

MEMORANDUM



From: Angela Guy
Contaminated Land Officer

To: Matthew Phillips
Planning Officer

Our Ref: P/2017/0927

Your Ref: P/2017/0927

Date: 05 January 2023

**No. of
Pages:** 4

TOWN AND COUNTRY PLANNING ACT 1990

P/2017/0927 – Land Off, Mold Road, Gwersyllt, Wrexham, LL11 4AE

HYBRID PLANNING APPLICATION COMPRISING: FULL PERMISSION TO DEMOLISH VACANT BUILDINGS AND ERECT 54 BEDROOM LOW SECURE UNIT WITH ASSOCIATED ACCESS, PARKING AND LANDSCAPING. OUTLINE PERMISSION (WITH ALL MATTERS RESERVED EXCEPT FOR ACCESS) TO DEMOLISH EXISTING BUILDINGS AND ERECT HOUSING DEVELOPMENT (6 NO. DETACHED AND SEMI-DETACHED HOUSES, 24 NO. APARTMENTS)

I have reviewed the following reports, only the report prepared by Clancy has been submitted as part of the above planning application, however the Terraconsult report was provided on request:

1. 'Phase 1 Site Investigation Report, Westminster Industrial Estate, Wrexham, LL11 4AF, Report No 2079R01 Issue 2' for Whitley Bros Ltd & Matthews & Goodman, prepared by Terraconsult Limited, dated July 2014
2. 'Geo-Environmental Appraisal Report, Proposed Low Secure Unit & Residential Development, Mold Road, Wrexham, LL11 4AF, Ref: 10/1014/001' for ASC Real Estate Investments, prepared by Clancy Consulting Limited, dated November 2017

It should be noted that geotechnical, coal mining and radon matters are not within the remit of the Contaminated Land Team and therefore no comments on these issues have been provided in this response.

I understand the time period for submission of reserved matters for the outline planning permission (3 years) has now expired, but it is still within the 5 year period for commencement of the full permission, which is the low secure mental health unit.

Phase 1 Assessment

In regard to the Terraconsult report, whilst the report is 8 years old I consider it to be sufficient in principle. Given the possibility of some changes having occurred over the intervening period it will be necessary to confirm whether any further issues have arisen in that time which will also require assessment.

The report identified a number of past uses which could give rise to potential contamination, and very specific areas where targeted site investigation would be required too i.e.:

Area 1 – a bunded heating oil tank and the slope on the western boundary which could comprise colliery spoil;

Area 2 – a small substation, an area where a barrel containing a potentially contaminative substance was left;

Area 3 – a heating oil tank (pipework known to have been damaged), 2 large oil tanks within the eastern part of a shed within the large building and in the western part evidence of hydrocarbon staining on the concrete floor, a diesel tank on a brick plinth in SW corner and a new plastic bunded tank on top of old metal tank next to the last shed; and

Area 4 – a heating oil tank.

In addition to the above, the risk of asbestos needs to be considered, it is noted that asbestos has been found as part of the buildings construction materials.

Geo-Environmental Appraisal Report

It is noted that the following potential sources of contamination were identified:

- Asbestos from former and existing buildings on site (Amosite slate tile observed at ground surface in SO2).
- Hydrocarbon contamination from the heating oil tanks and fuel / waste oil tanks (WS1, TP1, TP3, TP4 and TP7 at depths ranging from 0.2m to 1.8m bg). These tanks were above ground however there is evidence of spillages at surface.
- Mineral oils and PCBs from the electrical sub-station.
- PAH and sulphate contamination and possible combustible material from colliery waste.
- Radon risk.
- Hazardous ground gas risk.
- Migration of off-site contamination from adjacent refuse tip, colliery and industrial sites.

I have the following comments on the works undertaken:

1. Photograph 9 on p37 of the report indicates there are also buried fuel tanks (as well as the above ground tanks referred to above), these buried tanks will also be potential sources of contamination and therefore require further investigation.
2. It is stated the above ground tanks are in the western portion of the site but the plans provided in the report do not clearly identify the position of the tanks or the electricity substation, further details on their position and the investigation locations which target those specific sources should be provided. I note TP1 to TP7 were excavated within close proximity to the above ground former tanks with TP11 excavated adjacent to the substation but a plan/photos/description that shows how close would be beneficial.
3. It is noted that the aim of the investigation was to position window sample boreholes beneath the proposed development areas (buildings and car park) in order to characterise the general ground conditions, refine the Conceptual Site Model and carry out targeted contamination and geotechnical assessments. It is necessary to

assess areas of soft landscaping and gardens as exposure risks can occur there too, details on investigation positions which have assessed garden/open space areas should be provided.

