

Materials Management Plan (MMP)

Clarendon Road Gasworks, Phase 3

**Mary Neuner Road
Hornsey
London
N8 0JU**



	Print Name	Position	Signature
Author	Jack Holliday	Remediation Scientist	
Checked by	Tom Simpson	Technical Manager	
Approved by			

Revision History				
Document No.	Revision No.	Issue Date	Author	Description of Modifications
001	0	27/04/2020	JH	First issue
002	1	22/09/2020	AH	Second Issue

Sign off by Project Manager	Print Name	Signature	Date
	Eoin Lawless		

APPENDICES

Appendix A Materials Management Plan (MMP) Form - October 2014

Appendix B Figures & Plans

- I. Site Location Plan: CG3-KRE-X-000-XX-M2-CE-0011 – Site Location Plan
- II. Environmental Monitoring Stations and Indicative work locations: CG3-KRE-X-000-XX-M2-CE-0012
- III. Site Surrounding Receptors: CG3-KRE-X-000-XX-M2-CE-0013
- IV. Gas Holder 3 pile arising fill area W257-KLB-DD-ZZ-DR-DR-DM-14-0049-GH3

Appendix C Regulatory Liaison

- I. Planning Conditions - HGY/2017/3117

Appendix D Records & Logs

- I. Stockpile register
- II. Import Log
- III. Export log

Appendix E Referenced Documents

- I. Human Health DQRA – W257-ATK-DD-ZZ-RP-EN-01-0003
- II. Controlled Waters DQRA – 5192204_P3_CWDQRA
- III. Remediation Strategy – W257-ATK-DD-ZZ-RP-EN-01-0004
- IV. Remediation Method Statement – W257-ATK-DD-ZZ-RP-EN-01-0005

Appendix A

Materials Management Plan (MMP) Form - October 2014

Materials Management Plan (MMP) Form - October 2014

This form should be completed once the lines of evidence have been marshalled in relation to suitability for use, certainty of use and quantity required.

The answers to the questions posed within this form, together with the supporting information will constitute the MMP and must be provided to the Qualified Person.

A Qualified Person may comment on draft versions of this MMP, but will not complete the Declaration until all the relevant documents, demonstrating lines of evidence have been provided for each site.

The person / organisation who will pay the Declaration fee should confirm that they have read and understand the Terms and Conditions relating to the payment of the Declaration fee to CL:AIRE. These can be found on the CL:AIRE website.

The person / organisation agreeing to pay the Declaration Fee - Name, organisation and contact details inc. email address -	Joe Jackson Keltbray Remediation, St Andrews House, Portsmouth Road, KT10 9TA Joe.Jackson@keltbray.com
--	---

✓ I confirm I have read and understood the Terms & Conditions.

Each question must be answered. If the question is not applicable please state this and provide a brief explanation.

1. Specify the scenario to which this MMP relates, as described in the Definition of Waste: Development Industry Code of Practice (DoW CoP) (1, 2, 3 or 4):

- ✓ 1. Reuse on the Site of Origin
☐ 2. Direct Transfer of clean naturally occurring soil / mineral materials
☐ 3. Cluster Project
☐ 4. Combination of any of the above

In the case of a combination of reuse scenarios, please describe it below (e.g. (i) Reuse on Site of Origin and Direct Transfer of clean naturally occurring unpolluted soils, (ii) Reuse on the Site of Origin with Direct Transfer of clean naturally occurring soil to x number of development sites etc: (NB: A Declaration is required for reuse on the Site of Origin and for any 2 site arrangement i.e. there is no facility for a combination Declaration)

2. Organisation and name of person preparing this MMP	Jack Holliday Keltbray Remediation St Andrew's House, Portsmouth Road, Esher, Surrey, KT10 9TA Jack.Holliday@Keltbray.com
---	--

Document Control

Date issued	15/04/2020
Revision date	22/09/2020
Summary of revision 1	Addition of pile arising volume to material reuse on site.
Summary of revision 2	Not Applicable

Insert additional lines to the table above for any subsequent revisions.

Note - revisions to the MMP do not trigger an additional Declaration by a Qualified Person, unless an additional site is added to the project.

Revisions to the MMP must be recorded and summarised in the Document Control box above.

