

CAGNE

Deadline 4 – Air Quality - Summary of Report

Air Pollution Services

15 March 2024

Air Pollution Services (APS) has been commissioned by CAGNE (the 'Client') to review the air quality assessment undertaken by the Applicant for the Gatwick Northern Runway Project (herein the 'Proposed Development'). The report provides clarification on the issues raised at the ISH and provides further representations on other air quality issues. It includes questions for the Applicant, which we believe would be beneficial for the Examining Authority (ExA) to have a response. Below is an overview.

The ExA should not be confident that the roads modelling carried out accurately predicts concentrations across the full study area.

The ExA should not be confident that the modelling of PM₁₀, PM_{2.5} or NH₃ is reliable without a model performance evaluation for these pollutants.

It is clear from our review of the modelling files that there could have been simple improvements to the base model (and assessment models) and that good practice was not followed resulting in poor model performance.

One key implication of the Applicant's model failing is that the ExA cannot be sure that the mitigation provided and proposed monitoring is appropriate.

Without confidence in the concentrations from the modelling study, the assessment of effects needs to be carried out with caution and accounting for uncertainty, which has not been done.

The Applicant's approach to determining significance does not provide the ExA with the information to make a determination based on the latest scientific evidence and appropriate approaches.

The Applicant does not appropriately define the future baseline, in particular in relation to the relevant air quality assessment level (AQAL) and as an example, an AQAL of 20 µg/m³ for NO₂ should be considered in future years.

The effect of the Proposed Development on human health is deferred to the Health and Wellbeing Chapter and the assessment of the effect on the quality of the air due to the Proposed Development should be carried out considering appropriate AQALs combined with additional methods of presenting and determining the effect on the quality of the air given the non-threshold nature of air quality.

The effects of ultra-fine particles (UFPs) have not been considered appropriately in the Air Quality Chapter. A judgement of no significant effects on the air quality (in regard to UFP) cannot be reached based on the information in the Air Quality Chapter. As such, the ExA are not able to determine the likely significant effect nor, the appropriate level of mitigation or monitoring where proposed.

In summary:

- Consideration needs to be given to both the confidence in predicting the pollutant concentrations, which we consider to be in question based on the evidence provided, and the appropriateness of the AQALs used in Table 6.3 of the EPUK/IAQM guidance;
- The need for an assessment to be proportional should not be used as an excuse for poor modelling approaches (see Section 2); and
- If the Applicant had used relevant AQALs in the assessment, the outcome of the assessment is likely to, either:
 - o change from insignificant to significant, with risks of an unacceptable burden on the local population; or
 - o remain insignificant but correctly define the magnitude of risk and facilitate the appropriate level of mitigation (more than currently proposed) and the appropriate level of monitoring (more than currently proposed) to be specified.

We believe clarification on the issues should be provided and the assessment updated where necessary. Once updated, proportional mitigation and monitoring can be defined, hence the importance of a good assessment. The monitoring requirements are expected to be greater than those currently proposed. We also believe that the current approach is not compliant with the requirements set out in the EIA Regulations.

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