

Consultation Response from: KC Environmental Health (Pollution & Noise Control)		
2022/91685 - adj, 71, Quarmby Road, Quarmby, Huddersfield, HD3 4EA		
Discharge of conditions 6 - 10 (contamination and remediation) on previous permission no. 2019/91038 for demolition of existing garages and erection of one detached dwelling		
Date Responded: 23rd June 2022	Responding Officer: Natalie Heaney	Responding Ref: WK/202217243
We note that groundworks have already commenced on-site. The applicant is seeking to discharge contaminated land conditions associated with previous permission no. 2019/91038. These include pre-commencement conditions. Therefore, the applicant must demonstrate to a high degree of confidence, that all contaminated land risks for all receptors related to the sites current and future uses have been fully addressed. Failure to confirm that the site is suitable for the intended use may result in planning enforcement action. Condition 6 – Preliminary Risk Assessment (Phase I Desk Study Report) To discharge Condition 6, a Phase I Desktop Study and Preliminary Risk Assessment Report by GeoEnviro Solutions Ltd, dated January 2022 (ref: GES 2112-21 PI Report) has been submitted. The Phase I report offers an evaluation of the environmental setting as well as an appraisal of the historical on-site and off-site land uses dating back to the 1800s. The report indicates that there have been activities that could have impacted the development site and its surroundings. These include chemical works, historic landfills and unspecified mills. As viable pollutant pathways have been identified, the report concludes by recommending an intrusive investigation. It is recommend that the investigation includes soil sampling and two gas spikes to be monitored over a period of time to establish any ground gas and groundwater levels in accordance with CIRIA C665. We have read the report provided and have concerns over the recommendations for the intrusive investigation. The report identifies two records of historic landfills within 41m and 296m of the site (Royds Hall Playing Fields, and Haughs Road Quarry). Based on this, in Section 8, a preliminary conceptual model is provided, and a moderate/low risk rating has been assigned to the potential pollutant pathway between off-site ground gases migrating from historical landfill sites nearby. In Section 9.1 it is recommended that two gas spikes will be undertaken in accordance with CIRIA C665. However, this does not appear to be in accordance with CIRIA C665 guidance and we consider ground gas spike testing to be temporally limited. Therefore, it is difficult to establish the ground gas regime impacting the site. The CIRIA C665 guidance states that spike testing should not be used to confirm or prove the absence of soil gas and that sole reliance on soil spiking data is not recommended. It adds that further investigation with permanent installations would always be required. Therefore, where a potential pollutant pathway between a potential gas source and on-site receptors has been identified, we would expect any future Phase II investigation to include ground gas and groundwater monitoring from boreholes over a period and frequency as suggested in Table 5.5a and 5.5b of CIRIA C665.		

Furthermore, only two spikes were recommended in Section 9.1 of the report. CIRIA C665 guidance recommends that, however small the site may be, a minimum of three wells will need to be installed. We agree with the guidance that, a minimum of three boreholes, increases the confidence in any data set. That is, two spike tests would be insufficient and inappropriate for the site investigation.

Notwithstanding, we note that the report has been submitted alongside a Phase II Site Investigation and Updated Risk Assessment by GeoEnviro Solutions Ltd, dated March 2022 (ref: GES 2112-21 PII Report). As the potential pollutant pathway for off-site ground gases has been identified in the preliminary conceptual model presented in the Phase I report and a site investigation has already been undertaken, we recommend the discharge of Condition 6.

Condition 7 – Phase II Intrusive Site Investigation Report

To discharge Condition 7, a Phase II Site Investigation and Updated Risk Assessment by GeoEnviro Solutions Ltd, dated March 2022 (ref: GES 2112-21 PII Report) has been submitted.

The report details the findings from works undertaken in March 2022. The investigation found made ground in all four of the trial pits to a depth between 0.15 and 0.70 metres below ground level. This was reported as concrete hardstanding and granular made ground (gravelly clayey sand). No visual or olfactory evidence of contamination was encountered or observed during this ground investigation. Three samples were taken for chemical analysis and the results of the analysis were screened against generic assessment criteria (GAC) for a residential with homegrown produce end-use. In Section 9.3 of the report, the samples found to exceed the adopted GAC are summarised. In total, only one exceedance was identified, which was the lead concentrations at TP03. The sample contained 390 mg/kg of lead compared to the GAC of 200 mg/kg.

