| Consultation Response from: KC Environmental Health (Pollution & Noise Control) | | |
|---|---|---|
| **2021/93567 Land off, Westgate, Cleckheaton, BD19 5DR** | | |
| **Erection of 194 dwellings with associated works** | | |
| **Date Responded:**<br>**19th November 2021** | **Responding Officer:**<br>**Rebecca Muff – Air Quality**<br>**Natalie Heaney – Contaminated Land**<br>**Mohammed Nasim - Noise** | **Responding Ref:**<br>**WK/202132888** |

The application seeks permission for 194 dwellings with open space. The site is located within Cleckheaton off the A643 Westgate which is to the north of the site. To the east is Quarry Road which provides access to several industrial units and beyond that there is a residential area. To the south is open land allocated within the Kirklees Local Plan as urban green space (UG315) and immediately to the west of the site is Brick Street where there are a variety of industrial units and beyond that a variety of residential properties. The site currently comprises of a roughly square single parcel of former industrial land. Former uses were Westgate Chemical works, a former Rolling Iron Mill and Wharfe Textile Mill, a scrap yard, malthouse, brickworks and quarry, and a central area formally occupied by Garnet Wires.

We have reviewed the application and supporting information and make the following comments and recommendations.

**Contaminated Land**

This site has been identified on our mapping system as potentially contaminated land due to its historical land uses (site reference 120/1, 122/1, 130/1 23/4, 24/4). The following documents have been supplied in support of the application:

1. Geoenvironmental Appraisal by Lithos dated May 2021 (ref: 3043/2C)
2. Remediation Strategy by Lithos dated May 2021 (ref: 3043/4A)

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 Geoenvironmental Appraisal begins by separating the site into four areas, associated with their former land use/s. Area A (1.1ha) is associated with former chemical works in the northwest of the site. Area B (1.7ha) is associated with the former Rolling Iron Mill in the south and southwest of the site. A former reservoir (now heavily vegetated) is present and associated with the chemical works in Area A. Area C (2.0 ha) was the site of a former scrap yard, malthouse, brickworks and quarry. Lastly, Area D (1.6 ha) is the industrial area in the centre-north of the site. Evidence of the former buildings remain. During the walkover, visual and olfactory evidence of contamination was identified. Consequently, the Phase I aspect of the appraisal recommends that to determine the presence or absence of contamination at the site, an intrusive investigation is necessary.

The report then continues to detail the findings from an initial exploratory investigation (in January 2019) and a supplementary investigation (September 2020). The fieldworks included trial pits, rotary probe holes for ground and gas monitoring, and soil sampling to determine the

ground conditions and any potential contamination. In Area A (the former chemical works) the investigation confirmed made ground across the entirety of Area A. The made ground was categorised into 6 main types, hardcore, burnt shale, cohesive made ground, granular made ground, brick fill and filter sand. The maximum thickness of made ground in Area A was 10.7m within the footprint of the former quarry in the northwest of the site. Several instances of visual and olfactory evidence of contamination were reported. These included hydrocarbon and solvent odours and yellow discolouration of the filter sand with a sulphurous smell. The latter is believed to be associated with sulphur precipitates from the production of sulphuric acid at the chemical works. Notably, at borehole 501 a glass fibre tank was also excavated with black oily sludge in the base.

In Area B (the Former Rolling Iron Mill and Wharfe Textile Mill), made ground was found. These were grouped into 4 main types, cohesive made ground, granular made ground, ash and clinker and brick fill. The maximum thickness of made ground in Area B was >4.4m, within the footprint of the former reservoir. Visual and olfactory evidence of contamination was noted in six trial pits/trenches. These included hydrocarbon odours and a major inflow of black groundwater with an oily sheen (in trail trench 428S and trial pit 429).

