

Consultation Response from: KC Environmental Health (Pollution & Noise Control)		
2022/93951 - Land adj, 15, Lower Lark Hill, Cleckheaton, BD19 6JJ		
Discharge conditions 6,7,8,9,10,13,16,17 on previous permission 2022/93166 for variation condition 2 (plans) on previous permission 2021/94291 for erection of detached dwelling		
Date Responded: 31st January 2023	Responding Officer: Natalie Heaney	Responding Ref: WK/202241404
Conditions 13, 16 and 17 are outside the remit of Environmental Health. Condition 6 - Preliminary Risk Assessment (Phase I Desk Study Report) To discharge Condition 6, a Phase I Desk Study Report by RB Geotechnical Ltd, dated June 2017 (no reference) has been submitted. 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 The Phase I report identifies several potential sources of contamination that may impact the site, these include an old mine shaft situated from 20m to the North East of the site, garages, a number of works buildings, pits, factories and sewage works. The report considers that an overall moderate to low risk of potential pollutant linkages exists on-site and the report recommends that an intrusive site investigation is undertaken. The report is five years old, and it is unclear whether the site walkover reflects the current site conditions. Nevertheless, this has been submitted with a more recent Phase 2 report. For that reason, we accept the Phase I Desk Study Report by RB Geotechnical Ltd, dated June 2017 (no reference) and we recommend the discharge of Condition 6. Condition 7 - Phase II Intrusive Site Investigation Report To discharge Condition 7, the following documents have been received: • a Phase II Contaminated Land Investigation report by JNP Group, dated January 2021 (B21114-JNP-XX-XX-RP-G-1002) • a Phase II Contaminated Land Investigation Report, by JNP Group, dated March 2022 (ref: B21114-JNP-XX-XX-RP-G-1002) • a letter titled 'Re: Meadowcroft, Lower Lark Hill, Cleckheaton,' by JNP Group, dated 23rd July 2019 (ref: B21114-JNP-11-XX-RP-G-1001) • a letter titled 'Comments on Environmental Health Response' by JNP Group, dated 8th July 2022 (ref: B21114-JNP-XX-XX-L1-G-001/PT) The reports include geotechnical information, which is outside the remit of Environmental Health, this consultation response therefore only relates to the land contamination aspects of the reports. The letter (ref: B21114-JNP-11-XX-RP-G-1001) details the work undertaken as three geotechnical trial pits and a fourth trial pit to locate a culvert. From these, samples were taken and assessed for geotechnical and chemical analysis. The report continues to detail evidence of made ground at the site comprising suspected slag and other inert waste to a depth of at		

least 1.70 meters below ground level. As the identified material was identified as inert, the risk of ground gasses from the made ground has been assigned as low.

The Phase 2 report (ref: B21114-JNP-XX-XX-RP-G-1002) details the findings from an intrusive site investigation undertaken in October 2020. Four trial pits were excavated, and six soil samples were analysed for potential contaminants. Notably, no ground gas monitoring was undertaken. The report considers that due to the thickness of made ground encountered (0.4-1m) that no ground gas risk exists on-site. Elevated concentrations of heavy metal and polycyclic aromatic hydrocarbons were encountered, and the report recommends that remediation is completed.

The revised Phase 2 Report (ref: B21114-JNP-XX-XX-RP-G-1002 P02) adds that due to the low organic content of made ground and the time the made ground has been in place (>35 years) that the ground gas risk is relatively low. It is then acknowledged that there are two mine shafts nearby and whilst these were capped by developers in 1987, they are assumed to pose a medium ground gas risk. From this, the report now suggests the installation of gas protection measures i.e. increasing the site to a 'CS2' classification.

The letter (ref: B21114-JNP-XX-XX-L1-G-001/PT) has provided additional commentary on the mine shafts near the site.

We accept the four documents and therefore recommend that Condition 7 is discharged.

