



Our Ref: E21/7893/MD/03A

Date: 18 December 2025

**FAO Mr M Graves**

c/o Marcus Walsh  
Martin Walsh Architectural

Dear Sir,

**Re: Remediation Method Statement for Chairbarrows Farm, Whitechapel Road, Cleckheaton**

**1. INTRODUCTION**

- 1.1 Haigh Huddleston & Associates have been requested by Martin Walsh Architectural on behalf of Mr M Graves to provide a remediation statement for the proposed development at Chairbarrows Farm, Whitechapel Road, Cleckheaton.
- 1.2 The purpose of the document is to specify the remediation philosophy for the site and to specify the fill materials that are required for the controlled backfilling and capping of the site.
- 1.3 Site investigation works have been undertaken previously and is detailed in HHA Report E21/7893/R001 dated April 2022. Following the investigation works, six rounds of gas monitoring were undertaken in 2022 and are documented in HHA letter reference E21/7893/JF/001 dated 6<sup>th</sup> May 2022. These reports have been utilised to compile this Remediation Statement.

**2. RESULTS OF THE INVESTIGATION**

- 2.1 Generally, the site investigation works proved a shallow depth of topsoils, made ground and clays overlying sandstone which was encountered at 0.3-1.5m below existing ground levels. In the lower east of the site, this was proved to be underlain by a layer of clay.
- 2.2 The made ground was predominantly beneath the hardstanding, with some fill material encountered beneath the topsoil in the western field.
- 2.3 Only the fill material in the western field recorded elevated levels of contaminants with an elevated level of lead of 250 mg/kg. No asbestos was recorded in the samples taken from site.
- 2.4 From the gas monitoring undertaken in 2022, No methane was recorded in any of the boreholes, and a maximum Carbon Dioxide level of 3.3% was recorded on site. No flow rates have been detected on site. The site was therefore classified as CS1 by BS 8485:2015+A1:2019 Table 2.
- 2.5 The Lead hotspot is shown on the plan attached to the rear of this report.

## **2.6 REVISED CONCEPTUAL MODEL**

- 2.6.1 In HHA Report E121/7893/R001 dated April 2022, it was noted that the site had been used for farming since 1892, with only farm buildings constructed on site. A colliery was located to the south west from 1905 until 1933 and was partially redeveloped for residential and commercial use.
- 2.6.2 Site investigation works have proved an isolated contamination hotspot of Lead in fill material located in the western field. No other elevated levels of contaminants, or asbestos, were recorded in the samples taken from site.
- 2.6.3 Similarly, the gas monitoring undertaken on the existing site proved low levels of carbon dioxide which were not considered a risk to future site residents and the site was therefore classified as CS1 by BS 8485:2015+A1:2019.
- 2.6.4 The development of the site therefore exposes the developers and future residents to the following risks:
- i) Contamination hotspot identified at TP01  
The risk to the developers and future site residents is therefore considered to be low and remediation measures will be required to address there.

## **2.7 REMEDIATION OBJECTIVES**

- 2.7.1 From the above, the remediation works required can be stated as follows:
- Removal of the material from the Lead contamination hotspot at TP01 to a licensed waste facility.

## **3. REMEDIAL PROPOSALS**

### **3.1 REMOVAL OF CONTAMINATION HOTSPOT**

- 3.1.1 The Lead contaminated hotspot at TP01 recorded an elevated level of lead of 250 mg/kg compared to the tier 1 trigger level of 200 mg/kg, an exceedance of 25%.
- 3.1.2 The lead containing fill material should be excavated to expose the underlying clay strata and the contaminated material removed from site to a suitable licensed waste facility.
- 3.1.3 A minimum of five samples (one from each side and one from the base) should be taken from the perimeter and base of the excavation and submitted for analysis to determine if any further asbestos or contaminants are present. Dependent on the size of the excavation, additional samples should be taken on a 10m grid spacing. Should no contaminants be proved in the new samples, the contaminated hotspot has been successfully removed.
- 3.1.4 Should any of the samples prove positive for contaminants, additional material should be removed from site, and further samples should be taken and submitted for analysis. This process should be repeated until all samples prove clean for contaminants when compared to the tier 1 trigger levels attached to the rear of this report.

