

Consultation Response from: KC Environmental Health (Pollution & Noise Control)		
2022/91735 Land off, Hermitage Park, Lepton, Huddersfield, HD8 0JU		
Outline application for erection of 80 dwellings and associated work, including the considerations of access, layout, and landscaping		
Date Responded: 22nd August 2022	Responding Officer: Rebecca Muff – Air Quality Natalie Heaney – Contaminated Land Mohammed Nasim - Noise	Responding Ref: WK/202220362
Air Quality An Air Quality Assessment by SLR (ref: 410.10429.00003) (version: rev 3) (dated: February 2022) has been submitted in support of the application. The proposed development site is situated off Hermitage Park, to the South of Rowley Lane, in Lepton, approximately 3.2 miles to the South-East of Huddersfield. It 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 Guidance on the Assessment of Dust Demolition and Construction v 1.1 June 2016. This involved a risk assessment to identify all potential sources of dust during the construction phase and the risk of impact at all sensitive receptor locations within 20m of the site boundary and within 500m of the site entrance on the access roads. From this, the potential significant impact of dust emissions associated with the development without mitigation measures was determined. The report concluded that there is the potential for air quality impacts because of fugitive dust emissions from the site, from earthworks, construction and track-out. The report goes on to say that these impacts are considered to be temporary and short term and can be controlled by the implementation of good practice dust control mitigation. These are outlined in table 8-1 (page 32) of the report titled Construction Dust Mitigation Measures. <u>Operational Phase</u> The proposed development was assessed in accordance with The West Yorkshire Low Emissions Strategy (WYLES) – Technical Planning Guidance. This document divides applications into 3 impact types (Minor, Medium and Major) using specific criteria to determine the type. Actions and mitigation requirements are dependent on the development use class and which impact type it is classified as. The report classes the development as a Medium size development, in terms of air quality, because it is not within an AQMA and does not meet the triggers to classify it as a Major development. For the operational phase, detailed dispersion modelling was undertaken to determine changes in pollutant concentrations due to traffic emissions caused by the development at 11		

existing sensitive receptor locations including the nearby Junior Infant & Nursery school. The assessment was undertaken in accordance with Defra guidance using ADMS-Roads, the latest Defra vehicle emission factors (EFT v10.1) and monitored data taken from Kirklees Councils 2020 Annual Status Report (ASR). Traffic flow data was provided by Optima Intelligent Highway Solutions, the Transport Consultants for the project, and includes the cumulative impact of two other committed developments in the area for 75 and 72 dwellings respectively. Using this information, the model predicted concentrations based on three scenarios as follows:

- a baseline/verification year of 2019
- an opening year of 2025 (without the development)
- opening year of 2025 (with the development)

The report concludes that for the operational phase the predicted annual NO₂, and PM₁₀ concentrations will be below the current national air quality objectives for both the “*without development*” and “*with development*” scenarios and at all modelled sensitive receptor locations in 2025. Therefore, in accordance with the Environmental Pollution UK (EPUK) and Institute of Air Quality Management (IAQM) guidance, the overall effect on air quality, because of the additional development trips, on sensitive receptors is considered to be ‘not significant’. The report makes note of the fact that the assessment was based on a previous design iteration comprising of 110 dwellings with an anticipated opening year of 2027. Therefore, the results are based on a worst-case scenario as it is predicted that with advances in technology and as shown with monitored data across Kirklees, there is a general downward trend in air pollutant concentrations.

In line with the WYLES 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

Having assessed the report, we agree with the overall methodology and approach. We concur with the conclusions of the report that for the operational phase, the development is not expected to have a significant impact on local air quality. To mitigate for future emissions, the development will include the recommended mitigation measures and a condition will be necessary for EV charging.

For the construction phase of the development, we expect the best practice mitigation measures as outlined in table 8-1 page 32 of the report titled Construction Dust Mitigation Measures to be implemented. Therefore, a condition will be necessary to control fugitive dust emissions during the construction phase of the development.

Contaminated Land

This site has been identified on our mapping system as potentially contaminated land due to its proximity to previous Collieries and Brickworks (site ref: 22/16 and 26/16). Contaminated land conditions are therefore necessary. The following documents have been submitted in support of the application:

- Desk Study Report by Betts Geo Environmental Ltd, dated October 2020 (Ref:

20FRT010/DS)

- Phase 2 Ground Investigation Report by FWS Consultants Ltd, dated May 2022 (ref: 3959OR01Rev01/May 2022)

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 Desk Study Report (Ref: 20FRT010/DS) details the site history. Notable on-site land uses are recorded as fields and a tramway associated with the adjacent Victoria Colliery. Surrounding land uses include coal mines, a fireworks factory and Hermitage Farm. In terms of coal mining legacy, the site is at high risk of shallow workings. Therefore, the report concludes that there is a 'Moderate – High risk from ground gas existing due to the possibility of ground gas being generated from shallow coal and a lack of significant superficial deposits' and there is a 'Low – Moderate (localised) risk' due to former tramways, made ground, former buildings, well and shafts. An intrusive investigation is recommended with rotary boreholes, twenty soil samples, and six ground gas monitoring visits over at least three months with varying barometric pressures.