Condition 8 - Remediation Strategy

To discharge Condition 8, the following documents have been received:

- a letter titled 'Re: Meadowcroft, Lower Lark Hill, Cleckheaton,' by JNP Group, dated 23rd July 2019 (ref: B21114-JNP-11-XX-RP-G-1001)
- a letter titled 'Re: Meadowcroft, Lower Lark Hill, Cleckheaton – Remediation Recommendation,' by JNP Group 27th October 2021 (ref: B31114-JNP-XX-XX-RP-G-1003)
- letter titled 'Comments on Environmental Health Response' by JNP Group, dated 8th July 2022 (ref: B21114-JNP-XX-XX-L1-G-001/PT)

The reports include geotechnical information, which is outside the remit of Environmental Health, this consultation response therefore only relates to the land contamination aspects of the reports.

The letter (ref: B21114-JNP-XX-XX-RP-G-1003) recommends that made ground should be removed down to the natural ground to a depth of 600mm (whichever is the lesser) and replaced with a clean cover layer of up to 600mm thick (150mm topsoil and 450mm subsoil).

The newer document (ref: B21114-JNP-XX-XX-RP-G-1004) maintains the previous proposals for clean cover and has added details relating to imported fill and the verification of clean cover. The report also assumed the sites' ground gas regime is a CS2 classification and therefore has detailed that a good performance passive sub-floor ventilation (a clear void or formed using gravel, geocomposites, polystyrene void formers, etc.) will be installed alongside a gas-resistant membrane fulfilling all requirements within Table 7 of BS8485 (2015+A1 2019), with verification in accordance with CIRIA C735. This combination will achieve a score

of at least 3.5 and therefore the report considers this to be in accordance with BS8485 guidance.

The report is generally satisfactory. However, it assumes a CS2 site classification and the number of samples for the imported material appears to be missing from the report. However, this is added in the letter (ref: B21114-JNP-XX-XX-L1-G-001/PT)

We accept the three documents and therefore recommend that Condition 8 is discharged.

Condition 9 – Remediation/Unexpected contamination

Groundworks must not commence until pre-commencement conditions 6, 7 and 8 have been discharged. Condition 9 must remain until the development is complete.

Condition 10 - Validation Report

We cannot consider the discharge of this condition until the approved remediation works have been implemented and verified.

Recommendations

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

We accept the Phase I Desk Study Report by RB Geotechnical Ltd, dated June 2017 (no reference) and we recommend the discharge of Condition 6.

Condition 7 - Phase II Intrusive Site Investigation Report

We accept the Phase II Contaminated Land Investigation report by JNP Group, dated January 2021 (B21114-JNP-XX-XX-RP-G-1002), Phase II Contaminated Land Investigation Report, by JNP Group, dated March 2022 (ref: B21114-JNP-XX-XX-RP-G-1002), a letter titled 'Re: Meadowcroft, Lower Lark Hill, Cleckheaton,' by JNP Group, dated 23rd July 2019 (ref: B21114-JNP-11-XX-RP-G-1001) and the letter titled 'Comments on Environmental Health Response' by JNP Group, dated 8th July 2022 (ref: B21114-JNP-XX-XX-L1-G-001/PT) and these satisfy the requirements of Condition 7, therefore, we recommend Condition 7 is discharged.

Condition 8 - Remediation Strategy

We accept the letter titled 'Re: Meadowcroft, Lower Lark Hill, Cleckheaton,' by JNP Group, dated 23rd July 2019 (ref: B21114-JNP-11-XX-RP-G-1001), a letter titled 'Re: Meadowcroft, Lower Lark Hill, Cleckheaton – Remediation Recommendation,' by JNP Group 27th October 2021 (ref: B31114-JNP-XX-XX-RP-G-1003) and letter titled 'Comments on Environmental Health Response' by JNP Group, dated 8th July 2022 (ref: B21114-JNP-XX-XX-L1-G-001/PT) and these satisfy the requirements of Condition 8, therefore, we recommend Condition 8 is discharged.

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