- 3.1.5 When the material is removed from site, waste transfer tickets should be retained for inclusion in a final validation report.

### **3.2 FURTHER TOPSOIL TESTING**

- 3.2.1 The existing topsoil on site should be scraped and stockpiled on site behind protective fencing to prevent cross contamination. The topsoil should be screened to remove organic and inorganic waste materials. Testing should be undertaken at a rate of 1 sample per 250m<sup>3</sup>, or minimum of three samples, of stockpiled material to confirm it is suitable for re-use on site prior to being relaid.
- 3.2.2 Based on a total site area of 3655m<sup>2</sup>, and assuming 50% soft landscaping with 300mm topsoil depth, this equates to approximately 550m<sup>3</sup> of topsoil required. We would therefore recommend that 3 further soil samples are required to determine the materials suitability for re-use on site.
- 3.2.3 The results of the chemical analysis should be compared to the tier 1 trigger levels to confirm the suitability of the topsoil to be re-used on site.
- 3.2.4 It is not anticipated that further clean topsoil will need to be imported to site.

### **4. REMEDIATION VALIDATION**

- 4.1 Photographic evidence showing the removal of the lead contaminated infill material along with the waste transfer tickets of the removal of the material from site to be compiled into a validation report confirming the contamination has been remediated.
- 4.2 Should the topsoil prove suitable to re-use on site, a copy of the chemical analysis results along with covering letter confirming the same should be submitted to the local authority and the warranty provider to discharge the outstanding contaminated land conditions.
- 4.3 If suspected contaminated material is found during remediation works, the independent consultant must be contacted and the extent of it must be established by further testing. All contaminated material must be removed from the site and replaced by equivalent uncontaminated material.
- 4.4 Should the existing topsoil prove unsuitable for use, clean material will need to be imported to site to provide a growing medium to soft landscaped areas. All imported material to be used for the growing medium should be uncontaminated and comply with the specification for Engineering Fill. All imported material should be tested for the full range of contaminants listed to the rear of this report. Only material found to be below published trigger levels should be deemed uncontaminated and accepted for use on site.
- 4.5 If the imported material is from a Greenfield site, a minimum of 3 samples or 1 per 250m<sup>3</sup> of imported material should be taken for testing, whichever is greater. If it is from a brownfield site, a minimum of 6 samples, or 1 per 100m<sup>3</sup> of imported material should be taken for testing, whichever is greater. Material provided by a commercial supplier should be certified to the same level of testing, with the certificate less than two months old.

- 4.6 All imported certified material should be placed immediately. If this is not possible, or the material is not certified and sampling is to be carried out prior to being laid, it should be securely stored on site prior to use to prevent possible contamination from any materials on site.
- 4.7 Following completion of the removal of contaminated material on site, and the further testing of the topsoil, the details, all site records should be consolidated into a validation report. The report shall be completed in accordance with 'Yorkshire and Lincolnshire Pollution Advisory Group: Verification Requirements For Cover Systems'.
- 4.8 Clean material imported should be visually inspected to confirm it doesn't contain unsuitable materials (i.e. glass, brick, etc)

We trust that the above is sufficient for your current requirements, however should you need any further information please do not hesitate to contact me direct.

Yours faithfully,

MICHAEL DEAN BSc (Hons) HND



Rev B. Area to be developed highlighted  
 Rev A. Amended to suit Site Investigation Works.

