

Our ref: MTW/RF/GM10028/LET-003/DRAFT

Date: 13th December 2018

Your ref:

Mr Iain Fowler
Wainhomes North West Limited
Kelburn Court
Daten Park
Birchwood
Warrington
WA3 6UT

Dear Iain

Cardwell Farm, Barton – Air Quality Screening Report

By email instruction dated 3rd May 2018 from Mr Gareth Salthouse of Emery Planning (on behalf of Wainhomes North West Limited), Wardell Armstrong LLP was commissioned to undertake an air quality screening assessment and prepare a letter report for a proposed residential development at Cardwell Farm, Barton, Preston.

The proposed development site is located to the south of Barton. To the north, the site is bordered by open land and a small number of residential properties. Open land borders the site to the east and south east. To the south west and west, the site is bordered by existing residential properties, as well as Phase 1 of the development which has been granted planning permission for residential use (Ref: 06/2018/0238). The site currently comprises open land and small areas of woodland.

From the information provided, we understand that the proposals are for Phase 2 of the residential development, comprising 97 dwellings and associated infrastructure. Access to the site is however through the Phase 1 area to the west, and as revisions to the access arrangements need to be made, the planning application will incorporate both phases. As a result, the application will consider a total of 152 residential dwellings, with 55 dwellings in the Phase 1 area already committed.





Local Air Quality

The proposed residential development is located within the administrative area of Preston City Council (PCC).

A review of local air quality confirms there are currently five AQMAs declared within the PCC area. The closest AQMA is located approximately 1.3km to the south of the proposed development, within the village of Broughton (AQMA 3). This was declared in May 2012 for exceedance of the annual mean and 1-hour mean objectives for nitrogen dioxide (NO₂). However, it should be noted that the Broughton by-pass (A6 James Towers Way) has recently been completed, thus alleviating traffic travelling through the AQMA.

The proposed development is not therefore located within an existing AQMA or known area of concern with regards to air quality.

A review of the 2017 Annual Status Report (ASR)¹ suggests that PCC does not currently operate any background air quality monitoring locations. Therefore, in order to provide more information on background concentrations at the proposed development site, data has been obtained from the 2015-based default concentration maps provided by Defra on their Local Air Quality Management (LAQM) web pages². The background pollutant concentrations for the appropriate 1km x 1km grid square are detailed below in Table 1.

| Defra Grid Square for Proposed Development Site | 2018 Pollutant Concentrations (µg/m ³) | |
|---|--|---|
| | Nitrogen Dioxide (NO ₂) | Fine Particulate Matter (PM ₁₀) |
| 352500, 436500 | 11.96 | 13.25 |

The annual mean air quality objective for both NO₂ and PM₁₀ concentrations is 40µg/m³. The background concentrations for the appropriate grid square, as detailed in Table 1, are well below these objectives.

Although PCC does carry out roadside monitoring at a number of locations in Broughton, none of these are located in the vicinity of the proposed development site.

¹ Preston City Council, 2017 Air Quality Annual Status Report (ASR), January 2018

² Department for Environment, Food and Rural Affairs, Local Air Quality Management webpages (<http://laqm.defra.gov.uk/review-and-assessment/tools/background-maps.html>)



Consultation

Contact was made by email with the Environmental Health Department at PCC on 22nd November 2018. Details of the planning application were provided, along with justification of why a screening assessment would be appropriate.

An email response was received from Mr Chris Hodson, Environmental Health Manager at PCC on 12th December 2018. The proposal for a screening assessment was agreed, although it was requested that electric vehicle charging points be incorporated into the development, in view of the UK Government's 'Road to Zero' strategy.

Construction Phase Impacts

A review of relevant guidance has been undertaken to consider the potential for significant effects during the construction phase of the proposed development. The review has taken into account guidance on construction dust from the Institute of Air Quality Management (IAQM)³.

In accordance with this guidance, with appropriate site-specific mitigation measures in place, it is considered that there will be a 'not significant' effect from dust and fine particulate matter associated with activities during the construction phase.

Operational Phase Impacts

Existing Sensitive Human Receptors

The planning application considers a total of 152 dwellings across two phases of development. However, 55 dwellings have already been granted planning permission as part of Phase 1 (Ref: 06/2018/0238). As a result, the additional 97 dwellings have been considered within this screening assessment.

Guidance prepared by Environmental Protection UK (EPUK) and the IAQM⁴ provides criteria for when a detailed air quality assessment may be required. The relevant criteria for a residential development include:

³ Institute of Air Quality Management, Guidance on the Assessment of Dust from Demolition and Construction, February 2014

⁴ Moorcroft and Barrowcliffe *et al*, Land-use Planning and Development Control: Planning for Air Quality, Version 1.2, January 2017



- A change in Light Duty Vehicles (LDVs) of more than 500 AADT (or 100 AADT within/adjacent to an AQMA);
- A change in Heavy Duty Vehicles (HDVs) of more than 100 AADT (or 25 AADT within/adjacent to an AQMA);
- The realignment of existing roads near to receptors, with a change of more than 5m when the road is within an AQMA; and
- The introduction of a new junction, or removal of an existing junction, leading to a significant change in vehicle acceleration/deceleration (e.g. through the introduction of traffic lights or a roundabout) near to receptors.

In this case, the proposals are for an additional 97 residential dwellings in Phase 2, and it has been confirmed by SCP (the appointed transport consultant for the project) that development generated vehicles are unlikely to lead to an exceedance of the criteria above on local roads. In addition, none of the other relevant criteria are met.

As a result, in accordance with the EPUK/IAQM guidance, the impacts of the proposed development can be considered as having an insignificant effect.

Taking into account background pollutant concentrations for the local area, as well as the potential for improvement within the Broughton AQMA (as a result of the newly opened by-pass), it is not therefore considered necessary to undertake a detailed air quality assessment for the proposed development.

Existing Sensitive Ecological Receptors

Using the Defra MAGIC online resource⁵, it has been identified that there are no statutory designated habitat sites within the wider area surrounding the proposed development site, the closest being the Fishwick Bottoms Local Nature Reserve, over 4km to the south. It is therefore extremely unlikely that development generated vehicles will lead to significant ecological effects.

Proposed Sensitive Human Receptors

We have also reviewed the current land uses surrounding the proposed development site, and it is considered that there will be no significant air quality, dust or odour issues associated with these land uses for future residents.

⁵ MAGIC online resource (Accessed at: <http://www.natureonthemap.naturalengland.org.uk/home.htm>)



Summary

A review has been undertaken, in accordance with relevant guidance, to consider the potential for impacts during both the construction and operational phases of the proposed development. This review suggests that any associated effects should be not significant. It is therefore not considered necessary to undertake a detailed air quality assessment as part of the planning application.

Yours sincerely

for Wardell Armstrong LLP

REBECCA FAULKNER

Principal Environmental Scientist

rfaulkner@wardell-armstrong.com

MALCOLM WALTON

Technical Director

mwalton@wardell-armstrong.com