Site Details

3. Site / Project name(s)	Clarendon Road Phase 3 Former Hornsey Gasworks Mary Neuner Road Wood Green London N8 0JU
Reuse / receiving site name :	As above
Donor site name (if Direct Transfer)	Not Applicable

Landowners

4a. Name of Landowner(s) (full address and contact details) – where excavated materials are to be reused	St William Homes LLP, Berkeley House, 19 Portsmouth Road, Cobham, Surrey, KT11 1JG
4b. Name of Landowner(s) (full address and contact details) – where excavated materials are arising from	St William Homes LLP, Berkeley House, 19 Portsmouth Road, Cobham, Surrey, KT11 1JG

Summary and objectives

5a. Provide a brief description of the planned project and how excavated materials are to be reused.	The project is the redevelopment of the Former Hornsey Gasworks. This MMP relates to the enabling works and remediation for the construction of Phase 3. The works include break out, excavation, piling, crushing, and screening, stabilising and validating the site. As part of this, material from excavations will be reused on site to provide the required levels. Material exceeding the reuse criteria will be stabilised prior to reuse. In addition to excavated materials, piling arisings will be reused on site to meet the required levels and reduce imported material and traffic movement.
---	---

General Plans and Schematics

6. Attach a location plan for the site(s) and a plan of the site(s) which identifies where different materials are to be excavated from, stockpile locations (if applicable), where materials are to be treated (if applicable) and where materials are to be reused.	Plan Document Reference(s): II. Environmental Monitoring Stations and Indicative work locations: CG3-KRE-X-000-XX-M2-CE-0012
7. Attach a schematic of proposed materials movement. Where there is only one source area and one placement area briefly describe it. For all other projects a schematic is required.	Description & Schematic Document Reference: II. Environmental Monitoring Stations and Indicative work locations: CG3-KRE-X-000-XX-M2-CE-0012

Parties Involved and Consultation – if more than one party please provide additional details for them and identify the location that they will be working e.g. where a site is zoned

8a. Main earthworks contractor(s) (full address and contact details) – Where excavated materials are to be reused	Keltbray Remediation St Andrews House, Portsmouth Road, Esher, KT10 9TA Jack.Holliday@keltbray.com
8b. Main earthworks contractor(s) (full address and contact details) - Where excavated materials are arising from	Keltbray Remediation St Andrews House, Portsmouth Road, Esher, KT10 9TA Jack.Holliday@keltbray.com
9. Treatment contractor(s) (full address and contact details) – for treatment on site of origin, or at a Hub site within a fixed STF / Cluster Project	Keltbray Remediation St Andrews House, Portsmouth Road, Esher, KT10 9TA Jack.Holliday@keltbray.com
10. Where wastes and materials are to be transported between sites, provide details of the transport contractor(s) (full address, contact details and waste carriers registration details (if applicable))	Not Applicable
11. Provide Local Authority contact details (full address and named contacts) where excavated materials are to be reused	Commercial Environmental Health Level 1 North - River Park House 225 High Road Wood Green N22 8HQ

12a. For the site where materials are to be reused and for Hub Site locations provide Environment Agency contact details (full address and named contacts):	Environment Agency, Alchemy Office, Bessemer Road, Welwyn Garden City, Herts, AL7 1HE
<i>For all Cluster Projects:</i> 12b. Attach any relevant documentation from the EA relating to the excavation and reuse of the materials to demonstrate no objection to the proposals (see 3.37 of DoW CoP) If the EA has not been consulted please explain why (see paragraph 3.39 of the DoW CoP).	Not Applicable

Lines of Evidence

There is no one single factor that can be used to decide that a substance or object is waste, or when it is, at what point it ceases to be waste; as complete a picture as possible has to be created.

The following sections require completion to ensure the correct decision is made.

If a requested item is not relevant it is important to clearly state why this is so (e.g. no planning permission required because permitted development status exists).

Suitable for use criteria

13. Please describe or provide copies of the required specification(s) for the materials to be reused on each site.	Phase 3, Clarendon Road, Hornsey, Remediation Strategy, Atkins, February 2020. 5192204/P3_RemStrat 2.0
<i>Where contamination is suspected or known to be present</i> 14a. Please provide copies of or relevant extracts from the risk assessment(s) that has been used to determine the specification for use on the site. This must relate to the place where materials are to be used. This must be in terms of (i) human health (ii) controlled waters and (iii) any other relevant receptors. If a risk assessment is not relevant for a particular receptor given the site setting please explain why below:	Phase 3, Clarendon Road, Hornsey, Controlled Waters Detailed Quantitative Risk Assessment, Atkins, February 2020 5192204_P3_CWDQRA_FINAL & Phase 3, Clarendon Road, Hornsey, Human Health Detailed Quantitative Risk Assessment, Atkins, February 2020. 5192204_P3_HHDQRA_rev2
14b. Please attach any relevant documentation from the LA relating to the excavation and reuse of the materials to demonstrate no objection (see 3.37 of the CoP)	LA Document references: Planning permission: HGY/2017/3117
14c. Please attach any relevant documentation from the EA relating to the excavation and reuse of the materials to demonstrate no objection (see 3.37 and Table 2 of the CoP)	EA Document references: Planning permission: HGY/2017/3117
14d. Please attach any relevant documentation from any other regulators (if relevant) relating to the excavation and reuse of the	Not Applicable

materials to demonstrate no objection (see 3.37 of the CoP)	
---	--

<i>Where contamination is not suspected</i>	
15a. Please attach copies or relevant extracts from the Desk Top Study that demonstrates that there is no suspicion of contamination.	Not Applicable
15b. Please attach copies of or relevant extracts from the site investigation/testing reports that adequately characterise the clean materials to be used (if appropriate).	Not Applicable
15c. Please attach copies of any other relevant information (if available) confirming that land contamination is not an issue.	Not Applicable

