Consultation Response from: KC Environmental Health (Pollution & Noise Control)		
2023/91116 - Land off Primrose Lane, Hightown, Liversedge, WF15		
Erection of 67 dwellings		
Responding Date: **5th June 2023**	**Responding Officers:** **MN, RM, NH**	**Responding Ref:** **WK/202314249**

Noise

The applicant has submitted a Noise Impact Assessment authored by SLR dated December 2022 Ref 403.064603.00001. A baseline noise survey was conducted from two monitoring positions as shown in figure 4.1 between Thursday the 3rd of November and Monday the 7th of November 2022. Due to high wind speeds affecting the monitoring data, a limited timeframe has been used. It was also during the bonfire night period with fireworks and this has been excluded from the assessment and these points are accepted. A summary of the results is shown in table 4.3.

A BS8233 assessment shows no mitigation measures will be required for both internal and external amenity areas. Consideration has been given to development related road traffic and table 5.2 shows a negligible increase to noise sensitive receptors as shown in figure 4.1.

The findings of the report are accepted.

Air Quality

An Air Quality Assessment by SLR (Ref: 410.064882.00001) (dated: November 2022) has been submitted in support of the application. The proposed development site is on land at Primrose Lane, Liversedge and is not within an Air Quality Management Area (AQMA) or near to any roads of concern.

The report details the impact that the development will have on existing air quality, and how this will impact existing and future sensitive receptors during the construction and operational phases. It uses techniques detailed in national and local guidance, such as Local Air Quality Management Technical Guidance (LAQM. TG16), the Institute of Air Quality Management (IAQM) Technical Guidance and The West Yorkshire Low Emission Strategy (WYLES) – Technical Planning Guidance.

<u>Construction Phase</u>

For the construction phase a qualitative assessment of fugitive dust emissions was undertaken in accordance with the Institute of Air Quality Management (IAQM) Guidance. This involved a risk assessment to identify all potential sources of dust during the construction phase. The report concludes that the Site is classified as “medium risk” in relation to dust, and that the impacts are temporary and short term and can be controlled by the implementation of good practice dust control mitigation. These are outlined in Table 7-1 page 23 of the report titled Construction Dust Mitigation Measures.

<u>Operational Phase</u>

A qualitative screening assessment was undertaken in accordance with Environmental

Protection UK (EPUK) and the Institute of Air Quality Management (IAQM) guidance, using DEFRAs Pollutant Climate Mapping Model (PCM) to determine the effects of development generated traffic on local air quality. Monitoring data from Kirklees Councils 2020 Annual Screening Report (ASR), DEFRAs pollution background maps and traffic data provided by Vectos, the traffic consultants for the project, was used for the assessment using a baseline year of 2019 and an opening year of 2025. The report concludes that pollutant concentrations because of the development are not predicted to exceed the national air quality objectives.

In line with the West Yorkshire Low Emissions (WYLES) -Technical Planning Guidance for medium developments the report recommends mitigation measures to assist in reducing any potential impacts in relation to air quality. These include the provision of EV charging for all dedicated parking and a travel plan promoting alternative mode of travel.

Comment
We agree with the overall methodology and approach of the air quality assessment and concur with the conclusions of the report. We recommend a condition to control dust emissions during the construction phase.

Contaminated Land
Our records indicate that the proposed development site on land identified as potentially contaminated land use due to its historical land use/s (site reference: 50/4). These include a colliery, spoil heap and treatment plant. The application is also a major development. Therefore, contaminated land conditions are considered necessary.

