

Consultation Response from: KC Environmental Health (Pollution & Noise Control)
2024/92949 - Land off Bankwood Way, Birstall Retail Park, Birstall, Batley, WF17 9D
Discharge of conditions 9 (retaining walls), 17 (Phase II Report), 18 (Remediation), 21 (Coal mining) 23 (charging facilities), 24 (facing materials) and 27 (construction management plan) of previous permission 2021/92528 for erection of retail development, associated parking, servicing areas and landscaping
Date Responded:
17th December 2024
Responding Officer:
NH
Responding Ref:
WK/202434387

Conditions 9, 21, and 24 are outside the remit of Environmental Health.

Condition 17 – Phase II Investigation Report

Several reports have already been reviewed as part of the previous permission. Additionally, we acknowledge the submission of new reports containing geotechnical information, which is outside the scope of Environmental Health. We have reviewed the Hazardous Ground Gas Risk Assessment authored by Sirius (May 2022, C8781/MB/9853) provided in support of the application to discharge Condition 17.

Sirius have conducted additional spot and continuous monitoring at the site, with wells CP301 and CP302 drilled to 9.0m and 10.0m bgl, and RO301–RO305 to 5.0m bgl. Wells targeted landfill material, cohesive made ground and Pennine Lower Coal Measures. Ambisense Gasflux monitors were installed in CP301, CP302, and RO305. Continuous monitoring occurred from 11th March to 4th April 2022, with periodic monitoring between 24th February and 14th April. Atmospheric pressure during the period of monitoring ranged from 988mb to 1045mb.

Methane and carbon dioxide concentrations reached 82.79% v/v and 27.86% v/v respectively. Oxygen was typically <1% v/v. Elevated methane (85.7%) and carbon dioxide (33.2%) were found in landfill wells. Flow rates varied from -3.57 to 13.2l/h (constant) and -3.27 to 13.54l/h (peak), with higher flow in CP302. The response zone of CP302 targeted the landfill material.

Based on the monitoring results obtained, the following ‘worst possible’ gas screening values for methane was 11.20 litres/hour (based on a concentration of 82.79% v/v and a maximum peak flow rate of 13.54 l/h). For carbon dioxide this was 3.68 litres/hour (based on a concentration of 27.86% v/v and a maximum constant flow rate of 13.2 l/h). These ‘worst possible’ values result in the site being classified as Characteristic Situation 4 (CS4), as defined in Table 2 of BS8485: 2019. Isolated occurrence carbon monoxide concentrations were generally noted to be <10ppm. However, as with the above two distinct increases in concentration were identified on 13th and 17th March with maximum recorded concentrations of 58.9ppm and 62.2ppm within CP301 and CP302, respectively.

We accept the report provided and recommend that Condition 17 be discharged.

Condition 18 – Remediation Strategy

The following documents have been received in support of the application to discharge Condition 18.

- A Strategy for Remedial and Preparatory Works authored by Sirius (May 2022, C8781/RS)

- A Combined Remediation Strategy, Drilling & Grouting Plan authored by Remada Geo Consultants (May 2024, 1080.07.02)

The reports include geotechnical information beyond the scope of Environmental Health. This response addresses only the contaminated land aspects of the report.

The Sirius report outlines the preparatory works proposed including site clearance and additional testing of existing stockpiles to assess their suitability to reuse onsite. The report proposes a 2m turnover of made ground (from existing or proposed levels, whichever is the deepest) to identify remaining obstructions. Sirius advise that all unsuitable materials encountered as part of the turnover should then be removed. The report outlines contingency measures for unexpected contamination.

Sirius state that the landfill waste type made ground is anticipated to remain below hardstanding (including the proposed food store and service yard) and not exposed within landscaping. On this basis, the risk to site end users is considered to be low, requiring no further consideration. For areas underlain by natural ground, a nominal 100mm depth of suitable growing medium is proposed in soft landscaped areas. If texturally unsuitable (but chemically acceptable) non-landfill waste-type made ground is left in situ within proposed soft landscaped areas, a cover of 300mm of clean topsoil or subsoil to create a suitable growing medium is proposed. Landfill material will remain below hardstanding.