NB: It is your responsibility to assess the nature of the material to be used and that it fits within the limitations of the scenario under which it is to be used

Certainty of use

Various lines of evidence are required to demonstrate that the materials are certain to be used. This includes:

- The production of this MMP
- An appropriate planning permission (or conditions that link with the reuse of the said materials)
- An agreed Remediation Strategy(ies)
- An agreed Design Statement(s)
- Details of the contractual arrangements

Please identify in the following sections what lines of evidence relate to the site(s) **where the materials are to be used**.

16a. Planning Permission(s) relating to the site where materials are to be reused Please provide a copy of the relevant planning permission	Planning ref. HGY/2017/3117 Copies of the planning permission and relevant conditions are contained within Appendix C.
16b. Explain how the reuse of the excavated materials fits within the planning permission(s) for each site.	To allow the remediation of the site (Condition 31) and achieve the required site levels (Conditions 36) Additionally, the subsequent reduction in traffic movements will assist in sustainability objectives and traffic management locally (Condition 38).
16c. If planning permission is not required for any one site please explain why below e.g. permitted development, clean up of a chemical spill, surrender of an Environmental Permit, re-contouring within the existing permission.	Not applicable.

<i>Where contamination is suspected or is known to be present</i> 17. Please provide a copy of any Remediation Strategy(ies) that have been agreed with relevant regulators.	Phase 3, Clarendon Road, Hornsey, Remediation Strategy, Atkins, February 2020. 5192204/P3_RemStrat 2.0
--	---

<i>Where contamination is not suspected</i> 18. Please provide a copy of any Design Statement(s) that have been	Not Applicable
---	----------------

agreed (e.g. with the planning authority or in the case of permitted developments the client).	
--	--

Quantity of Use

19. Please provide a breakdown of the excavated materials for each site and how much will be placed at each site or sub area of each site. Where this is not specific to a single readily identifiable source refer to an annotated plan, schematic or attach a tabulated summary.	Based on the existing and proposed levels, an estimated total of 18,150m³ of material is to be excavated across the remediation. A total of 21,300m³ is estimated to require treatment prior to reuse (this figures is greater than the excavated volume as some material will be treated through multiple processes, screening, crushing and stabilising). Revision 2: Additional material recovered from piling arisings to a maximum volume of 1380m³ will be used and treated if required to achieve the required levels in gas holder 3. (Drawing). The defined fill requirement for site is estimated at 14,000m³. However all suitable material will be reused on site. The later phases of development will include further (as yet undefined) basement construction, material disposal off site will be carried out in this phase once volumes are defined, if required at all.
--	--

20a. How has consolidation/compaction being considered in the above mass balance calculations?	A bulking factor and compacting factor have been used in the cut and fill assessment.
20b. How has loss due to treatment being considered in the above mass balance calculations (if applicable)?	Minimal.
20c. How has the addition of treatment materials being considered in the above mass balance calculations (if applicable)? Note - An exact figure is not required but one that is reasonable in the circumstances and can be justified if challenged.	Yes, both cement and GGBS (for high ammonia materials only) addition has been accounted for.

Contingency arrangements

Explain what is to happen in the following situations and **identify the appropriate clauses** in the contract(s) (Such clauses must be provided to the Qualified Person, preferably as a summary document): or

21a. What is to happen to, and who is to pay for out of specification materials?	Materials out of specification and not able to be reused elsewhere on site would be disposed of at an appropriately licensed facility. Additionally, where materials are not suitable for re-use on site and there is a deficit, materials will be imported to complete backfill and the excess materials would be disposed of at an appropriately licensed facility. Keltbray are working under an all risk contract and would be responsible for this
21b. What is to happen to, and who is to pay for any excess materials?	As above.
21c. What happens if the project programme slips in relation to excavated materials or materials under -going treatment?	Programme delays and liquidated damages are defined within the contract.
21d. Other identified risk scenarios for the project (relating to excavated materials)?	Unidentified hotspot areas have been allowed for as part of the Remedial Strategy. St William do not anticipate any additional risk scenarios.