The Phase 2 Ground Investigation Report (ref: 3959OR01Rev01/May 2022) states ground investigation was carried out between 21st February and 1st March 2022. The investigation included 17 trial pits, 9 rotary open boreholes, chemical testing and the installation of monitoring wells in mini boreholes (WS01, WS02, WS04, WS06, and WS10) to establish the ground conditions.

Generally, no made ground was encountered. However, localised made ground (reworked clay) was encountered above a drain in the north western area. The report also details that 'Thin coal seams (0.1 m to 0.4 m thick) were encountered near surface (2.0m to 7.4m) across the site,' and evidence of mine workings were identified across the whole site area. Perched groundwaters were identified at 0.8m to 3m in 'isolated pockets' and during the first monitoring visit, 'groundwater was recorded at depths of between 1.76m to 2.67m bgl in all standpipes, except WS10.'

No evidence of visual or olfactory contamination was reported during the ground investigation and the results of the soil analysis were subsequently screened against generic assessment criteria for residential properties with gardens. None of the topsoil samples was above the chosen criteria except for arsenic. Six samples from Trial Pits 3 and 6 and Mini bore WS4 in the northern area of the site contained concentrations between 43-45 mg/kg (GAC 37 mg/kg).

To date, one ground gas monitoring visit has been undertaken on 8th March 2022. The maximum methane and carbon dioxide concentrations encountered was <0.1% v/v and 1.5% v/v, respectively. The minimum oxygen concentration reported was 18% v/v and the steady flow rate was <0.1l/h. The report acknowledges that ground gas monitoring is 'preliminary' and that gas monitoring is ongoing.

The report continues to recommend that an additional investigation is undertaken in the northern area of the site and additional works to delineate the extent of the elevated arsenic hotspot. The ongoing ground gas monitoring must also be completed to confirm the gas regime.

Having read the reports, we accept the Desk Study Report by Betts Geo Environmental Ltd, dated October 2020 (Ref: 20FRT010/DS) but we do not accept the Phase 2 Ground Investigation Report by FWS Consultants Ltd, dated May 2022 (ref: 3959OR01Rev01/May 2022) for the following reasons:

- (1) The gas monitoring is incomplete therefore we consider the site characterisation to be incomplete. We would expect ground gas monitoring to at minimum reflect the recommendations made in Phase 1 report.
- (2) The report recommends additional investigations at the site, especially in the northern area. However, the area discussed is not clearly indicated, and it is unclear how we could accept a report where further investigations may change the conclusions of the current report.
- (3) No pressure trends have been reported in the ground gas monitoring data sheets supplied. We expect the reporting of ground gas monitoring to be undertaken in accordance with best practice guidance.
- (4) The results have all been screened using generic assessment criteria that assumes a 2.5% soil organic matter content. However, the soil organic matter content appears to range from 0.2 % to 5.6%. Clarification is required why a 'blanket approach' has been taken.
- (5) The whole western area of the site has not been covered by this intrusive investigation. We expect any intrusive investigation to consider the whole of the planning application area. Clarification is necessary.

Therefore, a revised Phase II Intrusive Site Investigation Report is required. Consequently, contaminated land conditions are therefore recommended, first for a Phase 2 Intrusive Site Investigation Report and the subsequent stages of land contamination risk management i.e., remediation and verification.

Noise

An Acoustic Planning Report authored Lighthouse Acoustic dated 21 February 2022 Ref 07/APR1 has been submitted to consider the impact of the surrounding environment on the application.

Automated environmental sound measurements were undertaken from 1400hrs on Wednesday 28 September 2020 to 1400hrs on Thursday 29th September 2020 from two measurement locations shown on the site plan. Position A was to the south of the site and position B was to the north of the site. The results are shown in para 5.5.2. The site layout as per drawing number 3284-0-002 from Nieman Architects dated 22nd September 2021 was used for noise modelling and this is shown in para 6.8 for internal daytime requirements and external daytime requirements and para 6.9 for internal night time requirements. The modelling shows parts of the façade in zone A exceed the requirements within BS8233 and mitigation will therefore be required.

Based upon reasonable assumptions for the construction proposals, glazing and ventilation is considered and at para 6.6.1, the report states '*In order to achieve the internal daytime and night-time requirements openable windows must remain closed In Façade Zones A and B*'. The number and technical specifications of the required ventilators is given along with a comment about mechanical ventilation which will be required to provide summer cooling. No detail is given on which system will, be installed.

