

Consultation Response from: KC Environmental Health (Pollution & Noise Control)		
2021/92427 - 48, Stile Common Road, Primrose Hill, Huddersfield, HD4 6DE		
Discharge conditions 9 and 10 on previous permission 2020/91228 for demolition of existing dwelling and erection of residential development to form student accommodation with associated access and parking		
Date Responded: 1st September 2021	Responding Officer: Natalie Heaney	Responding Ref: WK/202125277
Conditions 9 and 10 were recommended by the Coal Authority and relate to the Coal Mining legacy. Environmental Health were not originally consulted on previous permission 2020/91228. We acknowledge there is an overlap with Condition 9 as the coal mining legacy features may present an environmental health risk (e.g. from mine gases or combustion). Condition 10 relates to surface stability. This is outside the remit of Environmental Health. Condition 9 – Intrusive Site Investigation Works (Coal Mining Legacy) In our previous response dated 13th August 2021, we commented on a Coal Investigation report by Rogers Geotechnical Services Ltd, dated 10th June 2021 (ref: C337/20/E/1956). We stated that due to the presence of shallow coal workings and shallow coal, that gas monitoring and calorific testing is recommended to assess the environmental health risks associated with the coal mining legacy at the site. In the absence of such information, we recommended that Condition 9 should remain. Since then, to discharge Condition 9, we have received a gas monitoring addendum titled '<i>Gas Monitoring at Stile Common Road, Newsome, Huddersfield</i>' by Rogers Geotechnical Services Ltd, dated 23rd August 2021 (ref: C337/19/E/GM). The report includes geotechnical information, which is outside the remit of Environmental Health, this consultation response therefore only relates to the land contamination aspects of the report. We have read the assessment supplied by the applicant. The addendum details that a gas monitoring standpipe was installed to 2m and was the sole borehole undertaken as part of the site investigation. Gas monitoring visits were made to the site between the 4th June and the 29th June 2021. On the different monitoring occasions, the atmospheric pressure ranged between 1006 to 1012 mB, generally rising with the exception of falling pressure noted on the 29th June 2021. Peak carbon dioxide and methane concentrations reported were 0.1% v/v. The minimum oxygen concentration reported was 20.9% v/v and peak flow was 0.1 l/h. As such, the report considers the gas screening value to be 0.0001 l/h for both carbon dioxide and methane, therefore characterising the site as Characteristic Situation 1. Having reviewed the addendum, there are still several points requiring clarification and/or justification. These are addressed point-by-point below: 1. It is unclear why only one borehole has been sunk and monitored. This does not appear to be in line with the guidance. Furthermore, data from one borehole is spatially limited and does not provide evidence that can confirm to a high degree of confidence what the		

ground gas risk on site is. Further justification is required as to why only one borehole was utilised and how this can accurately be used to determine the ground gas risk on-site.

2. The original report (ref: C337/20/E/1956) provided information from 'RO1'. The addendum report (ref: C337/19/E/GM) discusses data from a 'BH01'. This does not appear consistent, and it is unclear whether BH01 and RO1 are the same as no supporting map has been provided in the addendum. Further clarification is required.
3. Additional justification is required for the placement of RO1/BH01 (see point 2). Not only does the placement of a singular borehole appear to be in discord with the current guidance as raised in Point 1, but RO1 is in the far corner of the site where what appears to be visitor parking is proposed. It is unclear why no further boreholes were placed whether the building footprint is proposed. The additional justification for site methodology must be in accordance with BS10175 guidance and other best-practice guidance.
4. The report acknowledges that barometric pressure is a principal factor in the movement of ground gas. Nevertheless, only one reading was undertaken in falling pressure from only one borehole. This period and frequency of monitoring does not appear to be in line with the guidance. In CIRIA C665 the guidance recommends that '*at least two sets of readings should be at low and falling atmospheric pressure (but not restricted to periods below <1000 mb) known as worst case conditions.*' We appreciate that the data set provided shows limited ground emissions from RO1/BH01. However, we consider that as the data set is spatially limited (not the minimum of three boreholes has suggested by the aforementioned guidance), and temporally limited as discussed in the current point, the uncertainties around the dataset therefore do not allow for a robust characterisation of the ground gas regime to be made, so further information is required.
5. In our previous response dated 13th August 2021, we recommended that calorific testing was undertaken to assess the environmental health risks associated with the coal mining legacy at the site. It is unclear from the addendum provided whether any calorific testing was undertaken on the shallow coal identified at the site. Additional clarification is required as to the risks from combustible material on-site.

It remains that due to the presence of shallow coal workings and shallow coal we recommend gas monitoring and calorific testing is undertaken to assess the environmental health risks associated with the coal mining legacy at the site. This must be undertaken in accordance with current land contamination guidance. The addendum information provided fails to confirm, to a high degree of confidence, that there will be no risk from either mine gases or combustible materials to receptors. In the absence of this information, we do not recommend the discharge of Condition 9.

Recommendations

The information provided in support of Condition 9 is unsatisfactory. We recommend that Condition 9 remains until further notice.