The Tracking System

Where contamination is suspected or known to be present, state the procedures put in place to:

22a. For all sites please describe the tracking system to be employed to monitor materials movements.	A stockpile tracker, import log and export log will be used and updated frequently to ensure materials are tracked from excavation to placement. The stockpile tracker details the movement of materials on site and ensures clear lines of evidence can be drawn to show all materials movements across the site from start to finish. The attached stockpile tracker allows a 'cradle to grave' approach. The approach allows for like/similar excavated materials (both geotechnical and chemical) based on the SI, on site testing and visual assessment it allows these materials to be stockpiled together. Each stockpile is given a number which will be inputted to the stockpile tracker as well as a visual sign being put up on site to avoid any possible confusion. The stockpile will be recorded in the tracker with the material type, what testing has been/needs to be undertaken and the classification of the stockpile. Treatment needs will also be recorded as well as what treatment has taken place and whether the stockpile is ready for reuse on site or removal from site. The export log tracks all materials leaving site. This log corresponds with the stockpile tracker and which stockpiles leave site is recorded on both logs. Every load leaving site is recorded with its unique waste transfer note / hazardous waste consignment note number, receiving facility, waste carrier and permit numbers. The import log details all materials coming into site along with where they are from, what the material is, when it is imported and it's intended end use.
<i>Where contamination is suspected or known to be present, state the procedures put in place to:</i> 22b. Prevent contaminants not suitable for the treatment process being accepted	All material testing (including SI data) will be assessed prior to excavating material on site. All materials and testing will be tracked using the stockpile register and surveys. A suitably trained technician will be on site full time and will ensure materials on site and in the stockpile register are appropriately handled and placed / exported.
<i>Where contamination is suspected or known to be</i>	Any material designated for off-site disposal will be stockpiled separately.

present, state the procedures put in place to: 22c. Prevent cross contamination of materials not in need of treatment, wastes awaiting treatment and treated materials	All material leaving site will be recorded on the export log. Each stockpile will have appropriate signage so all ground workers know where to direct material, all materials will be on the stockpile register and will be tracked throughout their life including placement location.
Where contamination is suspected or known to be present, state the procedures put in place to: 22d. Demonstrate that materials that do not require treatment and successfully treated materials reach their specific destination	All materials will be stockpiled separately at all times. The stockpile register ensure the correct materials are treated (or not) and where they are placed. In addition to this surveys will be undertaken a minimum of once a week of placed materials to ensure a suitable record is maintained. The mobile treatment licence deployment (Appendix E) details all treatment of material on site, volumes, methodologies, testing, validation and responsibilities. The validation and sampling procedures detailed below are attached. There will also be a suitably trained technician on site full time, this person will ensure that the records are kept up to date and that the correct stockpiles are used in the correct destinations.
Where contamination is suspected or known to be present, state the procedures put in place to: 22e. Ensure that waste for off-site disposal or treatment is properly characterised and goes to the correct facility	All material testing from the site investigation will be assessed prior to excavating material on site. Additional trial pitting is proposed to further assess and characterise the material for removal. All materials will be tracked using the stockpile register and surveys. A suitably trained technician will be on site full time and will ensure materials on site and in the stockpile register are appropriately handled and placed / exported.
23. Please attach a copy of the tracking forms / control sheets that are to be used to monitor materials movements. To include transfer of loads on site into stockpiles prior to treatment (if applicable), stockpiled after treatment (if applicable), stockpiled awaiting use (as appropriate) and final placement.	Document reference(s) Surveys will be produced to record movement of material along with completion of the following included forms: Stockpile register Import Log Export log

<i>For Hub Sites within Cluster Projects & where materials need treatment before reuse</i> 24. Please attach a copy of the Environmental Permit covering the treatment process. Alternatively if the treatment is covered by a Mobile Plant Permit and associated Deployment Form, attach a copy of the EA agreement to the Deployment Form.	Permit reference / EA letter reference: Pending deployment of MTP. Treatment of soil to be limited to picking of bulk asbestos fragments. Crushing of site won obstructions will also occur, this will be done under a T7 notification.
--	--

Records

25. Where, and in what form, are records to be kept? Note – records e.g. transfer notes, delivery tickets, Desk Top Study, Site Investigation, Risk Assessment(s), Verification Report(s) need to be kept for at least 2 years after the completion of the works and production of the Verification Report	Throughout the works extensive records will be maintained in the site office and on the Keltbray data server. Following completion of works all records will be kept at Keltbray's head office.
--	--

Verification Plan

26. Provide or explain the Verification Plan which sets out how you will record the placement of materials and prove that excavated materials have been reused in the correct location and in the correct quantities within the development works (see 3.4 of the DoW CoP).	Document Reference; Following completion of works and placement of all material to be reused on site a verification plan will be produced consisting of all the above mentioned records, testing certificates and other information. This will be produced within 4 week following completion of works on site.
---	---

Appendix B

Figures & Plans

Appendix C

Regulatory Liaison

Appendix D

Records & Logs

Appendix E

Referenced Documents