It is our position that acoustic trickle ventilation alone is unlikely to provide sufficient ventilation i.e. purge ventilation, to help control thermal comfort without the need to open windows and would therefore not be acceptable. It is unacceptable that building occupiers will be faced with the option of having to be exposed to either excessive noise or excessive heat and this is the situation that Kirklees requires to be addressed through the provision of an alternative ventilation system when windows need to be kept closed for noise mitigation reasons.

To assist the applicant, an alternative ventilation system would need to provide a level of ventilation to properties affected by excessive external noise, sufficient to replace the ventilation which would normally be provided by opening windows. Systems that draw in air from the roof-space of the building would need a bypass to allow air from the outside to be drawn in during warm weather.

The alternative ventilation scheme must identify which rooms require a ventilation system and the acoustic specification of the proposed ventilation system demonstrating that when operated it will not cause indoor noise target levels to be exceeded. Also, the alternative ventilation system must not compromise the sound insulation properties of the building envelope. A condition is recommended.

The external amenity areas meet with the requirements of BS8233 and would be improved if a standard solid perimeter fence were to be installed to each property.

The submitted report identifies part of the site is exposed to higher levels of noise and mitigation will be required to ensure it meets with the requirements of BS8233 and is accepted. However, no reference is made to the proposed pumping station to the south of the site and how this may impact upon the occupiers of nearby properties (plots 48 to 58 as per drawing number 3284-0-002 from Nieman Architects dated 22 September 2021). Clarification will be required to ensure any noise from the pumping station does not lead to a loss of amenity to the occupiers of nearby plots.

Loss of amenity caused by the construction of the development

Because of the large scale of the development and the proximity of existing 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. It will therefore be necessary for a condition requiring a Construction Environmental Management Plan (CEMP).

Electric Vehicle Charging Points (EVCP)

In an application of this nature it is expected that facilities for charging electric vehicles and other ultra-low emission vehicles are provided in accordance with the National Planning Policy Framework and *Air Quality & Emissions Technical Planning Guidance* from the West Yorkshire Low Emissions Strategy Group. A condition requiring charging points is therefore necessary.

Recommended Conditions

Dust1 Implement agreed Dust Mitigation Scheme – Condition

Before any construction work commences, the mitigation measures to control fugitive dust emissions during the construction phase of the development shall be implemented in accordance with those detailed in table 8-1 page 32 of the Air Quality Assessment by SLR (ref: 410.10429.00003) (version: rev 3) (dated: February 2022) and retained for the duration of the construction period.

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.

CLC2 Submission of a Phase 2 Intrusive Site Investigation Report - Condition

Groundworks (other than those required for a site investigation report) shall not commence until a Phase II Intrusive Site Investigation Report by a suitably competent person has been submitted to and approved in writing by the Local Planning Authority.

Reason: To ensure the safe occupation of the site in accordance with Policy LP53 of the Kirklees Local Plan and paragraph nos. 178 and 179 of the National Planning Policy Framework

CLC3 Submission of Remediation Strategy - Condition

Where site remediation is recommended in the Phase II Intrusive Site Investigation Report approved pursuant to condition (CLC2) further groundworks shall not commence until a Remediation Strategy by a suitably competent person has been submitted to and approved in writing by the Local Planning Authority. The Remediation Strategy shall include a timetable for the implementation and completion of the approved remediation measures.

Reason: To ensure the safe occupation of the site in accordance with Policy LP53 of the Kirklees Local Plan and paragraph nos. 178 and 179 of the National Planning Policy Framework

CLC4 Implementation of the Remediation Strategy - Condition

Remediation of the site shall be carried out and completed in accordance with the Remediation Strategy approved pursuant to condition (CLC3). In the event that remediation is unable to proceed in accordance with the approved Remediation Strategy or contamination not previously considered is identified or encountered on site, all groundworks in the affected area (except for site investigation works) shall cease immediately and the Local Planning Authority shall be notified in writing within 2 working days. Works shall not recommence until proposed revisions to the Remediation Strategy have been submitted to and approved in writing by the Local Planning Authority. Remediation of the site shall thereafter be carried out in accordance with the approved revised Remediation Strategy.

Reason: To ensure the safe occupation of the site in accordance with Policy LP53 of the Kirklees Local Plan and paragraph nos. 178 and 179 of the National Planning Policy Framework

CLC5 Submission of Validation Report - Condition

Following completion of any measures identified in the approved Remediation Strategy or any approved revised Remediation Strategy a Validation Report by a suitably competent person shall be submitted to the Local Planning Authority. No part of the site shall be brought into use until such time as the remediation measures have been completed for (that part of) the site in accordance with the approved Remediation Strategy or the approved revised

Remediation Strategy and a Validation Report in respect of those remediation measures has been approved in writing by the Local Planning Authority. Where validation has been submitted and approved in stages for different areas of the whole site, a Final Validation Summary Report shall be submitted to and approved in writing by the Local Planning Authority.

