

Contaminated Land Internal Memorandum of Technical Advice

TO:	Development Management	FROM:	Public Protection Services Manager Environment & Public Protection
CASE OFFICER:	Philip Forster	OFFICER:	Angela Sykes
CL SITE NO	T169	TELE EXTENSION:	2557
FLARE REF:	240859	DATE:	28 November 2022
PLANNING REF:	2022/42482	MY REF:	22-11-28-T169-M02-AHS-WBCDC

SUBJECT: CONTAMINATED LAND OFFICER REVIEW:

DISCHARGE OF CONDITION 9 (CONTAMINATION) ON APPROVAL 2022/41087

FORMER HOLY TRINITY VICARAGE, PALMYRA SQUARE NORTH, WARRINGTON, WA1 1JN

The following report has been submitted in support of discharging Condition 9 on approval 2022/41087:

- *Supplementary Site Investigation at the Former Vicarage, Palmyra Square North, Warrington prepared by Demeter Environmental Ltd on behalf of Alderley Group, dated 12 October 2022*

The following reports were provided previously:

- *Phase 1 Preliminary Risk Assessment for The Vicarage, Palmyra Square North, Warrington, prepared by Clancy Consulting Limited on behalf of Alderley Group, dated December 2021 [Ref: 10/1872/001 Rev.01]*
- *Preliminary Phase 2 Site Investigation Report for The Vicarage, Palmyra Square North, Warrington, prepared by Clancy Consulting Limited on behalf of Alderley Group, dated February 2022 [Ref: 10/1872/002 Rev.00]*

The above documents have now been considered and the following comments made:

Preliminary Risk Assessment (PRA) & Conceptual Site Model (CSM):

A review of the PRA report was undertaken previously and summarised as follows:

- *The proposed scheme comprises the demolition of the existing vicarage and the construction of an apartment block with minimal landscaping.*
- *Historical mapping indicates that the site was developed as a vicarage in circa 1937 and has remained largely unchanged. However the adjacent site included a Sunday school in the N and*

terraced/semi-detached housing in the S from 1894 which were later demolished prior to redevelopment as Palmyra House in the 1970/80.

- *The site is underlain by Shirdley Hill sand over glaciofluvial sheet deposits (Sands and Gravels) underlain by Wilmslow Sandstone Formation bedrock (SANDSTONE). Drift geology at the site is classified as a Secondary (A) Aquifer and the underlying bedrock is classified as a Principal Aquifer.*
- *The nearest surface water course is the River Mersey located 400m S of the site. The site is not located within a Groundwater Source Protection Zone.*
- *There are no registered or historical landfill sites within 250m. The site is not affected by Radon gas and there is no coal mining risk.*
- *A site walkover was carried out on 23 November 2021. The site was occupied by a vacant two storey building with the ground floor windows bricked-up, and a private garden area. A large brick wall was located to the front with dense vegetation behind. Building rubble, rough ground and concrete covered the rear garden with two large skips and a welfare unit. No visual/olfactory evidence of contamination was noted during the course of the walkover survey.*
- *The CSM derived within the PRA, following a review of the site history and also current land use/ground conditions identified 8 no. potential pollutant linkages which were considered very low to moderate risk, given that the proposed development is mainly hardstanding.*
- *Potential sources of contamination listed within the CSM included madeground and/or demolition rubble across the site, but should also include asbestos and asbestos containing materials within building materials.*
- *It was recommended that a limited intrusive ground investigation is undertaken at the site as part of the geotechnical survey.*

The PRA was deemed **satisfactory**.

Site Investigation & Generic Quantitative Risk Assessment (GQRA):

A review of the site investigation and risk assessment was carried out previously and summarised as follows:

- *The intrusive site investigation involved the excavation/drilling of 5 no. window sample boreholes to a depth of 5.45mbgl.*
- *Sampling locations were limited to the N and E of the building due to access restrictions, with no investigation beneath.*
- *Madeground was encountered across the site to a depth of up to 1.70mbgl, and comprised gravel over gravelly, silty sand. Gravel consisted of glass, metal, sandstone, plastic, brick and clinker. Obstructions were encountered at the surface in WS4 and at 0.5mgl in WS5.*
- *No Visual and olfactory evidence of contamination were encountered within the madeground.*
- *Several samples of the madeground and natural soil were obtained for chemical analysis; 5 no. madeground samples and 3 no. alluvium samples were tested for a standard suite of contaminants including asbestos, speciated TPH and speciated PAH.*
- *Testing results were then screened against Generic Assessment Criteria (GAC) for residential without plant uptake, including Soil Guideline Values (SGVs), Category 4 Screening Levels (C4SLs) and Suitable 4 Use Levels (S4ULs).*

- *The contamination assessment identified exceedances of GACs for lead and PAHs in WS1 and WS2 at 0.25 and 0.2mbgl respectively. No asbestos was detected.*

The GQRA could not be approved at the time due to the following queries and/or missing information:

- *Further sampling is required following the demolition of building structures on site. It is noted that access was limited to business operations; therefore further investigation is required in this area of the site, particularly within the footprint of the former garage, due to suspected tanks.*

Additional investigation has been undertaken including the excavation of 6 no. trial pits following the demolition of all building structures. 12 no. samples of the madeground and natural strata were obtained for chemical analysis. Exceedances of GACs for lead and PAHS were identified, however no asbestos was detected. No visual or olfactory evidence of contamination was identified.

The GQRA is now deemed **satisfactory**.

Controlled Waters Risk Assessment:

The Environment Agency were listed as a consultee for the original approval, but provided no comments, therefore it is assumed that they have no objections.

Ground Gas Risk Assessment:

A ground gas risk assessment has not been submitted in support of the Application. It is stated in the report that there are no significant sources of ground gas on site given that there are no landfills or infilled ground within 250m of the site and a limited thickness of granular madeground has been identified during the investigation.

Remediation Strategy:

Based on the site investigation the following remedial measures have been proposed:

- **Cover Systems:** *All areas of soft-landscaping will receive a 300mm cover system of clean/validated fill materials, including 150mm topsoil.*

Contaminated Land Condition Discharge Recommendations:

The following recommendations can now be made with respect to the Contaminated Land Planning Conditions (Condition 9) on the **2022/41087**:

- **CONDITION 9: ALL SECTIONS RECOMMENDED FOR DISCHARGE. NO SECTIONS REMAIN IN FORCE.**

I trust this is of assistance and please do not hesitate to contact me should you require any further information.

Angela Sykes
Environmental Protection Officer (Land)