In Area C (the former scrap yard, malthouse, brickworks and quarry), made ground was encountered and mainly comprised of granular made ground and ash and clinker. The maximum thickness of made ground in Area C was 17.1m, within the footprint of the former brickworks quarry. In trial pit 402 and 403, hydrocarbon odours were reported. In trial pit 403 groundwater seepage with an oily sheen was also encountered.

In Area D (the central industrial units), made ground was found and was grouped as cohesive made ground, granular made ground, ash and clinker and brickfill. The maximum thickness of made ground in Area D was >9.0m, within the footprint of the former quarry. Hydrocarbon and solvent odours were reported in trial pit 430 and 446 respectively.

Samples were taken from each area, analysed and the results were then compared with soil screening values for a residential end-use (with plant uptake). Inorganic and organic contamination was consistently identified across all areas. Concerning inorganic contaminants, the most common contaminants are arsenic (49 exceedances), copper (17 exceedances), lead (51 exceedances) and zinc (25 exceedances). Over two-thirds of the samples were contaminated with one or more contaminants and 18 samples contained concentrations over 5x the screening value, indicating that remediation will be necessary.

Four samples were found to contain asbestos (trial pits 402, 436, 524 and 512). These were associated with chrysotile (<0.001 %w/w), amosite (0.001 % w/w), chrysotile (0.62% w/w) and chrysotile cement sheeting. Anecdotal evidence suggests that an unknown quantity of asbestos was dumped within Area A, although to date the exact location has not been found. Evidence of asbestos sheets/fragment were also reported during the site walkover, suggesting that more significant amounts of asbestos-containing materials and free fibres may be encountered during the earthworks. Alongside asbestos, cyanide and total sulphur were also encountered in concentrations <5 mg/kg. These contaminants are not typically encountered, and the report advises these warrant a detailed site-specific risk assessment but at the concentrations reported '*neither is expected to be problematic*.'

With regards to organic contaminants, gross contamination was encountered in two samples

recovered from Area A (trial pits 501 & 512). Furthermore, concentrations of volatile and semi-volatile compounds, possibly associated with coal tar creosote were also noted in this area. Phenols were also identified in Area A at trial pit 505, including 2 & 4 methyl phenol and 2,4 dimethyl phenol. Phenols, volatile and semi-volatile compounds are volatile and soluble in water. The report therefore recommends that further consideration of the risk to groundwater and the surface water should be considered in any future site-specific risk assessment. Two samples of ash and clinker contained elevated naphthalene concentrations. As such, the report advises that an assessment of possible vapour risks should also be undertaken and incorporated into a detailed site-specific risk assessment following the gas and vapour monitoring. No further areas of gross hydrocarbon contamination were encountered in Areas B, C or D during the site investigation.

Ground gas and groundwater monitoring wells have been installed, and the report advises that these are to be monitored on 9 visits over 6 months. At the time of writing, only two monitoring occasions had been completed. It was also noted that vandalism and destruction of the wells have limited the quality of the data set. That said, to date the maximum concentrations of methane and carbon dioxide observed were 2.0% v/v and 17.9% v/v, respectively. The minimum oxygen concentration reported was 0.1 % v/v. The peak flow was 120 l/h and the peak steady flow was 8.0 l/h. The report advises that it would be prudent to assume all new dwellings will require Amber 1 gas protective measures and that a proportion may require a hydrocarbon resistant membrane.

It is acknowledged in the report that due to the plausible contaminant linkages, that remediation will be necessary at the site. However, the report recommends that first a site-specific risk assessment is required to determine remedial target concentrations of acute toxins (namely cyanide & sulphur), the remedial target concentrations for a range of volatile and semi-volatile organic compounds, the risk to groundwater and the surface water posed by the presence of phenols, volatile and semi-volatile organic compounds. In addition, a hazardous gas risk assessment incorporating all the results will be issued on completion of monitoring.

