Consultation Response from: KC Environmental Health (Pollution & Noise Control)		
2020/92546 - Land off Blackmoorfoot Road and Felks Street, Crosland Moor, Huddersfield HD4 7AD		
Outline application (with details of points of access only) for the development of up to 770 residential dwellings (Use Class C3), including up to 70 care apartments (Use Classes C2/C3) with doctors surgery of up to 350 sq m (Use Class D1); up to 500 sq m of Use Class A1/A2/A3/A4/A5/D1 floorspace (dual use), vehicular and pedestrian access points off Blackmoorfoot Road and Felks Stile Road and associated works.		
Date Responded: **10 October 2020**	**Responding Officer:** **Rebecca Muff (Air Quality)** **Natalie Heaney (Contaminated Land)** **Mohammed Nasim (Noise)** **Richard Hume (Lighting & EVCP)**	**Responding Ref:** **WK/202023384**

Air Quality

An Air Quality Assessment by Redmore Environmental, Ref: 1793r3, dated 31st July 2020 has been submitted in support of an outline application for a mixed-use development with 770 residential dwellings on land off Blackmoorfoot Road and Felks Street, Crosland Moor, Huddersfield.

The air quality assessment classifies the development as Major according to the West Yorkshire Low Emission Strategy (WYLES) – Technical Planning Guidance and includes the impact of the development during both the operational and construction phases.

The southern site boundary of the proposed development is adjacent to Johnsons Wellfield Quarry, this mineral extraction of sandstone is still currently active and has a history of dust generation in the area. Fugitive dust emissions and the potential concurrent dust impacts during the construction phase on sensitive receptors was assessed. This was based on the source - pathway - receptor model, in accordance with the methodology outlined in the Institute of Air Quality Management (IAQM) Guidance on the Assessment of Dust from Demolition and Construction V1.1.to predict the impact of fugitive dust emissions on sensitive receptors.

For the operational phase dispersion modelling was undertaken using ADMS-Roads, and other techniques detailed in DMRB, and LAQM.TG16. The pollutants modelled were Nitrogen Dioxides (NOX) and Particulate Matter (PM_{10}) using a baseline year of 2019 with a future year of 2022 representing the first year of occupation of the development. Traffic data provided by Crofts, the Transport Consultants for the project, supplemented with information from the Department for Transport (DfT) web site, was used with the model to predict the potential impact on air quality caused by existing and future traffic levels due to the development. Consideration was given to the impact the development would have on Kirklees Council's Air Quality Management Area (AQMA) 9 which incorporates roads bordering and within the Huddersfield ring road.

The report concludes that during the construction phase there is the potential for air quality impacts due to fugitive dust emissions from both the development site and the mineral extraction from Johnsons Wellfield Quarry. A risk assessment was undertaken and assessed

against criteria outlined in the IAQM Guidance. The Disamenity Dust Impact Risk and the background PM_{10} concentration in the vicinity were both predicted to be low and not significant. However, the implementation of good practice dust control measures as outlined in Table 29 – "Fugitive *Dust Emission Mitigation*" of the Assessment would provide suitable mitigation during the construction phase and reduce potential impacts to an acceptable level. For the operational phase, modelling was undertaken at sensitive receptor locations to predict future pollutant concentrations due to predicted vehicles movements to and from the site, with and without the development. The pollution concentrations for NO_2 and PM_{10}, as well as fugitive dust emissions from Johnsons Wellfield Quarry were predicted to be negligible. The report concluded that air quality impacts because of the development were not considered to be significant at any sensitive location in the vicinity of the site.

Comment

The development was assessed in accordance with the West Yorkshire Low Emission Strategy -Technical Planning Guidance (WYLES). 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. In terms of air quality, the proposed development is classed as Major impact type as it meets the additional criteria outlined in the WYLES guidance.

Having assessed the report, I agree with the methodology and find the approach satisfactory. It considers emissions associated with the site both during the construction and operational phases as well as the fugitive dust emissions generated from Johnsons Wellfield Quarry and the impact this cumulative effect this will have on sensitive receptors. However, as a Major development and according to the WYLES guidance the assessment should include a calculation of the monetary damages from the development and this should include a fully costed mitigation plan detailing the proposed low emission mitigation measures. The monetary value of the damages should be reflected in money spent on the low emission mitigation measures, and this should be in addition to the installation of Electric Vehicle Charging points (EVCPs).