27.09.22 MD  
 16.02.22 JF



**Haigh Huddleston & Associates**

Civil Structural Engineering Consultants

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<b>Client</b>				
MICHAEL GRAVES				
<b>Project</b>				
294 - 298 WHITECHAPEL ROAD, CLECKHEATON				
<b>Detail</b>				
TRIAL PIT LOCATION PLAN				
<b>Scale</b>	<b>Dwn</b>	<b>Chkd</b>	<b>Date</b>	<b>Dwg No.</b>
1:500	IC	ML	18M-22	521/7203/003 01D

**TIER 1 SOIL GUIDANCE VALUES FOR USE IN DOMESTIC GARDENS**  
**(WITH PLANT UPTAKE)**

<u>CONTAMINANT</u>	<u>ICRCL – TTV / DEFRA – SGV</u> <u>MG/KG</u>
<b>Arsenic</b>	37 (4)
<b>Cadmium</b>	22 (4)
<b>Chromium</b>	130 (2)
<b>Lead</b>	200 (4)
<b>Mercury</b>	40 (1,5)
<b>Selenium</b>	250 (1)
<b>Copper</b>	2400 (1)
<b>Nickel</b>	180 (1)
<b>Zinc</b>	3700 (1)
<b>Cyanide (total)</b>	25
<b>Sulphate</b>	0.24% (3)
<b>Sulphide</b>	250
<b>Thiocyanate</b>	50
<b>PAH (Total)</b>	40
<b>TPH (Total)</b>	250
<b>Phenols</b>	280 (1)
<b>PH</b>	6-8
<b>Asbestos</b>	No fibres present

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- (2) DEFRA CLR SGV's withdrawn used for initial comparison
- (3) BS 8110 1985 Table 6.1
- (4) Category 4 Screening Level
- (5) Unless there is considered to be historical site usage that would result in elemental and methylmercury compounds to be present, the inorganic mercury SGV is used as this is the most prevalent for of mercury present in the natural environment.

**TIER 1 SOIL GUIDANCE VALUES FOR USE IN DOMESTIC GARDENS WITH  
PLANT UPTAKE (SPECIATED PAH)**

<u>CONTAMINANT</u>	<u>SCREENING CRITERIA FOR PAH (mg/kg)</u>		
	<u>1% SOM</u>	<u>2.5% SOM</u>	<u>6% SOM</u>
<b>Acenaphthlene</b>	210 (1)	510 (1)	1100 (1)
<b>Acenaphthylene</b>	170 (1)	420 (1)	920 (1)
<b>Anthracene</b>	2400 (1)	5400 (1)	11000 (1)
<b>Benzo[a]anthracene</b>	7.2 (1)	11 (1)	13 (1)
<b>Benzo(a)pyrene</b>	5 (2)	5 (2)	5 (2)
<b>Benzo[b]fluoranthene</b>	2.6 (1)	3.3 (1)	3.7 (1)
<b>Benzo[ghi]perylene</b>	320 (1)	340 (1)	350 (1)
<b>Benzo[k]fluoranthene</b>	77 (1)	93 (1)	100 (1)
<b>Chrysene</b>	15 (1)	22 (1)	27 (1)
<b>Dibenzo[ah]anthracene</b>	0.24 (1)	0.28 (1)	0.3 (1)
<b>Fluoranthene</b>	280 (1)	560(1)	890 (1)
<b>Fluorene</b>	170 (1)	400 (1)	860 (1)
<b>Indeno[123-cd]pyrene</b>	27 (1)	36 (1)	41 (1)
<b>Naphthalene</b>	2.3 (1)	5.6 (1)	13 (1)
<b>Phenanthrene</b>	95 (1)	220 (1)	440 (1)
<b>Pyrene</b>	620 (1)	1200 (1)	2000 (1)

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(2) Category 4 Screening Level

**LQM S4UL SCREENING VALUES FOR SPECIATED TOTAL TPH**  
**(RESIDENTIAL WITH PLANT UPTAKE 1% SOM)**

<b>Petroleum Hydrocarbons</b>	<b>LQM S4UL Screening Values (mg/kg)</b>
<b>Aliphatics</b>	
C5-C6	42
C6-C8	100
C8-C10	27
C10-C12	130 (38)
C12-C16	1100 (24)
C16-C35	65000 (8.48)
<b>Aromatics</b>	
C5-C7	70
C7-C8	130
C8-C10	34
C10-C12	74
C12-C16	140
C16-C21	260
C21-C35	1100

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