



Our ref: DOC25/543843-5)

NSW Department of Planning, Housing and Infrastructure
Planning and Assessment Division
Locked Bag 5022
Parramatta NSW 2124

Returned via Major Projects Portal: PAE-87205460
By email: Jarrod.Blane@dpie.nsw.gov.au

Attention: Jarrod Blane

Dear Mr Blane

**Cabbage Tree Road Sand Quarry Modification 4 Western Extension (SSD-6125)
EPA Advice on Modification Report - Part 2**

Thank you for the request for advice for Public Authority Consultation (PAE-87205460) on the Modification Report submitted by Newcastle Sand Syndicate Pty Ltd (the Proponent) for the proposed Cabbage Tree Road Sand Quarry Modification 4 Western Extension (SSD-6125) (the Proposal) at 398 Cabbage Tree Road, Williamstown NSW (the Premises), located approximately 6 km south-east of Raymond Terrace, NSW in the Port Stephens Local Government Area. The existing sand quarry currently operates under Environment Protection Licence number 21264 (the Licence).

Background

The NSW Environment Protection Authority (EPA) has reviewed the following document titled '*SSD-6125 – CABBAGE TREE ROAD SAND QUARRY – WESTERN EXTENSION – MODIFICATION REPORT NO.4 (MR4)*' (February, 2025) (Modification Report) and the associated appendices to the Modification Report.

Based on the information provided, the EPA understands that the Proponent is seeking to modify their existing consent (SSD-6125-Mod-2) to:

- Include an additional 7.1 ha extraction area on adjacent land to the west in Lot 9 DP239608;
- Reduce the extent of the impact area within the land holding originally assessed under SSD-6125;
- Amend the Biodiversity Offset Strategy that reflects the change in impact area;
- Amend the Statement of Commitments to reduce duplication with Conditions of Consent and enable management plans to adapt to changing conditions on the Premises;
- Permit the import of up to 6,000 tonnes per annum of Virgin Excavated Natural Material (VENM) sand for on-site processing;
- Clarify methodologies used for sand extraction and rehabilitation; and
- Amend condition relating to the Radiation Survey in Schedule 3, Condition 46.

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The modification would result in the extraction of an additional 533,000 tonnes of material. There would be no change to the maximum extraction rate of 530,000 tonnes per annum.

Part 2 of EPA's Submission

This is Part 2 of EPA's submission and should be read in conjunction with the EPA Part 1 submission dated 17 July 2025 (EPA Reference DOC25/543843-5) Part 1 of EPA's response provided comments on the EPA's review of the Modification Report. At the time of the EPA's submission of Part 1, the noise, air and radiation assessments for the Proposal were still being reviewed.

This letter, being Part 2, provides the EPA's comments on air and radiation assessments provided

The EPA is concerned about the increased encroachment of mining to sensitive receivers and further information is required for the EPA to be able to adequately assess noise impacts. At this time the EPA cannot provide recommended conditions of approval.

EPA Requires Additional Information to Assess Noise Impacts

The EPA has reviewed has reviewed the document titled '*Acoustic Assessment Proposed Modification (Mod 4) Cabbage Tree Road Sand Quarry Williamtown, NSW*' (January 2025) conducted by Spectrum Acoustics (**Acoustic Assessment**). The existing noise limits for the Premises are detailed in Condition L3.1 of SSD-6125 and in the Licence. The existing limits are summarised below:

- 43 dB(A) $L_{eq, 15min(day)}$
- 39 dB(A), $L_{eq, 15min (night)}$
- 45 dB(A) $L_{Max, 1min}$

The Acoustic Assessment proposes to revise the project noise trigger levels to 47 dB(A) $L_{eq, 15min(day)}$ and 42 dB(A), $L_{eq, 15min (night)}$. The EPA considers this to be a substantial increase in the noise limit requiring substantial consideration and justification by the Proponent which has not been provided in the current Acoustic Assessment.