The remediation strategy submitted then advises that as remediation of the site will require a turnover of up to 3m of made ground in all areas, there is now no need for intrusive investigation works. The turnover will include:

- Removal of anticipated tanks from Area A
- Excavation and treatment of the full depth of the reservoir in Area B
- Removal of localised fuel/oil contamination; with subsequent treatment and/or offsite disposal, particularly in Areas A, B & C
- Removal of below ground obstructions
- Preparation of the ground for highway construction
- Excavation and removal of localised contamination as identified (all Areas)

The proposals also include the treatment of hydrocarbon impacted soil. Whist several options are proposed it is still unclear at this stage what exact method is to be utilised and the report acknowledges that treatment activities that are likely to generator odours for example, are unlikely to be approved adjacent to a densely populated residential area. Regrading of the site levels will also take place to leave a minimum of 1000mm for clean cover in all garden and landscaped areas.

Notably, there is still missing information regarding ground gas. In Section 7.26.1, the report also advises that '*Gas monitoring is still ongoing, a detailed gas risk assessment letter will be issued on completion, however current data indicates the site is likely to be classified as Amber 1. Monitoring is also periodically being undertaken for organic vapours.*'

Comments

Overall, we agree with the Phase I aspect of the report and agree that a comprehensive intrusive investigation was necessary. However, we consider the site characterisation to remain incomplete as not all the potential pollutant pathways have been fully investigated. As indicated in Section 11.2.2 of the Geoenvironmental report, the ground gas and groundwater monitoring results to date are of relatively poor quality (due to vandalism and destruction of the wells). As such, it is unclear how the Phase II report can be accepted at this time. A ground gas (including vapours) and groundwater addendum is therefore necessary.

Additionally, we have concerns relating to the on-site treatment soils given the proximity of nearby residential properties and ecological receptors. At this stage we also require confirmation of the measures to be undertaken for hydrocarbon treatment, to determine the efficacy of the proposed method. For these reasons, we require a full detailed risk assessment to be performed and provided in a revised remediation strategy or addendum report. To protect site neighbours, the environment and amenity, the methodology must also include appropriate methods to control potential nuisance arising from any of the proposed remediation activities.

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

**Air Quality**

An Air Quality Assessment by Ensafe Consultants (ref:AQ109055-1) (dated: 28/06/2021) has been submitted in support of the application. The proposed development site is not located within an Air Quality Management Area (AQMA) but is approximately 1.5 miles from Kirklees Councils (AQMA) 7 Liversedge, which incorporates Huddersfield Road (A62), Bradford Road (A638), Wakefield Road (A638), Wormald Street and Well Street, in Liversedge. This was declared due to exceedances of the annual mean air quality objective for nitrogen dioxide ($NO_2$). The site is located adjacent to the A643 Westgate where there is the potential to expose future sensitive receptors to elevated pollution concentrations due to increased road traffic emissions.

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. The pollutants modelled were nitrogen dioxides (NOX) and particulate matter ($PM_{10}$) and ($PM_{2.5}$). Particulate matter is everything in the air that isn't a gas, this includes natural sources like pollen, sea spray and desert dust, and also includes man made sources like smoke, and dust from exhausts, brakes and tyres. Particulate matter is classified according to size, $PM_{10}$ being particulate matter less than 10µm (micrometres) in diameter, and PM2.5 is particulate matter less than 2.5µm in diameter. The assessment uses techniques detailed in Local Air Quality Management Technical Guidance (LAQM) (TG) 16, and the Institute of Air

Quality Management (IAQM) Technical Guidance.

Construction Phase

The main emissions during construction are considered to be dust and particulate matter. A qualitative assessment of construction phase impacts associated with fugitive dust emissions was undertaken in accordance with the Institute of Air Quality Management (IAQM) Guidance on the Assessment of Dust from Demolition and Construction 2017. This considers four construction processes, demolition, earthworks, construction and trackout, and the potential dust impacts this will have on sensitive receptors within the vicinity of the site boundary. A risk assessment was undertaken to identify all sources of dust and the dust emission magnitude of the construction phase and the risk of impact at sensitive receptor locations. From this the potential significance impact of dust emissions associated with the development without mitigation measures was determined.