That said I am satisfied with the recommendations and conclusions of the air quality assessment, and agree with the suggested mitigation measures for the construction phase listed in Table 29 on page 54 of the Air Quality Assessment and the operational phase, namely:

- Enhanced pedestrian connections to the surrounding area to encourage sustainable transport modes
- Electric Vehicle (EV) charging points
- Production of a Travel plan.

However, submission of a monetary cost damage calculation is still required including a fully costed mitigation plan detailing the proposed low emission mitigation measures and because of these omitted details the report cannot be accepted therefore a condition requiring an air quality impact assessment is currently necessary.

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.

Contaminated Land

A Phase I And Phase II Geo-Environmental Site Assessment by E3P dated February 2018 (ref: 11-822-r1-2) has been received. I have read the report supplied by the applicant. 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 report begins detailing the desk study. The site is the former site of Black Cat Fireworks and multiple buildings associated with fireworks manufacturing activities still exist on site. The site has also been the site of former quarries. Polycyclic aromatic hydrocarbons (PAHs), asbestos-containing materials, heavy metals and metalloids and ground gas were identified as possible risks to site receptors and the report recommended intrusive work to confirm any source-receptor linkages identified in the preliminary conceptual model. I agree with the Phase I section of the report.

The report continues to detail the field investigation and laboratory results. The key findings were widespread made ground across the site generally comprising of inert material which was proposed as the possible source for several contaminants. Elevated heavy metals, PAH, naphthalene and total petroleum hydrocarbon C16-C21 were above soil screening values and the report recommends that remediation will be required in relation to ground contamination. I am satisfied with this aspect of the Phase II report.

Twenty-four samples were analysed for asbestos and from these, five contained asbestos fibres (chrysotile and amosite fibres, and chrysotile bitumen). Gravimetric analysis of four samples (excluding the chrysotile bitumen) determined that the asbestos content was very low or less than the limit of detection (<LOD). The findings suggested that asbestos was generally associated with localised shallow made ground and one instance of deeper made ground (WS215). From this, hotspot excavations and the placement of piled impacted soils at depth beneath the plots were proposed. From Figure 10.1 the proposed depth is 1.00m.

There are issues with asbestos-containing soil management on-site. Asbestos is common at sites with historical industrial land use. The asbestos identified was either low (<0.001%) or <LOD, no inhalation risks were considered during the movement and placement of these asbestos-containing soils beneath plots. Any disturbance may liberate asbestos fibres and present a serious health risk. Piling practices may also present a risk. Further risk-modelling should be provided relating to inhalation risk to site receptors, especially as amosite is amphibole asbestos and presents a greater inhalation risk.

Furthermore, in several of the samples, the base of the made ground was encountered, and for WS125 was deep (1.6 metres below ground level). The clean cover system proposed at this stage does not include a geotextile demarcation layer or present methods to limit horizontal and lateral migration of asbestos fibres beneath the plot and the deeper made ground into the adjacent 600 mm clean cover in front and back garden areas. Proposals for

asbestos remediation should show clear efforts to limit future exposure to site workers and end-users.

In addition to soil analysis, ground gas monitoring was carried out as a moderate ground gas source generation potential had been assigned to the site. The report writes that six visits are required over three months according to the guidance. The presented gas monitoring results suggest the site has minimal risk methane and carbon dioxide (Characteristic Situation 1 classification) and monitoring was terminated after less than 3 months.

There are several issues with the gas monitoring aspect of the report. The outline application is for variable end-use with different sensitivities to ground gas according to CIRIA C665 Table 5.5a and 5.5b. The gas monitoring undertaken (short of six intervals over three months) is for low sensitivity end-use. Meanwhile, C665 suggests a minimum period of twelve readings over six months in developments of high sensitivity (residential with gardens). Despite a low gas generation potential identified over six intervals, the report conclusions then state the CS1 classification is pending completion of gas monitoring. Until further information relating to the ground gas regime at the site is received or sufficient justification for the terminated ground gas monitoring is received, the potential risk from ground gas to receptors remains unclear.

I am satisfied with the Phase I aspect of the report, however further information is required relating to the asbestos found on site and the ground gas monitoring aspect of the Phase II report. Conditions relating to contaminated land are therefore necessary.

Noise

The proposed development is situated on land to the North of Blackmoorfoot Road and to the East of Felks Stile Road. It is bound by existing residential properties and with a caravan storage facility to the North East, Blackmoorfoot Road to the South East, Felks Stile Road to the South West and open grassland to the North West. Manchester Road, (A62) is situated approximately 750m to the North West of the site. A quarry is situated to the South East of the site opposite Blackmoorfoot Road whilst a golf club is situated to the South West of the site opposite Felks Stile Road.

