

Air Quality Comments Response

28th October 2020

Please find WYG's responses in **teal** below to a request for further information from Havant Borough Council (HBC) via email dated 8th September 2020. This document has been produced to respond to comments made by Jonathan Driver the Environmental Control Officer at Havant Borough Council.

Comment 1 Air Quality Assessment Modelling

The WYG Air Quality Assessment concludes that the projected air quality at the nearest-to-source proposed (new) air-quality-sensitive receptors is predicted to be compliant with the air quality objective, and that no exposure mitigation is therefore required.

As indicated in the 'principle of development' section above, the modelled result (if accurate) would represent some of the highest 'at receptor' concentrations in the borough.

The modelling result is regarded as a 'modelling best estimate', with a reasonably wide margin of +/- error. The modelling result was with prescribed standards of error, and so was not (did not need to be-) adjusted, but it is notable that the result is within the margins of expected modelling error.

Modelling is poor at accounting for the built environment, trees and topography, essentially assuming free-field. Significant differences can occur where barriers (such as new buildings) are introduced.

- I am uncomfortable with accepting that "no air-pollution exposure mitigation is required" at the western side of the development where modelled results are so high, being within modelling error of the AQO*
- local monitoring indicates that monitoring period exceedances are possible despite the (mitigating) vegetation buffer to the site*
- monitoring data is difficult to interpret in relation to distance from source, period & duration of measurement (relative to seasonality) and*
- the development would exceed current precedent for proximity of sensitive receptors to this (down-prevailing-wind) side of the A3(M)*

I would consider that either;

- i. the modelling & local monitoring data need to be refined to show that concentrations at the proposed 'building line' (facades relative to the A3(M) kerbside – being the hard shoulder, not the running-lane) are acceptable to within a reasonable margin of safety (e.g. at least modelling error),*

- ii. *the development layout should adopt a building line of at least 30m from the kerbside of the A3(M) (in line with local precedent) or,*
- iii. *the proposed apartment buildings in the West of the site should be protected in a similar way to the equivalent blocks on the APP/13/00266 development referenced (as precedent) in the design & access statement.*

It would represent a significant failure of planning for an AQO exceedance to arise at a building constructed post-publication of the NPPF 2019. It is unclear whether the applicant has done enough to demonstrate that the quantum sought can be sustainably delivered at this site. The planning service may take this response to be a holding objection pending clarification.

WYG Response 1 Air Quality Assessment Modelling

The WYG Air Quality Assessment dated October 2020 has been updated using the latest DEFRA calculating tools and ADMS Roads 5.0. Modelling has been undertaken where the building plan shows the building line would be 37 m from the A3(M) kerbside. The updated Air Quality Assessment shows the maximum NO₂ concentration at any proposed receptor within the proposed development as 30.24 µg/m³. This highest predicted concentration of NO₂ at the proposed development site is 75.6% of the AQO. Further details and figures of the locations of the monitoring undertaken and the distance to the A3(M).

Comment 2 Diffusion Tube Monitoring

The WYG monitoring within the curtilage of the site has returned a monthly result in excess of the air quality objective (AQO) value. The monitoring period is unclear as the report Appendix A contains the construction phase (dust) risk assessment, and not the details of monitoring indicated at section 4.1. It is worth highlighting that;

- *Results from period 1 & period 2 significantly differ, indicating that they may not be consecutive 4-5 week period monitoring.*
- *The location map presented is of insufficient scale to determine the distance of monitoring points from the kerbside of the nearest roads*
- *No photographs of monitoring points are shown for local context, and no specific description of the mounting is given.*

As a result of the above, it is difficult to draw a conclusion based on the monitoring presented, however in the absence of any additional details it would be appropriate to consider that it demonstrates that within-curtilage exceedance of the AQO is possible and that that exceedance probably relates to a location between 15 & 20m from the kerbside of the A3(M).

WYG Response 2 Diffusion Tube Monitoring

WYG has updated the Air Quality Assessment (dated 19th May 2020) to include further details on the WYG monitoring undertaken at the proposed development site. An error was made in the Air Quality Assessment (dated 19th May 2020) regarding the seasonal adjustment for the diffusion tube monitoring calculations, which has been corrected in the updated Air Quality Assessment. Further monitoring data is provided within the updated Air Quality Assessment. Monitoring undertaken during the national lockdown caused by the COVID-19 pandemic has been adjusted to account for the reduction in road traffic emissions, this has been undertaken in accordance with the assessment by Defra which determined the overall percentage decrease in emissions following the national lockdown.

Seasonally and Nationally adjusted monitoring data shows a maximum NO₂ concentration of 23.54 µg/m³.

Table 1 WYG Monitoring Average Period 1 - 4 Survey Results

Location Reference	Raw Monitored Results	Seasonally Adjusted Result (µg/m ³)	Nationally Bias Adjusted Result (µg/m ³)
Period 1 – 4 Average			
WYG1 (1,2,3)	31.39	24.65	22.68
WYG2 (1,2,3)	29.19	22.92	21.09
WYG3 (1,2,3)	28.99	22.77	20.94
WYG4 (1,2,3)	20.56	16.15	14.86
WYG5 (1,2,3)	21.31	16.74	15.40
WYG6 (1,2,3)	24.47	19.22	17.68
WYG7 (1,2,3)	24.16	18.98	17.46
WYG8 (1,2,4)	19.89	15.62	14.37
WYG9 (1,2,4)	32.58	25.59	23.54
WYG10 (1,2,4)	21.58	16.95	15.59
WYG11 (1,2,4)	27.93	21.93	20.18
WYG11 (1,2,4)	28.68	22.53	20.72
WYG11 (1,2,4)	26.82	21.07	19.38

Comment 3 Emissions Offsetting

I would encourage the applicant to consider reasonable emissions offsetting as an integral part of the detailed design and to do this at an early stage so that features identified to be economically implementable may be used to improve the environmental sustainability credentials of the outline scheme.

WYG Response 3 Emission Offsetting

WYG have undertaken a damage costs assessment in accordance with the IGCB damage costs guidance produced by Defra. This can be seen in the updated Air Quality Assessment dated October 2020. It is considered that the total sum calculated in the damage costs assessment will go towards measures within the

Hulbert Road, Havant Air Quality Assessment



adopted framework travel plan. Details of the measures within the framework travel plan are considered to be appropriate at offsetting air quality impacts from the proposed development due to their sustainable transport measures.