The report suggests the reuse of site won materials will take place and this should be agreed with regulators prior to placement. Sirius advise that any imported materials used as topsoil or subsoil must be tested in accordance with the guidance in the YALPAG document, "Verification Requirements for Cover Systems, Version 4.1" (June 2021) and that soils should be placed in the later stages of development to avoid cross-contamination.

The report also discusses potential gas protection measures for a CS4 site, indicating that a Gas Protection Score of 4.5 can be achieved. However, the report acknowledges that these measures need to be agreed upon with the local authority. The report closes by recommending verification proposals and states that a validation report will be provided to confirm compliance.

The Remada report presents a pre-remediation conceptual model and identifies several potential pollutant linkages, notably assigning a medium risk for ground gas inhalation by potential occupiers.

The report outlines plans to raise site levels in the eastern area and cut in the western area, with excess material to be disposed of off-site. It also details the seven stockpiles on-site, containing an estimated volume of 3,600m³. Remada state that further testing of this material will be required before reuse.

While gas protection measures are mentioned, specific measures are not detailed. The report acknowledges that a combination of protective elements will be necessary to achieve a 4.5 score per BS8485, with verification in accordance with C735 guidance

At this stage, we believe further clarification is necessary and that Condition 18 should remain. There appears to be turnover of landfill material proposed, and we require additional

information regarding the proposals. Furthermore, we expect ground gas monitoring to be conducted post-grouting/earthworks. In addition, the gas protection proposals have not been confirmed, and we would expect ground gas alarm systems to be implemented on sites of this nature.

Condition 23 – Electric Vehicle Charging Points

In relation to Condition 23, the supporting planning letter states:

‘The accompanying Proposed Site Plan (EV Boundary) (7404-SMR-00-XX-DR-A-8050-S3-P1) shows the location of EV spaces. A total of 12 EV spaces will be provided with fast chargers (with a minimum of 7kw). EV spaces will be provided before the development is brought into use and retained thereafter in accordance with condition 23. Condition 23 can therefore be fully discharged.’

The Proposed Site Plan (EV Boundary) (drawing no. 7404-SMR-00-XX-DR-A-8050-S3-P1) also shows the proposals for 12 electric vehicle charging points.

We consider that the scheme meets the requirements of the condition. However, we recommend that the condition remain in perpetuity, as the condition requires the EVCPs to be installed and retained thereafter.

Condition 27 – Construction Management Plan

In support of the discharge of condition 27, a revised Construction Environmental Management Plan (21st June 2024), has been submitted. 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

In section 1.1.5 of the report, we note that the Construction Environmental Management Plan does not address the aspects of Condition 27 that fall under the remit of Environmental Health. Additionally, the appended information is missing. For these reasons, we recommend that Condition 27 remain in place until further notice.

Recommendations

Condition 17 – Phase II Report

We accept the Hazardous Ground Gas Risk Assessment authored by Sirius (May 2022, C8781/MB/9853) and recommend that Condition 17 be discharged.

Condition 18 – Remediation Strategy

At this stage, we are unable to accept the information received in support of the application to discharge Condition 18. Further information is considered necessary. Therefore, we recommend that Condition 18 remain until further notice.

Condition 23 – Electric Vehicle Charging Points

We consider that the information in the Planning Statement and the Proposed Site Plan (EV Boundary) (drawing no. 7404-SMR-00-XX-DR-A-8050-S3-P1) meets the requirements of the

condition. However, we recommend that the condition remain in perpetuity, as the condition requires the EVCPs to be installed and retained thereafter.

Condition 27 – Construction Management Plan

We consider the document to be incomplete and insufficient to support the application to discharge Condition 27. Therefore, we recommend that Condition 27 must remain until further notice.