The site currently comprises of an industrial storage and distribution compound for a fireworks operator and agricultural fields.

In support of the application, the applicant has submitted an Acoustic Planning Report authored by Lighthouse Acoustics, dated 30 July 2020 (Ref:0276/APR1 Revision 1). The report states attended monitoring was carried out between 13:00 to 15:00 hours on Monday 11 December 2017 and between 13:00 to 15:00 hours on Tuesday 11 December 2017. Unattended monitoring was undertaken from 14:00 hours on Monday 11 December 2017 to 14:00 hours on Tuesday 11 December 2017. The location of the monitoring is shown in para 5.3 (A, B, C, D). The findings show road traffic along the surrounding road network remained the dominant sound source.

The author understands that the saw shed of the quarry, situated adjacent to Blackmoorfoot Road, operates continuously 24 hours a day and so a return site visit was made during the evening period in order to measure industrial sound levels. The report states manned

industrial sound measurements were undertaken between 21:00 and 22:00 hours on Monday 11 December 2017 during which the sound levels of industrial sound from the saw shed were measured over 5 periods with measurements paused for any passing vehicles. The location of the monitoring is shown in para 7.4 (location i, ii, iii)

Unsurprisingly, the dominant source of sound associated with the operation of the saw shed comprised of continuous machinery cutting noise from within the building. At Position i, this was clearly audible above the residual noise level. At Position ii, this was barely audible above the residual noise level and at Position iii, this was inaudible above the residual noise level.

The assessment indicates that the rating level of the existing industrial sound from the saw shed is likely to achieve a difference of up to +5dB when compared to the lowest representative night-time background sound level at the nearest proposed residential properties (limited to a number of properties situated to the North East of the site along the boundary with the caravan storage facility). This is therefore an indication of the existing industrial sound having up to a potentially adverse impact at the nearest proposed residential properties during the night-time period.

The author considers the existing industrial sound is likely to have a low impact at the nearest proposed residential properties during the night-time period. However, it is my opinion that a difference of around +5dB is likely to be an indication of an adverse impact and is not an insignificant increase above background noise levels.

The provided noise modelling shows an increase in noise levels along Blackmoorfoot Road and any properties will be exposed to higher levels of road traffic noise. The report states that in order to achieve the internal daytime and night-time requirements, openable windows must remain closed. It advises that background ventilation will therefore be provided by ventilators in the building façade and purge ventilation will be provided via openable windows at the occupier's discretion.

Trickle ventilation will not provide sufficient ventilation to help control thermal comfort without the need to open windows and would therefore not be acceptable as the internal daytime and night-time noise requirements will be exceeded during purge ventilation conditions. A condition will therefore be necessary.

External Lighting

A Lighting Assessment by Redmore Environmental Ltd dated 31 Jul 2020 (ref: 1793-1r3) has been submitted. The assessment considers the impact of existing lighting in the area on the proposed development and the impacts of lighting at the new development

The report identified existing lighting on adjacent highways and some commercial site in the vicinity. The most significant was considered to be that located on land immediately to the east of the site but considers that based the indicative layout this lighting and other existing highway lighting are unlikely to cause significant effects on the proposed development.

The report advises that the development will be likely to include lighting to highways,

pedestrian areas and area lighting for car parks, but advises that the impact of any such lighting cannot be assessed at this stage but is considered to be capable of being provided in a way that does not cause a significant impact.

Because new external lighting can have an adverse impact is is necessary for there to be a condition relation to the proposals for external lighting.

Construction Environmental Management Plan
The proposed development is large and construction work will have the potential cause a loss of amenity to neighbouring properties from noise, vibration, dust and artificial light. A condition requiring the effective control of the use it is therefore necessary.

Recommended Conditions

AQIAC 1 Air Quality Impact Assessment
Before construction work commences a revised Air Quality Impact Assessment shall be submitted to and approved in writing by the Local Planning Authority. The assessment shall:

- determine the impact that the development will have on air quality (taking into consideration any cumulative impact from other local developments)
- include a calculation of the monetary damages from the development and
- include a fully costed mitigation plan detailing the proposed low emission mitigation measures. The monetary value of the damages should be reflected in money spent on the low emission mitigation measures

The approved low emission mitigation measures shall be implemented before the development site is operational and shall be retained thereafter.
Reason: For promoting sustainable development and transport and conserving the natural environment in accordance with parts 2, 9 & 15 of the NPPF and XXXX of the Local Plan

AQIAF1 Air Quality Impact Assessment - Footnote
For anything to be considered as acceptable as part of the approved low emission mitigation measures it must be something that is to be provided in addition to what is normally provided at a development and also is not otherwise required. For example, the costs of providing footpaths and standard electric vehicle charging points would not be accepted as part of the costed mitigation measures.

