

Ref: 1C0104645/190201/L3 Date: 1st February 2019

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Additional Geo-Environmental Assessment and Addendum to Remediation Strategy – Beckenham Place Park, Beckenham Hill Road, BR3 1SY

1.0 Introduction

Resource and Environmental Consultants Ltd (REC) has been instructed by London Borough of Lewisham ('the Client') to undertake an additional phase of soil sampling and analysis at Beckenham Place Park (BPP).

1.1 Previous Works

REC has previously completed a detailed Geo-Environmental Site Assessment for asbestos encountered within an infilled lake elsewhere at BPP (report ref. 1CO104645/P3/R3, dated October 2018). A Remediation Strategy was subsequently prepared outlining the required methodology to ensure the safe, cost effective, and regulatory compliant redevelopment of the site (report ref. 1CO104645/p4/r3, dated October 2018).

1.2 Scope and Objectives

During excavation of soils underlying former tennis courts at BPP, suspected asbestos cement was identified by construction workers. Works were stopped and REC were consulted to confirm the identification and to assess the presence of further Asbestos Containing Material (ACM) within excavated soils.

The scope therefore comprised:

- Obtain samples of suspected asbestos cement and stockpiled soils;
- > Confirm the presence or absence of asbestos in samples taken; and
- Provide recommendations regarding appropriate handing and remediation of impacted material, as an addendum to the existing Remediation Strategy.

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2.0 Soil Sampling and Chemical Laboratory Analysis

A REC engineer attended site on 10th January 2019 to obtain samples of soils from 2no. stockpiles of material excavated from beneath the former tennis courts. Composite samples from across the stockpiled material were obtained to provide representative analysis of the soils.

An overview site layout and sample location plan is given as Figure 2.1. A detailed site location plan and a sampling location plan (ref's 1CO104645p7-001 and 1CO104645p7-002 respectively) are presented as Attachment 1.

A total of 3no. soil samples were collected from the stockpiled material (SP1 ES701A, SP2 ES703, SP2 ES706). An additional sample comprising the suspected asbestos cement (SP1 ACM1) was also obtained for identification. Select site photographs are given as Attachment 2.

Samples were submitted to a Concept Life Sciences, Braintree for the asbestos identification. The results of this testing are presented as Section 3 and discussed as Section 4.



Figure 2.1 Site Layout and Sample Locations



3.0 Results of Laboratory Chemical Analyses

3.1 Asbestos Identification

A summary of the asbestos identification testing is given as Table 3.1. Laboratory test certificates are given as Attachment 3.

Determinand	Detected	Fibre Quantification	Location	Primary Pathway	Assessment	
	N.D	N.D	SP1 ES701A			
Asbestos	N.D	N.D	SP2 ES703	1	No Further Action	
	N.D	N.D	SP2 ES706	1		
	D	N/A – Bulk Product	SP1 ACM1		See Discussion	

Table 3.1 Summary of Assessment Residential End Use

Key for	Key for Table				
[mc]	Maximum Concentration Recorded				
D.	Detected				
N.D.	None Detected (Limit of Detection = <0.001%)				
Primary Pathways					
1	Inhalation of dust (background and indoor);				

The bulk sample (SP1 ACM1) was confirmed to contain chrysotile asbestos bound in cement. No loose fibres were identified in the sampled stockpiled soils.

4.0 Discussion

The main exposure pathway for asbestos is dust ingestion. Given that only asbestos bound in cement was identified, with no loose fibres detected in the soils, the risk is considered to be reduced. Due to the heterogeneous nature of the stockpiled material it is considered likely that further ACM and or fibres may be present.

In accordance with Environment Agency technical guidance WM3¹, all soils with identifiable pieces of ACM must be considered as hazardous waste without interim remedial measures.

¹ Environment Agency (2015) Guidance on the classification and assessment of waste, WM3.



5.0 Recommendations

A detailed methodology for remediation of asbestos impacted soils elsewhere at BPP has previously been prepared by REC and approved by the regulatory authority (Remediation Strategy: report ref. 1CO104645/p4/r3, dated October 2018). REC recommends that the same strategy be adopted for the impacted soils on the tennis court site, following hand picking of visible ACM.