Reason: To ensure the safe occupation of the site in accordance with Policy LP53 of the Kirklees Local Plan and paragraph nos. 178 and 179 of the National Planning Policy Framework

CLC 7 Contaminated land - Footnote

All contamination reports shall be prepared by a suitably competent person, as defined in Annex 2 of the National Planning Policy Framework 2019. Reports must be prepared in accordance with the following guidance:

- *Land Contamination Risk Management (LCRM)*
- BS 10175:2011+ A2:2017 *Investigation of Potentially Contaminated Sites. Code of Practice*
- *Development on Land Affected by Contamination - Technical Guidance for Developers, Landowners & Consultants - (v11.2) June 2020* by the Yorkshire and Lincolnshire Pollution Advisory Group

NC1 Implement Agreed Noise Mitigation Measures – Condition

Before the development is first brought into use all works which form part of the sound attenuation scheme as specified in the Acoustic Planning Report authored Lighthouse Acoustic dated 21 February 2022 Ref 07/APR1:

- a) shall be completed; and
- b) written evidence to demonstrate that the specified noise levels have been achieved shall be submitted to and approved in writing by the Local Planning Authority.

If it cannot be demonstrated that the noise levels specified in the aforementioned Noise Report have been achieved, then a further scheme shall be submitted for the written approval of the Local Planning Authority incorporating further measures to achieve those noise levels.

All works comprised within those further measures shall be completed and written evidence to demonstrate that the aforementioned noise levels have been achieved shall be submitted to and approved in writing by the Local Planning Authority before the development is first brought into use

NC7 Ventilation of habitable rooms if windows need to be kept closed - Condition

Before construction commences, a ventilation scheme for rooms where windows need to be kept closed to prevent excessive noise levels shall be submitted to and approved in writing by the Local Planning Authority. The ventilation scheme shall provide the following information:

- Identify which rooms of which plots referenced back to the approved Noise Assessment require a ventilation system
- The ventilation Scheme must demonstrate how habitable rooms of these plots shall be provided with sufficient ventilation to help control thermal comfort and avoid over heating during hot weather without the need to open windows. This should include details of the air intake location and any summer bypass for any heat recovery system

including a calculation for air changes/hour. A Standard Assessment Procedure (SAP) assessment would be acceptable to demonstrate that a risk of overheating is minimised.

- The acoustic specification of the proposed ventilation system demonstrating that when operated it will not cause indoor noise target levels to be exceeded

All works which form part of the approved scheme shall be completed prior to occupation of the aforementioned plots and retained thereafter.

NF7 - Footnote to accompany condition NC7

A ventilation scheme that meets the performance specification given in Part 6 of Schedule 1 of the Noise Insulation Regulations 1975 is likely to be acceptable. Acoustic trickle ventilation alone is unlikely to provide sufficient ventilation to help control thermal comfort without the need to open windows and would therefore not be acceptable.

CEMPC Construction Environmental Management Plan - Condition

Prior to the 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.
- 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.

EVC1 Electric Vehicle Charging Points - Condition

Before the electrical system is installed a scheme detailing the dedicated facilities that will be provided for charging electric vehicles and other ultra-low emission vehicles shall be submitted to and approved in writing by the Local Planning Authority. The scheme shall meet at least the following minimum standard for numbers and power output:

- A Standard Electric Vehicle Charging point providing a continuous supply of at least 16A (3.5kW) for each residential unit that has a dedicated parking space

Buildings and parking spaces that are to be provided with charging points shall not be brought into use until the charging points are installed and operational. Charging points installed shall be retained thereafter.

Reason: In the interest of supporting and encouraging low emission vehicles, in the interest of air quality enhancement, to comply with the aims and objectives of Policies LP20, LP24 and LP47 of the Kirklees Local Plan and Chapters 2, 9 and 15 of the National Planning Policy Framework.

EVF1 Electric Vehicle Charging Points – Footnote

- A Standard Electric Vehicle Charging Point is one which is capable of providing a continuous supply of at least 16A (3.5kW) and up to 32A (7kW). The higher output is more likely to be futureproof
- Standard charging points for single residential properties that meet the requirements specified in the latest version of “*Minimum technical specification - Electric Vehicle Homecharge Scheme (EVHS)*” by the Office for Low Emission Vehicles will be acceptable. Basically, charging points that provide Mode 3 charging with a continuous output of least 16A (3.5kW) and have Type 2 socket outlet would be acceptable.
- The electrical supply of the final installation should allow the charging equipment to operate at full rated capacity.
- The installation must comply with all applicable electrical requirements in force at the time of installation.