

25 July 2024

## Final Method Statement

B & X Construction Ltd instructed TECON to carry out the test to identify the land contamination at 2nd Ickenham Scouts Group, Community Close, Ickenham, UB10 8RE.

Although the further test following on their report on July 2021 was carried out on 2<sup>nd</sup> April 2024, Planning were not satisfied to discharge Condition 4 (i) a. The depth of the further investigation was between .2m - .55m and the made ground of .1 - .0 4mbgl recovered across the site. The depth required is a minimum of .6m from near the surface and be made of ground. Furthermore, the additional sampling number was not a full representative of the entire site. Also, previous report on July 2021 was submitted and approved on PL02 and PL03 to be residential homegrown produce and the newly proposed standard 'public open space(parks)' has been rejected.

We have instructed TECON to go back to retake samples with the minimum depth of .6m of made ground and sample additional trial holes to the northern part to fully represent the entire site and to make an informed decision on the extent of likely contamination for the residential homegrown produce.

The Generic Assessment Criteria was applied as the most conservative of the six standard land use scenarios defined within the LQM/CIEH S4ULs – 'Residential with homegrown produce'

The new strategy report on July 2024 incorporated all the results and remedial measures of these tests.

Minor exceedences of lead (210mg/kg), Benzo(b)fluoranthene (3.10mg/kg) and Dibenzo(a,h)anthracene (0.50mg/kg), have been recorded at a depth of 0.10mbgl in WS05 during the 2021 investigation. Therefore, 3No additional samples were taken in this area during the April 2024 test (HDP01 – 0.10m to 0.30m, HDP02 – 0.15m to 0.25m and HDP03 – 0.10m to 0.20m) and were analysed for lead and speciated PAH, at depths similar to the original sample, to delineate any potential hotspot of contamination in this location. No additional contaminants were identified, therefore suggesting that there is no widespread contamination in the area of WS05. Please refer to Table 2.2 Previous Report Summary (TEC April 2024) page 4.

The additional sampling we requested from TECON were undertaken on 13<sup>th</sup> of June 2024 Made ground was recovered to depths of between 0.1m and 0.8m and was recorded to comprise slightly gravelly, silty clay with occasional rootlets. The gravel component comprising chert, sandstone and brick fragments across the site. Please refer to Figure 4 revision B page 20. The results of this additional sampling and soil testing, indicate that no further exceedences (over and above the areas identified during the 2021 and April 2024 investigations) of the 'Residential with Homegrown Produce' GAC have been identified within the proposed areas of soft landscaping, and no suspected asbestos containing material or detectable asbestos fibres have been identified.

## **SCOPE OF REMEDIATION WORKS**

Based on consideration of the Conceptual Site Model and CoPCs identified at the site and consultation with the Environmental Protection Team (Land Contamination) at Hillingdon Borough Council it is understood that the following remediation is required as per section 4.2.11. Both remedial strategies will be undertaken. We are going to excavate the made ground impacted with CoPCs in the area of WS05 and the area of proposed soft landscaping to remove the source and we are going to provide a cover system of 600mm within such areas where made ground remains following on the Remediation Strategy as per TECON's Report 2401020.001.01C.

“Cover Systems for Land Regeneration – Thickness of Cover Systems for Contaminated Land” in accordance to BRE 465 is appropriate in the proposed soft landscaped areas, to mitigate against the potential risk to site end users.

We are going to manage the site works carefully to ensure potential cross contamination from materials containing CoPC is avoided and we will ensure that no soil, within a specific depth of finished level within the soft landscaped areas, is contaminated with concentrations above the human health.

The depth of clean cover required will be calculated to ensure that the concentration of the contaminant of concern, within the depth of this mixing zone, will always remain at below a site-specific level and based on the specific data and indicative BRE calculations with ‘home grown produce’ land. The BRE guidance enables design of a clean cover layer of up to 600mm which we will provide within proposed soft landscaped areas where made ground remains.

Should contamination be found at any time when carrying out the development that was not previously identified, it will be reported in writing immediately to the Local Planning Authority. Following which, further investigation and risk assessment will be undertaken, and where further remediation is considered necessary, a revised remediation scheme will be produced and forwarded to the Local Planning Authority for approval in writing.

## **GENERAL REQUIREMENTS**

As the appointed Principal contractor, we will obtain and comply with all necessary permissions, licenses and permits required to undertake the works.

Given the presence of elevated contaminant concentrations within the made ground, as a minimum, made ground shall be segregated in accordance with current waste regulations to allow for separate treatment/disposal.