The assessment determined the risk of dust impacts with no mitigation applied and concludes that there is a potential for fugitive dust emissions. It identified the risk of dust effects due to dust soiling and human health effects to be high for all construction phase activities. This is because the site is located in a predominantly residential area where it is expected that people would be present for extended periods of time. However, it goes on to say that these impacts can be reduced through the implementation of the suggested mitigation measures which are listed in Table 17, page 22, of the report titled Fugitive Dust Mitigation Measures. The report concludes that assuming good practice dust control measures are implemented, the potential air quality impacts from dust generated by construction activities was predicted to be not significant.

Operational Phase

An air quality assessment has been undertaken 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 classifies the site as a medium proposal in accordance with WYLES, therefore detailed dispersion modelling using the Atmospheric Dispersion Modelling System (ADMS-Roads) was undertaken to determine if future sensitive receptors would be exposed to levels of poor air quality.

The proposed development has the potential to impact the existing air pollution levels at nearby sensitive receptor locations because of additional road vehicle exhaust emissions during the operational phase. Traffic data supplied by Andrew Moseley Associates the transport consultants for the scheme, indicted that traffic flow generation is predicted to be 1,062 Annual Average Daily Traffic (AADT) as a result of the development. This data was used in the model to predict changes in Nitrogen Dioxide ($N0_2$), and particulate matter ($PM_{10}$) and ($PM_{2.5}$) concentrations from traffic emissions. Monitored data supplied by Kirklees Council and background data supplied by Defra were also used in the assessment. The model predicted concentrations at a height of 1.5m, based on three scenarios, using a baseline year of 2019 and an opening year of 2026 with and without the development. The 2019 background data was used to represent the opening year as a worst-case scenario as it is predicted that air quality will improve in future years due to changes in vehicle technology.

The model was used to predict changes in pollutant concentrations at sensitive receptor

locations in the vicinity of the site due to changes in traffic levels because of the development. This was based on *Land-use Planning & Development Control: Planning for Air Quality Guidance by Environmental Protection UK (EPUK) and the Institute of Air Quality Management January 2017*. This guidance is used to compare the percentage long term average concentration at the receptor locations in the assessment year against the air quality objectives, and grades the overall impact as being negligible, slight, moderate or substantial as seen in the Table 6.3 below.

**Table 6.3: Impact descriptors for individual receptors.**

| Long term average Concentration at receptor in assessment year | % Change in concentration relative to Air Quality Assessment Level (AQAL) | | | |
|---|---|---|---|---|
| | 1 | 2-5 | 6-10 | >10 |
| 75% or less of AQAL | Negligible | Negligible | Slight | Moderate |
| 76-94% of AQAL | Negligible | Slight | Moderate | Moderate |
| 95-102% of AQAL | Slight | Moderate | Moderate | Substantial |
| 103-109% of AQAL | Moderate | Moderate | Substantial | Substantial |
| 110% or more of AQAL | Moderate | Substantial | Substantial | Substantial |

**Explanation**

1. AQAL = Air Quality Assessment Level, which may be an air quality objective, EU limit or target value, or an Environment Agency 'Environmental Assessment Level (EAL)'.

The dispersion modelling results indicated that annual mean $NO_2$, $PM_{10}$ and $PM_{2.5}$ concentrations across the application site were all below the national air quality objectives for those pollutants. Predicted impacts on annual mean $NO_2$ concentrations as a result of the 2019 operational phase exhaust emissions were predicted to be negligible at 23 receptor locations, and slight at 5 receptor locations. However, given the time period between the baseline year of 2019 and future year of 2026, a more realistic assessment scenario utilising 2026 emission factors was undertaken. This scenario considered an improvement to future emissions due to the uptake of low emission vehicles and government incentives and targets concerning fleet proportions by 2030. The additional sensitivity analysis predicted that the annual mean concentrations as a result of the development in the opening year 2026 due to exhaust emissions would be negligible and not significant at all sensitive receptor locations within the vicinity of the site.

