

Consultation Response from: KC Environmental Health (Pollution & Noise Control)
2024/91722 - Heckmondwike Hub Bus Station, Royle Fold, Heckmondwike, WF16 0HW

Discharge of details reserved by condition 3 (materials), 5 (retaining walls), 7 (phase I desk study), 8 and 9 (phase II intrusive site investigation report), 12 (CEMP) 15. (CMP), 19 (parking) of permission 2022/92471 for redevelopment of Heckmondwike Bus Station including a new concourse building with waiting room, changing places, WC, driver offices, 6 bus stands, landscaping, and associated works

Date Responded:
25th June 2024
Responding Officer:
NH
Responding Ref:
WK/202419454

Our comments relate to matters within the remit of Environmental Health only.

Condition 7 – Preliminary Risk Assessment (Phase I Desk Study Report)

A Phase 1 Geo-Environmental Assessment authored by WSP (dated July 2021, ref: TCF-WSP-KHBH-XXX-RP-CE-00001-V0.1) has been received in support of Condition 7. The report includes geotechnical information, which is outside the remit of Environmental Health, this consultation response therefore only relates to the land contamination aspect of the report.

We have read the report and accept the contents. The Phase I report provides an appraisal of the current site use, site history and previous surrounding land uses, since the 1800s and a comprehensive assessment of the environmental setting. The site is currently an operational bus terminal, with associated bus lanes and roadways. The ground cover across the bus station site is generally hardstanding with small areas of landscaping present in the centre of the bus station area. No visual or olfactory evidence of contamination was noted during the walkover, in June 2021.

The earliest mapping from 1890 shows small residential buildings and a hotel on the site, with surrounding residential and industrial areas, including woollen mills and foundries. The site has also been a tramway. By 1955, some buildings were demolished, and the tramway was gone and by 2011, all structures were demolished. The bus station was developed by 2015.

Concerning the anticipated ground conditions, the site is underlain by Pennine Lower Coal Measures. The site is not within a Development High Risk Area in relation to historic coal mining and notably, made ground is expected to be present associated with the former residential and commercial development.

Several potential sources of contamination have been identified including made ground associated with the former development and areas of industry surrounding the site. Several receptors and pollutant pathways have also been identified. The report concludes the potential for ground/groundwater contamination at the site as low, given the site's historic and current use. Nevertheless, WSP recommend a ground investigation to provide further information about the presence/absence of potentially complete contaminant linkages.

Overall, we accept the Phase 1 Geo-Environmental Assessment, authored by WSP (dated July 2021, ref: TCF-WSP-KHBH-XXX-RP-CE-00001-V0.1) in support of the condition, and therefore recommend that Condition 7 is discharged.

Condition 8 – Phase II Intrusive Site Investigation Report

A Phase 2 Geotechnical Interpretative Report authored by WSP (dated February 2023, ref: TCF-WSP-KHBH-XXXRP-CE-0002-V0.1) has been received in support of Condition 8. The report includes geotechnical information, which is outside the remit of Environmental Health, this consultation response therefore only relates to the land contamination aspect of the report.

We have read the report and do not accept the report. The report interprets the geo-environmental information from an investigation undertaken by Rogers Geotechnical Services Ltd in September 2022. Briefly, the fieldwork included the drilling of seven boreholes, the installation of 3 groundwater/gas monitoring standpipes and monitoring, and the retrieval of soil samples for chemical analysis.

The ground conditions were confirmed as hard covered, made ground and then sandstone or mudstone over Pennine Lower Coal Measures. A strong hydrocarbon odour was recorded on the exploratory log for BH1 between 0.10m and 0.40m bgl, logged as “macadam – possible tarmac”. The results of the soil analysis have been compared against the GACs for a public open space (POS) parks land use. Exceedances in benzo(a)pyrene, TPH and lead were identified.

Gas and groundwater monitoring was undertaken on six visits over eleven weeks, between September and November 2022. The monitoring has been undertaken during low atmospheric pressures (<1000mb) however falling pressure trends have not been captured. The maximum GSVs for methane and carbon dioxide were calculated as 0.0176 L/hr and 0.6776 L/hr, respectively. The calculated carbon dioxide gas screening value, together with repeated carbon dioxide concentrations recorded above the threshold value of 5%v/v and one instance of methane over 1%v/v are indicative of a Characteristic Situation 2 (CS2). WSP support the installation of gas protection measures based on the monitoring by RGS.