An updated conceptual site model has been provided in Section 10, and the elevated lead concentration at TP03 is assigned a moderate/low level of risk. However, the report adds that as the lead-contaminated soil is under a layer of macadam, no potential pollutant linkage exists. All other potential pollutant pathways were assigned a very low risk based on the findings of the investigation. The report concludes that general testing undertaken across the site shows that contamination is not likely across the site. It is reiterated that the hardstanding limits potential pollutant pathways at TP03, however, should the site be re-developed at any stage, the issue of lead contamination within the site soils should be re-evaluated in respect to any new development profile.

Finally, the report states that as less than 1 metre of made ground underlies the site, and on further review of the desk study, that there is insufficient thickness of made ground to represent a risk. A radon membrane is believed to be installed and the report adds that when referring to RB17, the guidance suggests that the presence of a radon membrane will provide sufficient protection against other ground gases, should any be present.

We have read and do not accept the Phase II Site Investigation and Updated Risk Assessment by GeoEnviro Solutions Ltd, dated March 2022 (ref: GES 2112-21 PII Report). Namely, for the reasons related to ground gas monitoring as identified in our response to Condition 6. No ground gas monitoring has been offered at we consider the justification for a lack of monitoring unclear. This appears to relate to ground gases generated from made

ground on-site, not ground gases from off-site sources associated with made ground and landfill sites. Regarding RB17 guidance and the radon barrier, the guidance is clear that gas monitoring on low-risk sites where small volumes of gas are likely to be present is not always necessary. However, with the proximity of a historic landfill <50m away from the site and an identified moderate/low risk of a potential pollutant linkage, we would not consider this site to be a low risk site. We would also expect a combination of gas protection elements to be installed if a ground gas issue has been identified. Yet without establishing the ground gas regime, it would be unclear what level of protection (if any) is required. Therefore, further clarification/information is required.

In addition, we have concerns that there is insufficient hardstanding in the area at TP03. Therefore, the applicant must clarify the surface cover. Where possible, additional photographs should be provided as from the appended photographs in the current report, there does not appear to be sufficient hardstanding to break the pollutant linkage identified.

For these reasons, Condition 7 must remain until further notice.

Condition 8 – Remediation Strategy

In the absence of an approved Phase II report, it is unclear how we can consider Condition 8 at this stage as we cannot establish whether the site has been correctly characterised, and if remediation is necessary. Therefore, we cannot consider the discharge of Condition 8 at this time and recommend that Condition 8 remains until further notice.

Condition 9 – Implementing Remediation/Unexpected Contamination

At this stage, it is unclear whether remediation is necessary as we currently consider the site characterisation incomplete. Therefore, Condition 9 must remain until further notice.

Condition 10 – Validation Report

As further information is required in relation to Condition 7 (Phase II Intrusive Site Investigation Report), we currently consider the site characterisation complete. Therefore, it is inappropriate to consider the discharge of Condition 10 at this stage. For that reason, we recommend that Condition 10 must remain until further notice.

Recommendations

Condition 6 – Preliminary Risk Assessment (Phase I Desk Study Report)

We accept the Phase I Desktop Study and Preliminary Risk Assessment Report by GeoEnviro Solutions Ltd, dated January 2022 (ref: GES 2112-21 PI Report) and recommend that Condition 6 is discharged.

Condition 7 – Phase II Intrusive Site Investigation Report

We do not accept the Phase II Site Investigation and Updated Risk Assessment by GeoEnviro Solutions Ltd, dated March 2022 (ref: GES 2112-21 PII Report). Therefore, Condition 7 must remain until further notice.

Condition 8 – Remediation Strategy

We cannot consider the discharge of Condition 8 at this time, as to date, insufficient information has been submitted in support of the Condition 7 (Phase II Intrusive Site Investigation Report). Therefore we recommend that Condition 8 remains until further notice.

Condition 9 – Implementing Remediation/Unexpected Contamination

At this stage, it is unclear whether remediation is necessary as we consider the site characterisation incomplete. Therefore, Condition 9 must remain until further notice.

Condition 10 – Validation Report

As further information is required in relation to Condition 7, we currently consider the site characterisation complete. Therefore, it is inappropriate to consider the discharge of Condition 10 at this stage. For that reason, we recommend that Condition 10 must remain until further notice