

Main Matter 4 Question7

Appendices Contents Page

<u>Appendix No</u>	<u>Contents</u>	<u>Page No</u>
<u>1</u>	<u>Hearing Statement by Malcolm Eykyn. MB., CHB (Retired GP). Lower Watchbury Farm Wasperton Lane Barford.</u>	<u>2</u>
<u>2</u>	<u>Michael Bull & Associates Review of Dust Assessment: Proposed Sand and Gravel Extraction, Haddiscoe Norfolk</u>	<u>8 (note from then follows it's own page numbers)</u>
<u>3</u>	<u>Michael Bull & Associates File Note 4th March 2024</u>	<u>12</u>

Appendix 3 Michael Bull & Associates File Note 4th March 2024

Haddiscoe Quarry – Response to Representations – Air Quality Assessments 13 February 2024

Michael Bull and Associates Ltd (MBAL) previously proposed a review of the Dust Assessment produced by Air Quality Assessments for the proposed sand and gravel extraction at Haddiscoe, Norfolk (dated 12 December 2023). Following the submission of this review a response has been prepared by Air Quality Assessments Ltd (titled Response to Representations) that attempts to address some of the comments made by MBAL (and other parties). This note briefly responds to the “Response to Representations” report. Both MBAL and Air Quality Assessments Ltd have presented their case on various aspects of the assessment and the planning authority is able to review each case presented and prepare their decision having considered the evidence before them. MBAL stand by the technical comments made on the assessment and invite the planning authority to take these into account in their decision.

However, MBAL do consider that it is necessary to address one point in the overall methodology where the Air Quality Assessments Ltd response is erroneous. Namely that the appropriate threshold concentrations where health effects of fine particulate matter can be discounted. As noted in the original MBAL report, the use of a concentration threshold of $17\mu\text{g}/\text{m}^3$ as an annual mean PM_{10} concentration is suggested in the appropriate guidance. However, the regulatory environment and health evidence related to fine particulate matter has clearly changed since the guidance was prepared.

As noted in the IAQM guidance the threshold is based on the likelihood of the 2010 annual mean objective for PM_{10} being exceeded (see Section 5.2 of the guidance). However, quite clearly the evidence relating to health effects of fine particulate matter has changed since the implementation of the original air quality standards in the UK in 2010. This is evidenced by:

- The introduction of new targets for $\text{PM}_{2.5}$ in the UK in 2023 through the Environmental targets (Fine Particulate Matter)(England) Regulation 2023;
- Publication of new air quality guidelines by the World Health Organisation in 2021 that reduced the guidelines for PM_{10} to $15\mu\text{g}/\text{m}^3$ as an annual mean (compared with the current UK standard of $40\mu\text{g}/\text{m}^3$);
- Publication of new air quality guidelines by the WHO in 2021 for $\text{PM}_{2.5}$ of $5\mu\text{g}/\text{m}^3$;
- The recent provisional agreement by the European Union of new air quality standards proposing annual mean PM_{10} and $\text{PM}_{2.5}$ standards of 20 and $10\mu\text{g}/\text{m}^3$ respectively.

The IAQM also acknowledge that the focus is shifting from PM_{10} to $\text{PM}_{2.5}$ when examining human health effects of particulate matter. In the second paragraph of its construction dust guidance¹ issued in January 2024 it states “*Exposure to PM_{10} has long been associated with*

¹ IAQM, Guidance on the assessment of dust from demolition and construction, January 2024 (Version 2.2).

a range of health effects, with an increasing focus on the smallest particles such as PM_{2.5} and smaller”

The Air Quality Assessments Ltd response notes several guidance and public inquiry decisions that have used the 17µg/m³ level however, there is a responsibility to base decisions on the best available science and not on outdated guidance and appeal decisions. As noted in the IAQM Code of Professional Conduct, members should be “*guided by the principle of applying the most appropriate science*”.

It is quite clear that the evidence is that there are health effects of fine particulate matter (as PM₁₀) below the 17µg/m³ level as evidenced by the changes in standards and targets and that there is an increasing focus on PM_{2.5} rather than PM₁₀, and it is therefore inappropriate to maintain that the use of the outdated threshold in guidance is correct. As a result, a health related assessment should be provided for this application.

Dr Michael Bull – Michael Bull and Associates Ltd 07729 272715