In the absence of acceptable proposals for Low Emission Mitigation Measures of sufficient value, a section 106 agreement may be required for the amount up to the estimated damage cost made available to the local authority to spend on air quality improvement projects within the locality.

Dust Mitigation measures
Mitigation measures to control fugitive dust emissions during the construction phase shall be implemented in accordance with those outlined in in Table 29 "*Fugitive Dust Emission Mitigation*" of the submitted Air Quality Assessment by Redmore Environmental, Ref: 1793r3,

dated 31st July 2020 and maintained throughout the construction phase of the development.
Reason: To safeguard the amenities of the occupiers of nearby properties in accordance with part 15 of the NPPF and xxxxxx of the Local Plan

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
- One Standard Electric Vehicle Charging Point providing a continuous supply of at least 16A (3.5kW) for at least 10% of residential parking spaces that are not allocated to specific dwellings
- One Standard Electric Vehicle Charging Point providing a continuous supply of at least 16A (3.5kW) for at least 10% of non-residential parking spaces

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 LP24 and LP51 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.
- At non-residential developments, the requirement for one standard electric vehicle charging point for at least 10% of parking spaces may initially be reduced to one charging point for at least 5% of parking spaces with the remainder provided at an agreed trigger point.
- For developments where some or all of the parking is likely to be used for shorter stay parking (30mins to 4 hours) then Fast (7-23kW) or Rapid (43kW+) charging points may be more appropriate. If Fast or Rapid charging points are proposed together with restrictions on the times that vehicles are allowed to be parked at these points then a lower number of charging points may 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.

CLC2 Submission of a Phase 2 Intrusive Site Investigation Report - Condition
Where further intrusive investigation is recommended in the Preliminary Risk Assessment approved pursuant to condition (CLC1) groundworks (other than those required for a site investigation report) shall not commence until a Phase II Intrusive Site Investigation Report 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 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 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 in accordance with *Model Procedures for the*

Management of Land Contamination – Contaminated Land report 11 (CLR11), National Planning Policy Framework (NPPF) and the Council's Advice for Development documents or any subsequent revisions of those documents.

Identify where alternative ventilation required and provide scheme - Condition
Before construction work commences, a further noise assessment report shall be submitted to, and approved in writing by, the Local Planning Authority. The report shall:

1. clearly show which rooms in which plots will not achieve satisfactory indoor sound levels with windows open and
2. for these rooms provide an alternative ventilation scheme which shall show how these rooms shall be provided with sufficient ventilation to help control thermal comfort and avoid over heating during hot weather without the need to open windows.

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. 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.

LC1 External Artificial Lighting - Condition
Before construction work commences a lighting scheme for external lighting shall be submitted to and approved in writing by the Local Planning Authority. The scheme should include the following information:

a) The proposed hours of operation of the lighting
b) The location and specification of all of the luminaires
c) The proposed design level of maintained average horizontal illuminance for the areas that needs to be illuminated.
d) The predicted vertical illuminance that will be caused by the proposed lighting when measured at windows of any properties in the vicinity.
e) The measures that will be taken to minimise or eliminate glare and stray light arising from the use of the lighting that is caused beyond the boundary of the site
f) The methods of switching and controlling the lighting so that it is only operated at the permitted times and at times when it is required.

The external artificial lighting shall be installed and operated thereafter in accordance with the approved scheme.
Reason: To safeguard the amenities of the occupiers of nearby properties and promote sustainable development in accordance with part 2 and 15 of the NPPF and xxxxx of the Local Plan

LF1 Artificial lighting - Footnote
The proposed design levels of illuminance should be shown to be appropriate for the intended use by reference to appropriate guidance. Generally, to minimise problems of glare and stray light from external artificial lighting it should be installed and maintained in accordance with *the "Guidance Notes for the Reduction of Obtrusive Light"* by the Institution of Lighting

Professionals: 2011 www.theilp.org.uk. The predicted levels of stray light must not exceed the recommended maximum levels given in Table 2 of this guidance for an Environmental Zone E2/3.

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.
- Artificial lighting used in connection with all construction related activities and security of the construction site.

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 xxxxxx 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 13.00hours , 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 2016 provided 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.