

Subject: FW: Land adjoining 4 Providence Hill - ref. F/24/97312

Sent: Friday, July 26, 2024 12:13 PM

Subject: RE: Land adjoining 4 Providence Hill - ref. F/24/97312

Hi Rebecca,

Thank you for sharing the Air Quality Report submitted by Hawkins Environmental in support of the

Construction of a Residential Care Community, comprising a 73-bed care home (Use Class C2) and 5 x 2-bedroom close care cottages (Use Class C3 age restricted), with associated access, internal access road, parking, landscaping, and infrastructure, ref. F/24/97312.

The development lays within our Hamble AQMA (3) and there are three EBC monitoring locations near the development.

Overall, the proposed methodology and legislative review appear adequate. However, I have several concerns and observations that need to be addressed:

1. Methodology and Legislative Review:
 - Section 2.9 references the "Use of 2020 and 2021 Monitoring Datasets (2021)" and discusses the impact of the Pandemic, which appears irrelevant to this assessment.

We reference the "Use of 2020 and 2021 Monitoring Datasets (2021)" guidance because when we were producing the report, Eastleigh had not made public their data for 2022 or 2023, therefore 2019 was the most recent data with which we could verify (2020 and 2021 data is not to be used, as per the guidance). Eastleigh have since published their 2022 data, a year late, along with the 2023 data.

27/09/2024 comment: While referencing the publication is not inherently wrong, it does seem unnecessary in this context, as no relevant data from that period was used, therefore irrelevant and copied over from the template. However, we appreciate the intent behind raising awareness, and we would like more recent data (Table 5.1, such as from 2020-2021) to be reviewed, so a more up-to-date perspective added and discussed.

2. Assessment Accuracy:
 - The assessment uses traffic and emissions baseline data from 2019, with counts undertaken in 2024, scaled up by 1.5% to 2026, which appears adequate.
 - Meteorological data from Southampton Airport for 2019 is used, but...
 - In Appendix 3.6 - Background Concentration of Air Pollutants the background concentration data year is unclear. It mentions 14.81 µg/m³ for NO₂ at 1 km² grid square centred at 448500 110500. A cross-reference for the location in 2019 suggests 19.78322 suggesting erroneous location or concentration.
 - The latest LAQM Technical Guidance TG22 published in 2022 should be referenced throughout, instead of the 2016 guidance noted in Appendix 2.
 - The report mentions the 2014 edition of the "Guidance on the Assessment of Dust from Demolition and Construction" when the newer (2023 and 2024) versions 2.1 and 2.2 are available.
 - Section 5.2 references the Environmental Permitting (England and Wales) Regulations 2010, which should be updated to 2016.

Our use of 14.81 µg/m³ NO₂ as a background concentration is queried, they have cross referenced and believe 19.78 µg/m³ should be used. 19.78 µg/m³ is indeed the correct background NO₂ concentration for the

location, however in accordance with TG22 guidance, predicted contributions of NO_x from major road sources are to be removed from the total background NO₂ concentration to avoid "double-counting" (all major roads are included in the modelling). This is very much normal and directed by local authority guidance TG22.

27/09/2024 comment: Please provide reasonable assumptions and calculations to justify the background concentration used in the model (Appendix 3.6), to account for the 'double-counting' of major road sources. It is still unclear how the 2019 background concentration of 19.78322 to be used as 14.81 µg/m³.

In the comments to the assessment reference to data monitoring page on EBC website [Air quality monitoring | Eastleigh Borough Council](#) was made. On our main [Air Quality](#) page we published the most recent ASRs.

3. Emission Factors and Data Use:
 - The report correctly mentions the use of Emissions Factors Toolkit v12 but discusses v11.0 in detail, compromising consistency.
 - It is unclear why 2019 data was used for model verification when more recent data is available through our website [Air quality monitoring | Eastleigh Borough Council & Diffusion Tube Data | Eastleigh \(my-air.uk\)](#). The communication with the consultancy did not include the request for the monitoring data. The report acknowledges that 2019 data for nearby locations at Providence Hill was incomplete, raising concerns about the accuracy of predicted and modelled concentrations.

It's stated that we discuss EFT v11.0 in detail - there is one typo that references it, which I have corrected to v12.0. It's stated that it is unclear why we used 2019 as the baseline year – see answer 1 above. Again, the council had not published their 2022 or 2023 data when we were conducting the assessment.

27/09/2024 comment: I still find it unacceptable that the consultant did not make the effort to either contact the council directly for the most recent data, review the council's air quality webpage, or refer to the comments provided on 26 July 2024.

4. Predicted Concentrations:
 - Table 7.2: Air Quality Concentrations 2024 – With Development Related Traffic appears to significantly underpredict concentrations. This can be verified against 2024 monitoring data, suggesting the predictions as unreasonable.

2024 should say 2026 here, which I have corrected. However, I have no idea on what basis they think pollutant concentrations have been underestimated, they don't provide any reasoning. All modelling and data-processing has been carried out according to prescribed methodologies.

5. Construction Phase Management:
 - We support the approach to managing the construction phase impact and addressing the residual risk, classified as medium, through the production and verification of a Dust Management Plan (DMP) or Construction Environmental Management Plan (CEMP). This plan “should be approved by the local planning authority prior to commencement of work on site”, following the recommendations of the [2024 \(v2.2\)](#) IAQM Guidance on the assessment of dust from demolition and construction.

Although we look forward to receiving the DMP/CEMP for review and approval as suggested, given the inaccuracies and inconsistencies noted, I have concerns about the overall quality of the presented information and question the report's conclusions.

The request for a DMP is a fairly standard planning condition for a development like this.

We notably state in the report "Although monitored 2020 and 2021 concentrations would be disregarded under IAQM Guidance owing to the influence of the COVID-19 travel restrictions (see Section 2.9), data from 2022 or 2023 would potentially be more useful in verifying the model. Eastleigh Borough Council have been contacted to see if more recent data is available." We never heard back about the 2022 or 2023 data, but I note that both have been published to the EDC website since we prepared the report.

27/09/2024 comment: As mentioned earlier, efforts should have been made to obtain [the latest](#) ASR and/or diffusion tube data which is published [monthly](#).

Kind regards,

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