The reason we do not accept the Phase 2 Geotechnical Interpretative Report authored by WSP (dated February 2023, ref: TCF-WSP-KHBH-XXXRP-CE-0002-V0.1) in support of the condition, is because the ground gas monitoring failed to capture worst case scenario conditions as defined in good practice guidance. The location of BH2 is in an area of proposed enclosed space and the GSV is close to the CS3 threshold. For these reasons, we request commentary (and monitoring) to support the conclusion of CS2. Therefore, we recommend that Condition 8 is not discharged at this time.

Condition 9 – Remediation Strategy

A Remediation Strategy authored by WSP (dated October 2023, ref: 70079085_RS) has been received in support of Condition 9. The report includes geotechnical information, which is outside the remit of Environmental Health, this consultation response therefore only relates to the land contamination aspect of the report.

We generally accept the report, but additional information is necessary before we can fully comment. Exceedances of the GAC (benzo(a)pyrene, TPH and lead) for a public open space end use were identified in the Phase 2 investigation. The potential risks to end users of the development will be largely mitigated by the presence of hardstanding across most of the site. However, in areas of soft landscaping/planting, WSP recommend the placement of a suitable cover system over areas of exposed made ground. A minimum depth of 300mm (locally

deepened to 900mm in areas of tree pits) of clean soils (suitable for soft landscaping within a public open space) over a geotextile which will act as both a demarcation layer and no dig layer. Prior to the placement of the cover systems, WSP confirm that the suitability of the soils will be determined with certification from the source and verification sampling and analysis. The results will be compared against a verification criterion detailed in Appendix E of the report.

An assessment of gas risk has determined that the site should be considered as a Characteristic Situation 2 site and the report states that appropriate gas protection measures to be incorporated into buildings on site. The preliminary design includes a structural barrier (i.e., reinforced concrete slab) in association with overlying installation of a gas resistant membrane in the 'hub' and canopy area. The report adds that the gas protection measures will be designed for a Type C building in accordance with BS 8485:2015+A1:2019. The installation of the measures is to be verified in accordance with YALPAG guidance.

It is unclear at this stage what volume of site-won material is proposed for re-use, however, the report states that where possible fill material should comprise site won material that has been deemed suitable (both chemically and geotechnically) for re-use.

Overall, we generally accept the Remediation Strategy, authored by WSP (dated October 2023, ref: 70079085_RS) authored in support of the condition 9. However, we request additional information in relation to the ground gas regime characterisation for Condition 8 before we can provide recommendations for Condition 9 as the remediation strategy may be subject to change.

Condition 12 – Construction Environmental Management Plan

A Construction Environmental Management Plan (CEMP) authored by RG Carter Construction (no date or reference), has been received in support of the application to discharge Condition 12. The document has been assessed in relation to the following areas which are within the remit of Environmental Health.

- Noise and vibration from construction activities and vehicle movements
- Dust from construction activities
- Stray light and glare from artificial lighting used on site

We have read the report provided.

Communications

The CEMP states that the Projects Manager will be responsible for monitoring communications. The contact details are provided in the CEMP. The CEMP also details that a letter drop and in person visits will undertaken. A project contact board will be in place on site hoardings and a complaints procedure will be determined should anyone has cause to formulate a complaint.

Construction Noise and Vibration

Prior to construction the CEMP states that noise readings will be taken at the site boundary to establish and control background noise levels. Weekly noise readings at the site boundary to bench-mark the impact will then take place during construction.

Fugitive Dust

Regarding fugitive dust, where and when necessary, water will be utilised as a dust suppressant to minimise dust pluming during vehicular and plant activities using localised misting systems. The site will be hoarded to reduce the spread of dust and there will be frequent sweeping of hard paving.

Temporary Construction Related Artificial Lighting

Work areas will be lit as needed, with lights switched on only during active work. Motion sensor security lights around the perimeter will deter break-ins.

Comments

We do not accept the CEMP. There is no acknowledgement of construction hours. In addition, the document does not appear to include site-specific mitigation measures for controlling noise and vibration as specified BS 5228-1:2009+A1:2014. The document also lacks site-specific mitigation measures to control fugitive dust as specified in the IAQM Guidance on the assessment of dust from demolition and construction (January 2024, v2.2). We expect all CEMP documents to demonstrate knowledge and understanding of good practice guidance.

To safeguard the amenities of the occupiers of nearby properties in accordance with policies LP24 and LP52 of the Kirklees Local Plan, we recommend that Condition 12 remain until further notice.

To move forward with application, the applicant must revise the CEMP to address the points raised. On receipt of new information, we recommend consultation with Environmental Health.

Recommended Conditions

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