The following documents have been submitted in support of the application:

- Coal Mining Risk Assessment by Wardell Armstrong dated 13th July 2022 (ref: LD10469)
- Phase 1 Geoenvironmental Risk Assessment by Michael D Joyce Associates LLP dated July 2021 (ref: 4146)
- Preliminary Phase 2 Ground Investigation by Michael D Joyce Associates LLP dated September 2021 (ref: 4157)
- Ground Gas Risk Assessment by Michael D Joyce Associates LLP dated 19th April 2022 (ref: ADJ/DJM/12274)
- Waste Acceptance Criteria (WAC) testing results by Michael D Joyce Associates LLP dated 30th September 2021 (ref: ADJ/DJM /11258)

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

The coal mining risk assessment (ref: LD10469) acknowledges a potential risk from mine gases associated with potential unrecorded shallow coal mine workings at the site and recommends an intrusive investigation. Likewise, the Phase I report (ref: 4146) has also been provided which assesses the potential source pollutant linkages and recommends a site investigation to establish the geoenvironmental conditions of the site given the site history and sensitive end-use.

The Phase 2 report (ref: 4157) details the findings from an intrusive investigation. The site

was split into two sections based on the site history and ground conditions. The Northern section of the site comprises the former Stanley Colliery. Ten trial pits (TP1 to TP10) and seven sampling boreholes (WS1 to WS7) were drilled in this area. Poor quality topsoil was generally encountered (20mm - 40mm thick) over variable made ground which comprised of suspected washed former colliery spoil and also mixed made ground consisting of colliery spoil and a sandy clay containing gravel sized fragments of shale, mudstone and sandstone. Suspected foundations were encountered at 1.5m to 1.75m depth at WS3. The report notes that at least 4m of made ground was encountered at the northern boundary but the made ground thinned in a southerly and westerly direction. No clear evidence of a reservoir or deeper made ground was encountered.

The Southern section of the site is agricultural land and lies outside the former colliery area. This section is reportedly overlain by between 200mm and 350mm of topsoil, with approximately 100mm of subsoil in places. Intact coal was encountered at TP11 (2.0m to 2.8m depth). In addition, a former quarry was encountered at TP18 and TP20, identified by the made ground at 2.0m to 2.2m overlying suspected waste materials derived from quarrying. The full extent of the quarry is not known at present. The report recommends further investigation to 'define the actual extent and its depth' of the suspected quarry.

During the investigation, no groundwater was encountered. No unusual colouration or odours to any of the soils encountered during the investigation and no obvious visual evidence of contamination was found. When compared against a generic assessment criterion for residential end use, the made ground in the northern part of the site was uncontaminated. However, the topsoil in the southern part of the site contained elevated arsenic. The report attributes this to historic herbicide and pesticide use or high natural concentrations. TP19 was also tested for more recent and persistent herbicides and pesticides and the returned results were less than the limit of detection. Two samples of made ground from the northern part of the site were tested and two samples of topsoil against waste acceptance criteria. The results confirmed made ground in the northern part of the site and topsoil in the southern part of the site and are classified as hazardous waste.

Gas monitoring standpipes were installed across the site (WS1, WS2, WS4, WS5, WS8, WS9, WS11, WS12, WS13, WS14, WS15 and WS16) to measure oxygen, methane, carbon dioxide, hydrogen sulphide and VOCs. The full monitoring results are reported in the ground gas assessment letter (ref: ADJ/DJM/11274). No methane, hydrogen sulphide or VOC gases were detected. Carbon dioxide peaked at 3.1% v/v and no flow rate was detected. The resulting gas screening values placed the gas regime within Characteristic Situation 1, and the letter concludes 'the site does not require any gas protection measures.'

Notwithstanding, the Phase 2 report recommends that additional work is necessary. In contradiction to the ground gas letter, the installation of ground gas protection elements is proposed. It is also recommended that rotary drilling is undertaken to establish the presence of potential shallow mine workings and trial pitting to locate a mineshaft in the southern part of the site and the extent and depth of the quarry in the south east part of the site. Additional testing of the soils below the topsoil and sampling and testing of the woodland area is also recommended.

Having read the report, we make the following observations:

(1) Details regarding the response zone and targeted source/s is missing. This information must be included and be fully justified.

(2) The ground gas monitoring is limited to events >1000 mB. Justification is necessary for this approach as this does not appear to be in accordance with best practice guidance.

(3) We request additional commentary on the sampling methodology to detail the rationale behind the chosen samples sent for analysis.

