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Via Email: sarah.clibborn@planning.nsw.gov.au

31 March 2022

RE: Independent Technical Peer Review – Air Quality Impact Assessment – Final Response

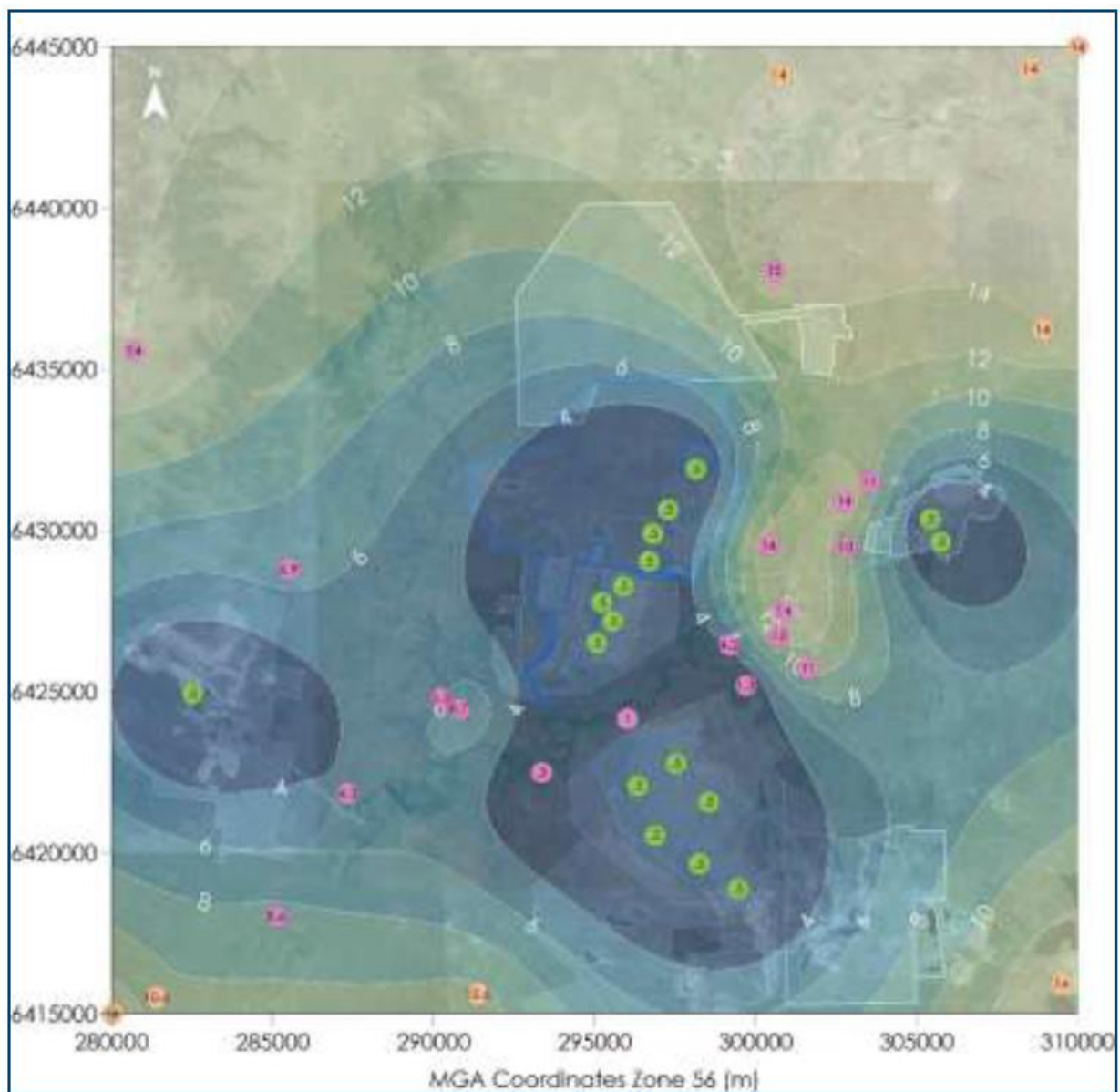
Dear Sarah,

Zephyr Environmental provided a report to the Department of Planning and Environment (DPE) in February 2022, in which it closed out almost all the remaining issues with the Todoroski Air Sciences (TAS) Air Quality Impact Assessment for the Mount Pleasant Optimisation Project.

There was only one issue that required a response (Issue 8), which was a request for further data to reproduce the spatially varying residual background grid for PM₁₀ (Figure 6-10 in the original assessment). TAS provided a partial response and also confirmed that the statistical mean was used to determine the final grid values. As described in the TAS response, there are three groups of values which are used to create the grid. These are noted below and are also shown in the figure taken from the TAS response.

- Pink dots are those locations explicitly modelled (monitoring sites)
- Orange dots are those representing boundary conditions (values assumed by TAS)
- Green dots are those within mining areas (values assumed by TAS)

TAS did not provide the MGA coordinates for the mining areas (green dots), so Zephyr has had to estimate these. In addition, the figure resolution was too poor to read the associated values, although TAS notes that the “*lowest off-site residual*” was used and so it was assumed these were all 0.5 µg/m³. Using these assumptions, Zephyr was able to reproduce the spatially varying background grid for PM₁₀ and this issue is now closed.



Source: Figure provided in the TAS response on 16 March 2022

TAS then made additional remarks in response to the comments in the peer review regarding the lack of site-specific data to support the claims of a 90% control on wheel generated dust on unsealed roads, and the 2% silt content applied to these haul roads.

Regarding the 90% control, TAS cites evidence gathered from other mines indicating that detailed studies were completed at these sites, but was unable to provide these reports to substantiate the claim. Rather, TAS provided screenshots from the reports with a brief description of the methodology. Zephyr does not dispute these results are valid for these other mines, but simply notes that such evidence does not exist for the subject site. While this issue was closed out in the last review, our observations were made for the benefit of DPE to understand the assumptions made in the emission inventory.

Again, with respect to the low value used for silt content this issue was considered closed out in the last review, with a note there was no supporting evidence presented for the subject site. Given the very large range of measured values made across many different mines, it would have been beneficial and straightforward to gather this information and demonstrate that the 2% value was reasonable for Mount Pleasant. To be clear, Zephyr is not suggesting that 2% is wrong, just that it is not conservative and remains unsupported by site-specific data. As noted by TAS, "*this mine has been in operation for a number of years*" and so should be able to provide information to support the anomalously low value selected.

Please contact me if you have any further questions.

Yours sincerely

A handwritten signature in black ink, appearing to read "Jane Barnett".

Jane Barnett
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