

Consultation Response from: KC Environmental Health (Pollution & Noise Control)
2020/91258 - 4 Olney Street, Slaithwaite, Huddersfield, HD7 5EG.
Discharge conditions 9-12 on previous permission 2019/94075 for erection of pair of semi-detached dwellings
**Date Responded:
19 June 2020**
**Responding Officer:
Natalie Heaney**
**Responding Ref:
WK/202011085**

The previous consultation response dated 21st May 2020, detailed that the submitted Geo-Environmental Ground Investigation Report by Haigh Huddleston Associates (ref: E20/7691/R001) failed to meet the requirements for Condition 10 and could not be discharged.

On 9th June 2020, I received two new trial pit logs (TP03 and TP04) and an updated site plan. I have reviewed this information with the previously submitted information for application 2020/91258 and alongside the comments made in the previous consultation response. I am unable to accept your proposals for fitting a gas membrane and a suspended slab floor in line with Characteristic Situation 2 (CS2). The reasons for which are as follows.

Sites at higher risk of ground gas exposure are those with made ground over 5m or an average depth greater than 3m. Considering the new information, the average backfilled material and made ground on site is over 3m. Whilst I accept that there is evidence of sandstone beneath the made ground in the two new trial pits, there are depth inconsistencies concerning the made ground and missing information relating to the total organic carbon (TOC) content of the backfilled/made ground material. Although the trial log description reports the fill material is low in organic content, Appendix C of the Phase II report mentioned TOC analysis was completed. However, this data is missing.

Utilising the evidence provided so far, I believe the site is most likely to fall into either CS2 or CS3. In which case, CS2 measures may not provide adequate protection. As the site is for sensitive end-use and is in a residential area, we need you to demonstrate there is no risk from ground gas to receptors. This can be done either by quantitative assessment i.e. by completing a period of ground gas monitoring over 6 intervals in 3 months as suggested in CIRIA 665 – *Assessing risks posed by hazardous ground gases to buildings guidance*.

Alternatively, you may be able to demonstrate negligible risk by using an empirical approach to characterise the ground gas risk using the total organic carbon content (TOC %) analysis results. Further information can be found in British Standard 8485:2015+A1:2019 *Code of practice for the design of protective measures for methane and carbon dioxide ground gases for new buildings*. I would also expect samples for TOC analysis to be taken at more than 1 trial pit across the site to allow for adequate characterisation of the whole site and to show whether the made ground TOC content is consistent across the whole site.

Until the new information is received, I am unable to recommend that Condition 10 be discharged at this time.