(4) Piling is necessary on part of the site (northern section and the area of the suspected backfilled quarry). We consider the report to lack an assessment on the piling activities and possible ground gas pathways/migration. A more detailed ground gas assessment is necessary.

(5) The ground conditions in the woodland area to the north of the site are unknown yet form part of the application site. We also understand that additional deeper investigations are proposed to establish the coal mining legacy. In the absence of full site information, we consider part of the site characterisation incomplete.

Before the application is determined, the applicant must respond to the above points so we can make the necessary contaminated land recommendations for this application. In addition to the above, we also seek clarification on the following:

- Given the type of made ground identified and historic land use on-site and to the west, we expect the calorific value of the made ground soils to be established. Additional information and/or clarification is necessary.

- We understand that soils will have to be imported and a cover system is recommended in the northern area of the site. However, the report also suggests the possible re-use of site-won subsoils. However, we require additional testing to confirm the sub-soils soils suitability for re-use as no subsoils appear to have been tested to date.

Electric Vehicle Charging Points - (EVCPs)
We note from the Design & Access Statement that the proposal includes the provision of electric vehicle charging points (EVCPs) situated either in the garage or the side wall of individual dwellings. Should the application be approved we expect the EVCP to be installed. Approval under the Building Regulations may also be required, and the applicant should contact their Building Control Provider for further information in relation to Approved Document S.

Loss of amenity caused by the construction of the development
Because of the large scale of the development and the proximity of residential properties to part of the site boundary there is a significant potential for loss of amenity to the occupiers of nearby properties from noise, vibration, dust and artificial light from the construction phase of the development. Therefore, we recommend a condition for a Construction Environmental Management Plan (CEMP) to be submitted.

Recommendations

Before the application is determined, the applicant must respond to the contaminated land points raised herein (points no. 1 to 5) so we can make the necessary contaminated land recommendations for this application.

The following conditions are recommended for other aspects of the application. Please note our recommendations are not final and are subject to satisfactory contaminated land information being submitted and approved before the application is determined.

CEMPC Construction Environmental Management Plan - Condition

Prior to development commencing a Construction Environmental Management Plan (CEMP) shall be submitted to and agreed in writing with the Local Planning Authority. The plan shall describe in detail the actions that will be taken to minimise adverse impacts on occupiers of nearby properties by effectively controlling:

- Noise & vibration arising from all construction related activities. This should also include suitable restrictions on the hours of working on the site including times of deliveries.
- Dust arising from all construction related activities, which should include measures to monitor and record the emissions of dust during construction, in accordance with Table 7-1 page 23 of the Air Quality Assessment by SLR (Ref: 410.064882.00001) (dated: November 2022)
- Artificial lighting used in connection with all construction related activities and security of the construction site.

A communications plan detailing the responsible person, their contact details and how this will be communicated to local residents and the Local Authority must be included.
The agreed plan shall be adhered to throughout the construction of the development.
Reason: To safeguard the amenities of the occupiers of nearby properties in accordance with part 15 of the NPPF and LP52 of the Local Plan.

CEMPF Construction Environmental Management Plan - Footnote

Noisy construction related activities should not take place outside the hours of:
07.30 to 18.30 hours Mondays to Fridays
08.00 to 13.00 hours, Saturdays
With no noisy activities on Sundays or Public Holidays

Institute of Air Quality Management document *"Guidance on the assessment of dust from demolition and construction"* Version 1.1 2014 provides detailed information regarding dust control.

Kirklees Council has powers under Section 60 of the Control of Pollution Act 1974 to control noise from construction sites and may serve a notice imposing requirements on the way in which construction works are to be carried out. It has additional powers under Sections 80 of the Environmental Protection Act 1990 to prevent statutory nuisance including noise, dust, smoke and artificial light and must serve an abatement notice when it is satisfied that a statutory nuisance exists or is likely to occur or recur. Failure to comply with a notice served using the above-mentioned legislation would be an offence for which the maximum fine on summary conviction is unlimited.

Kirklees COUNCIL