6.0 Summary of Remediation Requirements

The remediation strategy for the Site will therefore comprise:

- Phased excavation, hand picking of visible ACM and transport of soils to receiving location elsewhere in Beckenham Place Park as part of current MMP which will need updating accordingly.;
- REC understands that the previous designated receiving location (B1 on drawing 1CO104645p7-003 in Attachment 1) is to be used for soils excavated from the tennis court site.
- Update to the existing MMP and encapsulation soils once screened; and
- Independent verification of the works and production of a validation report.

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We trust this letter and its enclosures are clear. Should you have any further queries please contact the undersigned.

Yours sincerely, For and on behalf of REC

Hana Foggin Geo-Environmental Consultant

Ged Sojka Operations Director

Attachment 1 – Drawings 1CO104645p7-001 Site Location Plan 1CO104645p7-002 Sampling Location Plan 1CO104645p7-003 Asbestos Receiving Site Attachment 2 – Site Photographs Attachment 3 – Chemical Testing Results



Geo-Environmental Assessment Beckenham Place Park January 2019 1CO104645/190131/L2

Attachment 1 Drawings











Geo-Environmental Assessment Beckenham Place Park January 2019 1CO104645/190131/L2

Attachment 2 Site Photographs

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Plate 1: Overview of former tennis court with soils cleared.



Plate 2: Stockpile of excavated soils where a single fragment of ACM has been identified.



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Attachment 3

Chemical Testing Results

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Concept Life Sciences

Certificate of Analysis

3 Crittall Drive Springwood Industrial Estate Braintree Essex CM7 2RT Tel : 01376 560120 Fax : 01376 552923

Report Number: 795086-2

Date of Report: 21-Jan-2019

Customer: Resource Environmental Consultants Ltd Capital Business Centre Unit 19a Carlton Road South Croydon CR2 0BS

Customer Contact: Mr Richard Hodkin

Customer Job Reference: 1CO104645 Customer Purchase Order: 006114 Customer Site Reference: Beckenham Place Park Date Job Received at Concept: 14-Jan-2019 Date Analysis Started: 14-Jan-2019 Date Analysis Completed: 21-Jan-2019

The results reported relate to samples received in the laboratory and may not be representative of a whole batch.

This report should not be reproduced except in full without the written approval of the laboratory Tests covered by this certificate were conducted in accordance with Concept Life Sciences SOPs

All results have been reviewed in accordance with Section 25 of the Concept Life Sciences, Analytical Services Quality Manual



Report checked and authorised by : Aislinn Arthey Customer Service Advisor Issued by : Aislinn Arthey Customer Service Advisor

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Concept Reference:	795086					
Project Site:	Beckenha	m Place P	ark			
Customer Reference:	1CO1046	45				
Soil Miscellaneous	Analysed	as Soil				
		Concep	t Reference	795086 001	795086 002	795086 003
Customer Sample Reference				SP1 ES701A	SP2 ES703	SP2 ES705
		Da	ate Sampled	10-JAN-2019	10-JAN-2019	10-JAN-2019
Matrix Class				Fill	Fill	Fill
Determinand Method	Test Sample	LOD	Units			
Asbestos ID T27	A40			Asbestos not detected	Asbestos not detected	Asbestos not detected

Concept R	795086					
Pro	Beckenha	Beckenham Place Park				
Customer R	1CO1046	1CO104645				
Bulk Product Miscellaneous		Analysed	as Bulk Pr	÷,		
			Concep	t Reference	795086 004	
		Customer Sample Reference			SP1 ACM1	
			Da	ate Sampled	10-JAN-2019	
Determinand	Method	Test Sample	LOD	Units		
Asbestos	T27	AR		a	Chrysotile Detected	
				19.11	Asbestos Cement	

Index to symbols used in 795086-2

Value	Description
A40	Assisted dried < 40C
AR	As Received
S	Analysis was subcontracted
U	Analysis is UKAS accredited

Notes

Asbestos subcontracted to REC Limited

Method Index

Value	Description
T27	PLM

Accreditation Summary

Determinand	Method	Test Sample	LOD	Units	Symbol	Concept References
Asbestos ID	T27	A40			SU	001-003
Asbestos	T27	AR			SU	004