Temporary stockpile will be piled in a suitable hardstanding or impermeable membrane, to prevent mixing with underlying materials and will also be covered with an impermeable membrane. To avoid potential cross-contamination, work methodologies will be adopted such that the trafficking over contaminated areas is minimised and, wherever possible, avoided. The site is large enough to manage and segregate the cross contamination.

Excavated contaminated material will be disposed from site to an appropriately licensed facility.

We will dispose all waste in accordance with the Waste (England and Wales) (Amendment) Regulations 2014 and will only be sent to a class of disposal facility permitted to accept the materials identified.

We will transport all the waste contaminated materials off site by licenced waste removal company.

To minimise the generation of water requiring management, surface run-off and collection will be reduced by ensuring that the scale of open excavation is restricted to that necessary for the immediate works.

Where excavation of contaminated materials occurs, the resultant excavation will be backfilled with general fill, or imported clean material. Excavated contaminated materials will not be used for backfilling.

Site maintenance procedures and risk assessments will be documented and implemented to ensure that the capping layer and hard cover areas are appropriately maintained, and future maintenance workers are protected during exposure to materials beneath the capping layer and hardstanding.

Due consideration will be given as to whether the depth of any clean cover system is sufficient for the planting proposed, e.g. planting of vegetation with a rooting zone in excess of the depth of clean cover may require deepened excavations or use of containers.

Should significant future excavation works be required within the site then full reinstatement in accordance with this Remediation Strategy will be required.

All aspects of health and safety during site works will be undertaken in accordance with the Construction (Design and Management) Regulations, 2015 (CDM), or superseding documentation. In addition, all remedial works will be undertaken in accordance with the Health and Safety Executive publication (HSG66) "Protection of workers and the general public during the development of contaminated land" (1991), CIRIA Report 132 "A guide for safe working on contaminated sites" (1996).

## **VERIFICATION PLAN, TESTING AND REPORTING**

Geochemical Verification Testing to be undertaken in accordance with BS10175:2011+A2:2017 which shows that no sources of contamination are or have been present; or A site where suitable site investigation and testing has been undertaken in accordance with BS10175:2011+A2:2017 which clearly demonstrates the chemical suitability of the imported material.

All imported material, whether used as part of a clean cover system or not, will comply with the limits set out within Table 6.1. All imported topsoil and subsoil materials should meet the requirements of BS3882:2015 and BS8601:2013. All imported topsoil and subsoil should be free from foreign objects discernible by the naked eye (e.g. glass, brick, concrete, wire, tarmac, plastic, ceramic, metal, treated wood) or potentially hazardous foreign matter which may represent a risk of traumatic injury or damage to health.

A written description and photographic record of each verification pit will be provided.

Given the proposed development, it is suggested that where appropriate supporting current certification is not available an appropriate number of validation samples of the placed imported cover system will be taken and chemically analysed.

Where appropriate supporting current certification is not available in relation to the chemical quality of placed imported cover system material, verification samples will be taken and chemically analysed. The number of validation samples required will be confirmed with the regulatory authorities prior to undertaking the sampling but would be initially suggested as follows:

- One sample for every 100m<sup>3</sup> of fill, if the material is imported from a known 'Greenfield' source.

- One sample per 50m<sup>3</sup> of fill if the material is derived from site or imported from an unknown

source or off-site source without appropriate documentation of non-contaminative history.

However, where different sources are utilised to provide the cover system, there may be the need for further testing to confirm the chemical composition of the imported materials.

In accordance with current guidance, upon completion of the final works a verification report(s) will be prepared that demonstrates the effectiveness of the remediation carried out and identifying any requirements for longer-term monitoring of identified pollutant linkages, maintenance and arrangements for contingency action, if appropriate. It may be that, with prior agreement of the regulatory authorities, partial verification of the site may be obtained should the development be completed in a phased manner.

The verification report(s) will be prepared in accordance with the LCRM - Land contamination: risk management (Environment Agency, 2023).

Should, at any time, verification information show that remediation activities have not achieved the remediation criteria derived for the relevant pollutant linkages or additional assessment is undertaken, the following action plan shall be implemented:

- The results shall be notified to the Local Planning Authority immediately and confirmed in writing.

- Any agreed remedial action will be undertaken within such reasonable time as required by the Local Planning Authority; and

- A report detailing any remedial works undertaken, the monitoring results and the effectiveness of the action plan shall be forwarded to the Local Planning Authority.