

TECHNICAL NOTE

Air Quality Review for S73 application at Langstone Technology Park

Introduction

ACCON UK Limited (ACCON) has been commissioned by PRC Architecture & Planning (PRC) to review an Air Quality Assessment produced by REC (REC Reference: AQ107578R1, dated October 2019). The purpose of this Technical Note is to consider whether any changes to the consented development would result in any implications with respect to the Air Quality Assessment produced by REC in 2019.

The site is in Havant and has an extant planning consent APP/19/00703 for an industrial scheme and PRC are preparing a Section 73 application to vary the consent with a new layout.

The extant consent is for 4 No. new industrial buildings split into 12 units totalling 12,500msq GEA.

The Section 73 application seeks to vary the consent to two buildings split into four units totalling 11,290msq GEA. The uses are to remain the same as the existing consent with light industrial, B2 & B8, but with the addition of E class research and development, repositioning of external façade to building 1000, alterations to the proposed car parking outside of building 1000 increasing the total number of parking spaces by 6 and the retention of an additional 134 car parking spaces in the southern car park.

Havant Borough Council (HBC) Local Plan Core Strategy was adopted in 2011 and sets out the planning framework until 2026. Whilst this is still relevant, there is a draft Local Plan which HBC have been preparing which sets out how the Borough should be developed into the late 2030s.

The Havant Borough Local Plan was submitted for examination to the Secretary of State for Housing Communities and Local Government on 12 February 2021.

Considerations

Construction Phase Impacts

In terms of the construction phase, very little will change in respect of the s73 application as the scale of the development remains broadly similar to that of the consented development, and all of the guidance utilised in the REC report remains relevant and valid. Accordingly, the conclusions and mitigation measures identified in the REC report remain appropriate for the s73 application.

Local Pollutant Concentration Monitoring

The REC report identified local pollutant concentration monitoring utilised for verification purposes in respect of modelling of the impacts of the development on sensitive receptors in the vicinity of the development. The verification process utilised diffusion tube monitoring results from 2017.

As can be seen in **Table 1**, the diffusion tube monitoring results, apart from ID 19(B), did not significantly change for 2018, the most recent data available from HBC, when compared to the 2016 and 2017 monitoring results.

If the verification process was repeated now with the most recently available diffusion tube data it is ACCON's professional experience that there is unlikely to be any significant change in the adjustment factor, such that modelled results would remain similar.

Table 1: Diffusion Tube Monitoring Results

ID	Site Name	Type	Grid Ref		Annual Mean NO ₂ Concentration (µg/m ³)		
			X	Y	2016	2017	2018
1(B)	Langstone Road (West)	Roadside	471610	105592	38.47	34.384	N/A
2	Rectory Road	Suburban	471742	105794	27.99	25.63	25.815
5	South Street	Urban Centre	471789	106205	25.94	20.977	20.78
6(B)	Park Road South (West Street)	Roadside	471555	106298	33.76	31.907	N/A
7(B)	Brockhampton Lane	Urban Centre	471180	106063	28.109	26.679	25.281
12(B)	Xyratex	Roadside	471611	105680	34.205	30.257	30.468
13	Grove Road	Suburban	471988	106076	19.803	19.211	N/A
14	Elm Park Road	Suburban	471777	106759	20.84	20.608	20.298
19(B)	Langstone Road (East, Bus Stop)	Kerbside	471640	105794	56.321	46.05	47.705
19(C)	Langstone Road East (Woodbury)	Roadside	471637	105686	N/A	37.327	34.832
20	Bosmere Junior	Urban Centre	471693	105920	28.866	30.743	27.088
21	Park Road South (Solent Road)	Other	471589	106132	40.943	40.356	N/A
22	Road South (Bulbeck Road)	Roadside	471573	106200	35.751	31.419	32.954
23	Park Road South (Elm Lane)	Other	471571	106374	43.313	41.776	N/A
27	Havant Precinct	Urban Background	471654	106287	N/A	25.75	25.186
28	Park Road South (West Street)	Roadside	471577	106280	N/A	30.64	34.897
29	Orchard Road	Suburban	472019	105800	N/A	24.16	24.945
W10	Compton Court	Roadside	471368	106805	30.1	27.756	29.141

Changes to modelling since 2019

Since the original Air Quality Assessment report was undertaken in 2019, there have been a number of significant changes to the modelling of pollutant concentrations which include revised background pollutant concentrations and revised emission factors from DEFRA which were released in August 2020.

Accordingly, the 2017 background pollutant concentration data utilised for REC dispersion modelling is no longer relevant.

The same grid square location of 471500, 105500 from the REC report has been utilised for the updated 2018 reference year background pollutant concentration maps. Within these maps, background

concentrations are available for 2018 to 2030. These 2018 reference year maps have been calibrated using 2018 monitoring and meteorological data.

As identified in **Table 2**, for NO_x the pollutant concentrations have slightly reduced, compared to the original REC report, and the NO₂, PM₁₀ and PM_{2.5} have marginally increased, but they all remain significantly below the Air Quality Objectives.

If the 2018 background data was utilised for verification modelling now, then it is unlikely there would be significant changes to the results, and therefore the background pollutant concentration data can still be relied upon.

Table 2: Background Pollutant Concentrations

Pollutant	Predicted Background Concentration (µg/m ³) – REC Report		Predicted Background Concentration (µg/m ³) – Up to date data		Difference between REC background concentrations and latest DEFRA data for 2020
	2017	2020	2018	2020	2020
NO _x	32.51	28.89	30.61	28.06	-2.55
NO ₂	21.42	19.45	21.00	19.52	+0.07
PM ₁₀	15.25	14.78	15.71	15.21	+0.43
PM _{2.5}	10.58	10.18	10.82	10.43	+0.25

It should be noted that the difference between the REC report and the latest background data is less than 0.5µg/m³.

Traffic Generation

In terms of traffic generation from the site, **Table 3** summarises the changes in traffic movements for the S73 application compared to the extant consent.

The overall reductions in traffic movements from the site are anticipated to be 132 vehicles per day (25% HDV). Therefore, the proposed S73 changes, whilst resulting in less traffic movements, will be unlikely to result in any significant change to the outcome of the REC report in respect of air quality, and any air quality impacts will remain as previously identified as **negligible** and **not significant**.

Table 3: Traffic Data Comparison

Land Use	AM Peak			PM Peak			12-hour			AADT		
	In	Out	Total	In	Out	Total	In	Out	Total	In	Out	Total
B1c/B2	-3	-1	-4	0	-3	-3	-23	-13	-36	-37	-20	-57
B1c/B2 (HDV)	0	0	-1	0	0	0	-3	-2	-5	-5	-5	-10
B8	-1	-1	-2	0	-1	-2	-13	-14	-27	-21	-21	-42
B8 (HDV)	0	0	-1	0	0	-1	-6	-6	-11	-11	-12	-23
Total	-4	-2	-8	0	-4	-6	-45	-35	-79	-74	-58	-132

Concluding Statement

ACCON have carried out a comparison of data utilised in the REC report with that which is available now and have concluded that the S73 application, which results in less traffic movements from the development, would not result in any implications on local air quality over and above those identified in the REC report for the extant consent.



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