In order to off-set the impact of the development and based on the recommendations in WYLES a number of air quality mitigations options have been suggested and these are listed in Table 23 page 29 of the report titled- West Yorkshire Planning Guidance Mitigation.

Comments

Overall, we agree with the approach and methodology of the Air Quality Assessment by Ensafe Consultants (ref:AQ109055-1) (dated: 28/06/2021) for both the construction and operational phases of the development and concur with the conclusions. However, it will be necessary for a condition relating to dust mitigation measures during the construction phase of the development.

**Noise**

The applicant has submitted a Noise Risk Assessment authored by C80 Solutions dated 02

April 2020 Ref 10555. A noise survey has been undertaken to measure the typical ambient noise levels around the perimeter of the proposed development although no dates are given to indicate when this was conducted. The author has used a sampled approach to the methodology, measuring in a 3 hour period across different locations, between 1000hrs and 1700hrs all in accordance with the Pro PG guidance. The key areas which were measured were plots which were exposed to noise from roads and industrial units.

Seven measurement locations have been chosen and these are shown on map 1.1 in Section 5. In summary –

- Point 1 was selected due to its proximity to Westgate Road, proximity to the take away and also as the rear of the dwellings will back on to this street
- Point 2 was selected as the industrial units adjacent will be operating and the rear of the dwelling will be located adjacent to the units
- Point 3 selected as dwellings will be situated close to Westgate Road
- Point 4 selected as dwellings will be situated close to Westgate Road and the industrial units to the east
- Point 5 was selected as a number of dwellings will be situated round this part of the site which is close to an industrial unit
- Point 6 was chosen as would be the centre of the site with dwellings facing the industrial unit and also faces Westgate Road
- Point 7 was selected as a number of dwellings will be situated round this part of the site which is close to 2 industrial units.

Section 6 looks at the noise impact assessment and provides a daytime and night-time $L_{Aeq}$ and these are all tabulated for measurement locations 1 through to 7.

The noise from the industrial units which border the site are considered in section 9. These are –

- Quarry Road industrial Estate (South East corner of Development)
- Quarry Road industrial Estate (Southern section of Development)
- Brick Street industrial Estate (Western section of development)
- Centre of the site in between Brick Street and Quarry Road

Based upon the highly perceptible impulsive noise coming from the industrial units on every position tested across the proposed development. 9dB has been added to the specific sound level and these are tabulated for each location.

It is clear that the site is exposed to high levels of noise and mitigation measures are necessary. The northern section of the developments primary sound sources are from Westgate (A643), the south eastern edge and southern edge primary sound sources are the Quarry Road Industrial estate and the Western Edge primary source is the Brick Street Industrial units.

At section 10, the report compares the measured values against BS8233 for both internal and external levels and specifies the glazing which, acoustically, is identified to be the weakest part of the building. There is also a recommendation for trickle vents to be fitted. It is our position that 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.

With regards to the glazing, it is unacceptable that building occupiers will be faced with the option of having to be exposed to either excessive noise of 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.

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. Therefore, the system would be capable of helping to improve thermal comfort and reduce the risks of overheating. Therefore, during hot weather, the alternative ventilation system must be capable of drawing in cooling external air; any heat exchanges used for warming incoming air during cold weather must therefore be capable of being bypassed during hot weather. Similarly, 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.

Where the alternative ventilation system is mechanical, the self-generated noise created by the system must not cause excessive indoor sound levels. Also, the alternative ventilation system must not compromise the sound insulation properties of the building envelope. A condition is recommended to prevent the loss of amenity to the occupiers of the development.

The report looks at the external amenity areas and where necessary, a noise barrier/fence is recommended. A variation of heights and mass of materials are proposed dependent on the measured values for that area. A condition is recommended for the applicant to show the details of the noise barrier/fence and where it is required.

