Wesson Environmental

Contaminated Land Solutions

22nd January 2019

Planning Reference: 2017/4242/P

Remedial methodology, 195, Fordwych Road, London, NW2 3NH

Background

Wesson Environmental carried out a phase 1 desktop study concerning the site located on Fordwych Road in June 2017. It was considered that risks from heavy metals, polycyclic aromatic hydrocarbon (PAH) compounds and petroleum hydrocarbon (TPH) compounds had the potential to be present. It was therefore recommended that an intrusive investigation was carried out or soils were excavated and replaced with clean materials. However, development went ahead with out agreement of the latter measures with the LPA and only 200mm of cover was imported. Consequently, the conditions relating to contaminated land could not be discharged. Wesson Environmental subsequently carried out and intrusive investigation (January 2018) targeting both the shallow imported layer and the underlying soils. This found that lead and PAH compounds exceeded generic assessment criteria (GAC) in a number of samples.

It was therefore recommended that remediation of soils should be carried out prior to occupation. The recommended remedial measures are as follows.

Remedial measures

The current data indicates that contamination of site soils is by contaminants that are unlikely to form a vapour phase. Therefore, remediation should consist of targeting areas where soft landscaping is to be present. The following measures should be taken:

1. All areas of soft landscaping must be excavated to a depth that will allow the cover system to be placed as described below.
2. The cover system will comprise a minimum of 600mm depth comprising:
    a. A minimum of 150mm of certified clean topsoil.
    b. 450mm of certified clean subsoil.
3. The capping to be underlain by a visual warning membrane (marker sheet).
4. The base of the excavation should be compacted prior to placement of capping.
5. The imported material to be accompanied by suppliers' certificates confirming suitability as growing medium

It is anticipated that the excavated volume will be roughly 42m^3.

Validation

Soils

1. The depth of excavation in the garden areas should be visually validated and photographic evidence produced to show adequate removal of soils has taken place.
2. Representative samples of the proposed capping soils shall be collected at a rate of 1 sample per 250m3 or 1 per 4 plots if undertaken once placed. In the case of material on the slope, we would recommend that 4 samples are taken across the slope face after placement. Each sample shall be forwarded to a UKAS and MCERTS accredited laboratory for analysis for the following determinands:

   total metals (copper, nickel, zinc, boron, chromium, arsenic, mercury, selenium, cadmium and lead) speciated polyaromatic hydrocarbons, speciated TPH, total cyanide, phenols (total).

3. Waste transfer notes must be obtained for all materials going off site and should be included in the validation report.
4. A validation report shall be produced and submitted to the LPA including details of the above.

Discovery strategy

Care should be taken during excavation or working of the site to investigate any soils, which appear by eye or odour to be contaminated or of different character to those analysed. In the event of any discovery of potentially contaminated soils or materials, it should be quarantined and reported to the most senior member of site staff for action. The location, type and quantity must be recorded, and London Borough of Camden notified immediately, and approval must be sought prior to implementing any proposed mitigation action.

The discovery strategy must remain on site at all times and must demonstrate a clear allocation of responsibility for reporting and dealing with contamination. A copy of the strategy must be placed on the health & safety notice board and /or displayed in a prominent area where all site staff are able to take note of and consult the document at any time. Any member of the workforce entering the site to undertake any excavation must be made aware of the potential to discover contamination and the discovery strategy.

Dr. Richard Wesson

Wesson Environmental