## E T H O S U R B A N

15 October 2021

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## SANCROX QUARRY EXPANSION PROJECT (SSD-7293) - RFI RESPONSE TO EPA ADVICE

We refer to your correspondence of 24 June 2021, requesting a response to the issues raised in the EPA's advice on the Sancrox Quarry Expansion Project dated 22 June 2021.

The EPA's advice related to additional comments and recommendations associated with air quality and noise impacts, which have been addressed below. In response to the EPA's advice, Hanson has prepared the following:

- Supplementary Air Quality Assessment, prepared by ERM, provided at Attachment A.
- Supplementary Noise and Vibration Impact Assessment, prepared by ERM, provided at Attachment B.

In summary, we note that the supplementary information has addressed the EPA's issues as follows:

## Air Quality

- 1. Further information to address additional exceedances of the EPA's 24-hr PM10 criterion: ERM has undertaken further modelling with more detailed and refined air quality emissions and mitigation assumptions, for three operational scenarios (normal operating conditions, maximum daily operating conditions, maximum daily operating condition with extent hours). The modelling has demonstrated that there are no predicted additional exceedances of the EPA's 24-hour PM10 criterion at all residential receptors in all scenarios. As requested by the EPA, the modelling also considered the future receptors within the approved industrial area adjoining the site to the north and east. The modelling does estimate some exceedances of the EPA's 24-hour PM10 criterion at these closest industrial receptors for maximum operational conditions only (i.e. no exceedances under normal operational conditions) – and justifies the exceedances on the basis that the modelling assumptions are conservative (as they represent the maximum operational conditions) and would not occur all day or every day, meaning there is also a significant opportunity to manage the potential exceedances through implementation of the proposed Trigger Action Response Plan.
- 2. Further information on proposed control strategies should be provided to address large project-only concentrations:

The Supplementary Air Quality Assessment notes that the proposed mitigation measures are relatively standard and considered to be best practice for extract industries such as this proposal, and highlights that over 85% of generated dust would arise from wheel generated dust. As such, whilst controls on other sources will be beneficial, in terms of total dust reductions, ensuring dust control on unsealed roads will have the most impact on reducing dust emission. The 90% control factor applied for the sealed portions of the roads is considered by ERM to be conservative, and the use of watering and chemical dust suppressants are highly effective. The Supplementary Air Quality Assessment concludes that with an active management plan in place involving monitoring and a Trigger Action Response Plan the estimated emissions reduction levels should be readily achievable.

 Further assessment of future (industrial) receptors and clarification of emissions inventory estimate and whether modelling assumptions represent a reasonable worst case scenario: As described in Item 1 above, the Supplementary Air Quality Assessment has undertaken further air quality modelling, which assessed the air quality impacts on adjoining future (industrial) receptors. In relation to clarifying the emissions inventory estimates and modelling assumptions, ERM provides detailed responses on each relevant modelling parameter in relation to the revised modelling – including hours of operation for each emission source, how truck movements have been apportioned under each modelled scenario, and a justification that the emission rates and wind erosion emission estimates represent reasonable worst case scenarios.

## <u>Noise</u>

- 4. There has not yet been enough evidence provided to show that Background Noise has not been impacted by the existing operation of the quarry: The Supplementary Noise and Vibration Impact Assessment provides further verification that the dominant noise source at the monitoring location was road traffic on the Pacific Highway, noise from the existing quarry was inaudible at the location.
- Further information on how the worst-case F-class meteorological conditions have been assessed: ERM provide detailed explanation of how metrological corrections are calculated and applied to the predicted noise levels by the noise modelling software, including for worst-case F-class meteorological conditions.
- 6. Further evidence that there are no annoying noise characteristics, especially with regards to low frequency noise:

The Supplementary Noise and Vibration Impact Assessment provides the spectral data from attended noise measurements and predicted noise levels, confirming that there are no annoying noise characteristics that would warrant a modifying factor.

The EPA also identifies truck movements that, whilst not regulated by the EPA, should be considered by the Department of Planning, Industry and Environment in its assessment. In response to this comment, we highlight that the Sancrox Quarry currently generates approximately 42 heavy vehicle movements per day, and that this is proposed to increase to approximately 164 heavy vehicle movements per day on average (i.e. based on average annual production rates). For comparison, the average number of heavy vehicles for 2021 using the Pacific Highway on a weekday (measured by TfNSW at Taree) is over 5,200. Given that 99% of the Sancrox Quarry's trucks are expected to travel directly to the Pacific Highway via the Sancrox industrial precinct, the proposed heavy vehicle traffic from the Sancrox Quarry Expansion Project is therefore of minimal affect in relation to local and sub-regional air quality emissions associated traffic on the Pacific Highway. Further, when considered more holistically, the quarry does not generate demand for construction materials. Rather, demand for construction materials throughout the mid-north coast would generate the need for trucking of these materials along the Pacific Highway, with similar (or potentially higher) overall impacts on sub-regional and regional air quality, even if these construction materials were not supplied form the Sancrox Quarry.

We trust that the information provided in the attachments, and summarised above, is suitable to address the further issues raised by the EPA. If you have any question in relation to the additional information provided, please contact me on 0450 133 453 or at tward@ethosurban.com. We also note that there remains a second Request for Information dated 26 August 2021, relating to issues raised by the Biodiversity and Conservation Division and Port Macquarie-Hastings Council. We are currently finalising a response to these issues and will provide a response to the second RFI as soon as possible.

Regards

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Tim Ward Director, Planning - Ethos Urban