**Loss of amenity caused by the construction of the development**
Because of the large scale of the development and the close 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. It is therefore necessary for a condition requiring a Construction Environmental Management Plan (CEMP) to be submitted.

**Electric Vehicle Charging Points (EVCP)**
The proposal is for 194 dwellings with the facility for 380 car parking spaces. 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. The following information has been submitted in relation to electric vehicle charging points:

- Rolec Free Standing Mounting Post – (Drawing no: EVFP0020) (dated 14/09/2020)
- Rolec Wallpod Deep combination 10A RCBO/13A SKT (Drawing no: EVWP0020) (dated: 09/01/2012)
- Rolec : EV Ready Technical Data Sheet

From the submitted information it would appear that the proposal is to provide Rolec 13amp IP65 Mode 2 twin charger electric vehicle chargers. No other information has been submitted

and it is unclear if EVCPs are to be supplied to every dwelling. In addition, the specification does not meet with the minimum required standard for power output in accordance with the aforementioned guidance. Therefore, it will be necessary for a condition relating to electric vehicle charging points.

**RECOMMENDED CONDITIONS**

**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 in either the Preliminary Risk Assessment or the Phase II Intrusive Site Investigation Report 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

**Dust1 Implement agreed Dust Mitigation Scheme – Condition**
Before any demolition and 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 17, page 22, of the report by Ensafe Consultants (ref:AQ109055-1) (dated: 28/06/2021) 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 xxxxx of the Local Plan.

**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 Risk Assessment authored by C80 Solutions dated 02 April 2020 Ref 10555 require a ventilation system
- The acoustic specification of the proposed ventilation system demonstrating that when operated it will not cause indoor noise target levels to be exceeded
- 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.

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.

**BC1 Acoustic Barrier - Condition**
Before the development is brought into use, details of the locations and specifications of the acoustic barrier (as recommended in the Noise Risk Assessment authored by C80 Solutions dated 02 April 2020 Ref 10555) shall be submitted to and approved in writing by the Local Planning Authority. The details shall include -

- A plan showing the location of the barrier
- The minimum height of the barrier relative to the adjacent ground level
- The construction specification of the barrier including the barrier support structure, the barrier material, the minimum barrier thickness, the minimum density of the barrier material and the details where the barrier meets the ground.

The use hereby approved shall not commence until the construction of the acoustic barrier has been completed and the barrier shall be retained thereafter**.**

**CEMPC Construction Environmental Management Plan - Condition**
No development shall take place, until a Construction Management Plan has been submitted to, and approved in writing by, the Local Planning Authority. The Construction Management Plan shall provide details of:

a) timetable of all works
b) vehicle sizes and routes, times of vehicle movements, identify the location of any HGV waiting areas and include details of the management of said areas
c) the parking of vehicles of site operatives and visitors
d) details and location of signage
e) loading and unloading of plant and materials
f) storage of plant and materials used in constructing the development
g) measures to be taken to minimise the deposit of mud, grit and dirt on public highways by vehicles travelling to and from the site, including the provision of adequate wheel washing facilities within the site
h) measures to control and monitor the emission of dust and dirt during construction
i) a Site Waste Management Plan, detailing recycling/disposing of waste resulting from demolition and construction works
j) mitigation of noise and vibration arising from all construction related activities to (these details should also include suitable restrictions on the hours of working on the site including times of deliveries)
k) artificial lighting used in connection with all construction related activities and security of the construction site
l) site manager and resident liaison officer contact details (including their remit and responsibilities); and
m) details of engagement with local residents and occupants or their representatives.

The development shall be carried out strictly in accordance with the approved CEMP and no change there from shall take place without the prior written consent of the Local Planning Authority.
**Reason:** To safeguard the amenities of the occupiers of nearby properties in accordance with

part 15 of the NPPF and xxxxx 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
- 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

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.
- 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.