



HORSHAM DISTRICT COUNCIL CONSULTATION

TO:	Horsham District Council – Planning Dept
LOCATION:	Berkeley Homes Development Site Worthing Road Southwater
DESCRIPTION:	Erection of 94 dwellings with associated access, parking and landscaping at Land West of Worthing Road (Phase 5), Southwater
REFERENCE:	DC/19/2464
RECOMMENDATION:	Advice / No Objection / Objection / More Information / Modification / Refusal
SUMMARY OF COMMENTS & RECOMMENDATION: We have reviewed the 6186-Response to EHO Comments – June 2025.pdf prepared for Berkeley Homes by Stuart Michael Associates Limited and have the following comments to make.	
MAIN COMMENTS: Construction 1. The Proposed Development is to be built in a number of phases and will introduce new receptors, which might increase the sensitivity of the area to dust emissions during the construction phase. Not addressed. Review the Construction Dust Assessment to account for new receptors. Fine Particulate Matter 2. PM2.5 has a significant impact on human health and as stated in the IAQM Air Quality Guidance, the air quality assessment should include <i>Impacts on existing receptors during operation (usually on concentrations of nitrogen dioxide, PM10 and PM2.5)</i> . The AQA report outline does not include PM2.5. Addressed below. Air Quality Modelling 3. It is not clear which roads links were modelled. A map clearly showing the road links is required. Map provided. Horsham monitors air quality with diffusion tubes at 15 locations in Horsham and Southwater, why only Horsham AQMS and Southwater 1 were used for model verification? Some types of sites can perform differently, and it is considered better to have multiple sites at which to verify results and improve model confidence.	

4. What was the model verification for particulate matter (PM10 and PM2.5)? Please provide full statistical analyses to give full picture of the model performance.

- a. It is expected that the predicted particulate matter concentrations for 2024 at receptor HO2 are being underpredicted, considering the concentration trend from the most up to date ASR.

PM adjustment factor 3.9522 is considered high. Model adjustment should not be the first step in improving the performance of a dispersion model. Has the applicant checked their model setup parameters and input data in order to reduce the uncertainties before applying the adjustment factor?

The Environmental Targets (Fine Particulate Matter) (England) Regulations 2023 sets the target to ensure that the annual mean concentration of PM2.5 in ambient air is equal to or less than 10 micrograms per cubic metre ($\mu\text{g}/\text{m}^3$) by 31st December 2040. Additionally, the Environmental Improvement Plan 2023 for England set interim targets that by January 2028, the annual average of $12\mu\text{g}/\text{m}^3$ for PM2.5 is not exceeded at any monitoring station.

As the predicted PM2.5 concentrations at sensitive receptor as expected to be close to $12\mu\text{g}/\text{m}^3$ in 2028, has the applicant considered PM2.5 exposure for the development users in the site layout, the development's design, technology used in the construction or installed for use in the development? And how it can be reduced?

5. The Proposed Development is to be built in a number of phases and will introduce new receptors, these new receptors were not identified in the modelling. See **Construction comments**.

Emissions Mitigation

6. When completing the damage-cost calculation, the [damage costs toolkit](#) should be used. The price base year should be the year of appraisal (2024), and the start year, the predicted opening year (2028). Please could the applicant review their calculation of emissions and air quality appraisal.

The damage cost calculation is not in line with *Sussex Air (2021) Air Quality and Emissions Mitigation Guidance* for Sussex. To clarify:

2024 – price base year (year of appraisal)

2028 – start year (predicted opening)

2032 – end year (five years of scheme operation)

The damage cost toolkit should be used to apply the updated damage costs.

7. The Mitigation measures for the proposed development should be in line with the *Sussex Air (2021) Air Quality and Emissions Mitigation Guidance* for Sussex. The emission mitigation statement should contain itemised costing for each proposed mitigation option and total value of all proposed emissions' mitigation. This should be equal to the value from Emissions calculation and total calculated value of emissions' health damage cost. *Sussex Air quality guidance* aims to avoid the duplication of measures that would normally be required through other regimes.

Draft Section 106 Agreement, with the revised damage cost figure.

ANY RECOMMENDED CONDITIONS:

Condition: No dwelling shall be first occupied until an air quality mitigation plan has been submitted to and approved in writing by the Local Planning Authority.

Reason: To mitigate the impact of the development on air quality within the District and to sustain compliance with national objectives for pollutants in accordance with Policies 24 & 41 of the Horsham District Planning Framework (2015).

NAME:	Thais Delboni
DEPARTMENT:	Environmental Health and Licensing
DATE:	25 June 2025