4. Whilst there appear to be a good spread of investigation positions not all positions have had samples collected and tested. For example there are two hand excavated pits in stockpile areas, SP1 has been sampled, however SP2 hasn't, close to SP2 is SO1 which is a fragment sample for asbestos.
5. A significant proportion of the sampling has been undertaken at depth. Exposure to site users is most likely to occur within the top 0.6m of ground. Deeper sampling is still beneficial for assessing risks to site users from deeper contamination (for example in relation to vapours) and for assessing risks to controlled waters. Of the 24 samples tested (not including those done only for asbestos or those on the eastern part of the site not in the area of the secure unit), 12 were within the top 0.6m of ground (WS1, WS5, WS6, WS7, WS8, WS10, WS11, TP3, TP4, TP6, TP7, TP9). Furthermore, in regard to assessing the near surface risk exposure, the testing suite has been limited in relation to hydrocarbons, 6 of the 12 had TPH CWG tests. Based on the information currently available from this report, i.e. sampling focused in areas of buildings/hardstanding, and limited near surface sampling and testing, it is considered risks to future site users in garden areas is insufficient.
6. It is stated visual and olfactory evidence of hydrocarbon contamination was encountered in the Made Ground and natural soils in WS1, WS11, WS15, TP1, TP3, TP4, TP7, TP9 and TP10. These locations are typically in the areas of the former above ground tanks. However no TPH testing was undertaken at WS11, a deeper test in the natural soils was not taken at WS1, the deeper sample from the clay in TP1 where odours were still present was not tested, the shallower sample at TP4 was not tested for TPH although the two deeper ones were, and no sample was tested from TP10.
7. It appears that the stockpiled material is an embankment around the northwest corner of the site. Clarity on whether that is the case or not should be provided. Logs of the pits are not provided, therefore it is not clear what the ground conditions are, it could be colliery spoil. Of the two hand excavated trial pits excavated (SP1 and SP2) just SP1 had a sample tested, one sample may not be representative of the area of concern due to potential variability of the ground.
8. It is noted that the embankment in the south west corner of the site was not investigated to establish what the ground comprised. The proposed development shown on Drawing 17-032-110 dated 29 June 2017 appears to show some new landscaping for that area, it is currently described as heavily vegetated whereas the plan shows some trees but the remainder is grassed. It is not marked as such but there appears to be a retaining wall so the embankment may have works proposed too.

Section 6.3 and 9.0 details further works that are recommended (copied below) and considers potential remediation options. I can confirm that these are sufficient in principle, however the concerns I have raised above should be considered when designing and undertaking these works.

- a) that the appointed ground works contractor is made aware that an asbestos tile was recorded in the location of SO2 and that a watching brief is carried out during excavations in this area of the site. That the person undertaking the watching brief must have up to date asbestos awareness training. And should any suspected asbestos containing materials be encountered the works should be halted

immediately and a qualified environmental consultant engaged to recover samples and determine if any remedial action is required. These requirements should be detailed in the Remediation Strategy.

- b) that further investigation is carried out in the location of the above ground fuel storage tanks following demolition of the existing buildings and removal of the tanks has taken place. During the removal of the tanks a qualified environmental consultant should be present to observe the condition of the underlying soils directly beneath the base and side walls and to recover soil samples for laboratory analysis. The results of this work, including photographs, will be detailed in a report along with the findings of the further investigation works. As detailed in paragraph 8.7 the risks of this contamination to soakaways will need consideration if soakaways are to be adopted, details of this should be reported too. Section 8.9 refers to water ingress within excavations, proposals to manage contaminated groundwater during the removal of the tanks and during the additional site investigation works needs to be considered. Following these works the report should be submitted for approval to the Council along with the Remediation Strategy which will include any further remedial works found to be necessary.
- c) Assessment of hydrocarbon contamination identified in several locations associated with the above ground fuel storage tanks is considered further, to include more detailed risk assessment of controlled waters following the additional testing, to potentially include a DQRA and some form of remediation.
- d) Section 7.2 and 7.3 details the initial gas monitoring works that have been undertaken, further monitoring was yet to be completed at the time of the report being prepared. Details of the remaining works is required before any conclusions regarding gas risks can be commented on, although I note that it is suggested in the report that an allowance be made for gas protection measures being required, and also hydrocarbon vapour protection too (radon also although this is under the Building Regulations remit not contaminated land). As stated verification of any remediation, not just gas protection measures, will be needed.
- e) Should the re-use of materials on site be planned then the advice provided in section 8.8 should be followed and details provided to the Council for consideration, in addition any waste disposal requirements should be detailed in the Remediation Strategy.
- f) Additional trial pits to be excavated beneath existing building footprints following demolition to confirm the ground conditions and depth of filled ground.

At this time I do not recommend the discharge of condition 9, the reports detailed above recommend further works are required and I am in agreement with this for the reasons outlined earlier. On completion of the further investigation works and subject to those works being approved by the Council, a Remediation Strategy will also be required for condition 9.

Should you have any queries regarding the above then please contact me on Ext. 8771.



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Angela Guy
Contaminated Land Officer