
Crosshands Business Park
Carmarthen

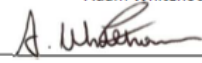
Decus Research Limited
ExCAL House
Capel Hendre Industrial Estate
Ammanford
Carmarthenshire
SA18 3SJ

Tel: 01269 844558
Fax: 01269 841867
Email: info@decusuk.co.uk

Certificate Number: 8025

Project/Site name:	Sterling Construction Ltd	Sampling Date(s):	18/07/2024
Quotation Number:	-	Samples Received:	18/07/2024
Order Number:		Date Instructed:	18/07/2024
Number of Samples:	2	Sampled By:	Client
Number of Tests:	1		
Sample Matrix:	Soil	Analysis Commenced:	18/07/2024
		Analysis Completed:	31/07/2024
		Report Issued:	31/07/2024

Amendment Records:
None

Approved by: Adam Whitehouse
Signature: 
Title: Laboratory Manager

Sample 1 of 2						
Laboratory Sample Number:		180724007				
Client Sample Reference:		Sample 01				
Deviation Codes:						
Sample Matrix:		Soil				
Specific Matrix:		Soil				
Sample Date & Time:		18/07/2024				
Sample Received:		18/07/2024				
Method Code	Determinand	Units	Accreditation Status	Testing Commenced	Testing Completed	Result
ORG-S02	Polycyclic Aromatic Hydrocarbon (Total)	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<2.0
ORG-S02	Naphthalene	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<0.10
ORG-S02	Acenaphthylene	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<0.10
ORG-S02	Acenaphthene	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<0.10
ORG-S02	Fluorene	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<0.10
ORG-S02	Phenanthrene	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<0.10
ORG-S02	Anthracene	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<0.10
ORG-S02	Fluoranthene	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<0.10
ORG-S02	Pyrene	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<0.10
ORG-S02	Benzo(a)anthracene	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<0.10
ORG-S02	Chrysene	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<0.10
ORG-S02	Benzo(b)fluoranthene	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<0.10
ORG-S02	Benzo(e)pyrene	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<0.10
ORG-S02	Indeno(1,2,3-cd)pyrene	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<0.10
ORG-S02	Benzo(ghi)perylene	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<0.10
ORG-S02	Dibenzo(ah)anthracene	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<0.10

Sample 2 of 2						
Laboratory Sample Number:		180724008				
Client Sample Reference:		Sample 02				
Deviation Codes:						
Sample Matrix:		Soil				
Specific Matrix:		Soil				
Sample Date & Time:		18/07/2024				
Sample Received:		18/07/2024				
Method Code	Determinand	Units	Accreditation Status	Testing Commenced	Testing Completed	Result
ORG-S02	Polycyclic Aromatic Hydrocarbon (Total)	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<2.0
ORG-S02	Naphthalene	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<0.10
ORG-S02	Acenaphthylene	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<0.10
ORG-S02	Acenaphthene	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<0.10
ORG-S02	Fluorene	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<0.10
ORG-S02	Phenanthrene	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<0.10
ORG-S02	Anthracene	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<0.10
ORG-S02	Fluoranthene	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<0.10
ORG-S02	Pyrene	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<0.10
ORG-S02	Benzo(a)anthracene	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<0.10
ORG-S02	Chrysene	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<0.10
ORG-S02	Benzo(b)fluoranthene	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<0.10
ORG-S02	Benzo(e)pyrene	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<0.10
ORG-S02	Indeno(1,2,3-cd)pyrene	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<0.10
ORG-S02	Benzo(ghi)perylene	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<0.10
ORG-S02	Dibenzo(ah)anthracene	µg.kg ⁻¹	N	18/07/2024	31/07/2024	<0.10

* Accreditation Status

Tests marked 'A' hold UKAS accreditation

Tests marked 'N' do not hold UKAS accreditation

Tests marked 'S - A' were sub-contracted to an approved laboratory with accreditation on the specific method

Tests marked 'S - N' were sub-contracted to an approved laboratory without accreditation on the specific method

Any comments or interpretations are beyond the scope of UKAS accreditation

Sample ID	Decus Sample ID	Deviation Codes	Summary
No Compliance Deviations for any samples have occurred			

Analytical Method	Method Code	Accreditation Status
Determination of PAHs in soilby GC-MS (In-house method)	ORG-502	None

Key and Comments:

Any comments or interpretations made by Decus Research Ltd are beyond the scope of UKAS accreditation.

Microbiological water samples will be disposed of upon completion of testing.

Chemistry water samples will be retained for a period of two weeks following the date of the issued certificate.

Chemistry soil samples will be retained for a period of one month following the date of the issued certificate.

All results only relate to the items tested as received.

This report supersedes any previous versions issued by the laboratory.

A full list of determinants relating to abbreviations such as PAHs, VOCs, SVOCs, PCBs etc. is available upon request.

Where results have been labelled as deviating for any reason, the data may not be representative of the sample at the point of sampling:

 /JA/: Date of Sampling not supplied, results may be compromised.

 /JB/: Sample tested outside the recommended stability times, results may be compromised.

 /JC/: Samples not received in appropriate containers, results may be compromised.

 /JD/: Broken Container, results may be compromised.

 /JE/: Transportation of storage temperature is outside the recommended range, results may be compromised.

 /JF/: Time of sample taken not recorded, microbiological results may be compromised.

 /JG/: High levels of non-target bacterial growth present which could have suppressed the growth of the target species.

 /JH/: Correct incubation conditions not achieved, results may be compromised.

 /JM/: High levels of non-target bacterial growth present which could have suppressed the growth of the target species.

 /JT/: Transportation storage temperature is outside the recommended range, results maybe compromised.

 /JU/: Insufficient Sample.

 /JV/: Unsuitable Sample.

< "Less Than"

> "Greater Than"

cfu "colony forming units"

Where any sub-contracted results have been noted as deviating by the laboratory in question, their deviation codes will be applied and detailed.

Accreditation statements are correct at the time of issue.

This report shall not be reproduced in part without the approval of Decus Research Ltd, nor used in any way as to lead to misrepresentation of the results or their implications.

Uncertainties of measurement values are available upon request.

***** END OF REPORT*****

* Accreditation Status
Tests marked 'A' hold UKAS accreditation
Tests marked 'N' do not hold UKAS accreditation
Tests marked 'S - A' were sub-contracted to an approved laboratory with accreditation on the specific method
Tests marked 'S - N' were sub-contracted to an approved laboratory without accreditation on the specific method
Any comments or interpretations are beyond the scope of UKAS accreditation