The Noise Policy for Industry (NPfl) (EPA 2017) Fact Sheet B presents a procedure for determining background noise. The NPfl requires a minimum of 7 days data to determine the rating background noise level with data affected by weather excluded from the data set. The background noise monitoring data presented in the Acoustic Assessment in Appendix 1 does not appear to show that noise data has been excluded from the data set for weather. The Proponent should be required to demonstrate that the weather affected data exclusion requirements of the NPfl have been followed and that the resulting data meets the minimum requirements of the NPfl. Williamtown airport weather station is close to the Premises and could be used to assess weather affects. Additionally, the derived "assessment background levels" (**ABL's**) should be presented as required by the NPfl.

When a proponent is required to vary requirements, the EPA will take into account existing commitments and requirements, and performance against those requirements, as evidence of the ability of the proponent to implement reasonable and feasible measures to mitigate noise. That is, where a licence holder meets current noise limits or can do so, this will be considered evidence that practical measures can be implemented to mitigate pollution for the purposes of section 45(d) of the *Protection of the Environment Operations Act 1997* when the EPA makes a licensing decision. Therefore, the Proponent should be required to justify why the noise limit should be increased rather than implement reasonable and feasible measures to mitigate.

For the assessment of modifications to existing Premises, the noise from the existing Premises should be excluded from background noise measurements. As the background noise monitoring has been conducted at one of the closest residential receivers to the quarry, the Proponent should be requested to justify the background noise monitoring position to ensure noise from the existing Premises has been excluded from the background noise measurements.

If you have any further questions about this issue, please contact Emily Holland on 4908 6852 or via email to info@epa.nsw.gov.au and cc Emily.holland@epa.nsw.gov.au.

Warm regards,

Natasha Ryan
Unit Head - Operations
NSW Environment Protection Authority

22 July 2025

Encl: Attachment 1: EPAs comments on Air and Radiation

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Air

The proposed expansion will result in some receptors within 50m of operations. The Air Quality Impact Assessment (AQIA, Todoroski Air Sciences, 4 Dec 2024) has modelled peak daily emissions and used site-specific PM₁₀ measurements for background. The AQIA does not predict any exceedances of the PM₁₀ or PM_{2.5} criteria at any receptors. The AQIA has also considered respirable crystalline silica (RCS) impacts which are not predicted to exceed EPA's interim criteria.

The Proponent operates two real-time PM₁₀ monitors at the boundary, including one at the closest receptor, and is required under Licence conditions O3.7 - O3.11 to adjust defined onsite activities with specific meteorological and PM₁₀ measurements. The EPA considers these to be sufficient mitigation measures to manage offsite dust impacts.

Radiation

The proposed amendment to Schedule 3, Condition 46 of SSD-6125 to replace the requirement for a radiation survey prior to all vegetation clearing with a risk-based radiation assessment targeted to areas disturbed by historical mineral sand mining offers a more focused and efficient approach whilst maintaining worker safety. The EPA is of the view that this risk-based approach to determining the need for radiation surveys is appropriate.

In order to maintain the original intent of the condition which was to ensure that potential radiation risks from buried technologically enhanced monazite concentrates are identified and managed before ground-disturbing activities occur, the EPA recommends that a full survey should be undertaken when there is reasonable suspicion or evidence that materials containing technologically enhanced naturally occurring radioactive material (TENORM)—such as TE monazite—may be present either in the construction area or in materials being sourced for use. Thus, targeting surveys where there is a higher likelihood of encountering elevated radiation levels, rather than applying blanket requirements to all sites or materials.

Situations that would reasonably trigger the need for a full radiation survey include:

- Elevated dose rate readings during preliminary site checks (e.g., radiation levels greater than 0.5 µSv/h above background taken at 1 metre height using a portable radiation meter);
- Use of sand, soil, or crushed rock sourced from areas with a history of mineral extraction or known TENORM potential; and/or
- Evidence from geological maps, site history, or supplier declarations indicating the presence of enhanced monazite or similar radioactive minerals.

Note: Background radiation levels in NSW typically range from 0.05 to 0.2 µSv/h. If results exceed 0.5 µSv/h above local background, then a full radiation survey, including laboratory analysis of materials, is justified.