



SF17/40580; DOC18/17601

Mr Joel Herbert
Planning Officer - Resource Assessments
Department of Planning and Environment
GPO Box 39
SYDNEY NSW 2001

Dear Mr Herbert

Ardmore Park Quarry Modification 3 – EPA Comments

I refer to your email of 12 January 2018 in which you requested the NSW Environment Protection Authority's (EPA) comments on Multiquip Quarries Modification proposal for the Ardmore Park Quarry (the quarry) at Bungonia (Project Approval 07_0155).

The EPA has reviewed the Environmental Assessment (EA) titled '*Ardmore Park Quarry via Bungonia, NSW Environmental Assessment For Modification 3 to PA 07_0155 (Ardmore Park Quarry)*', prepared by R.W. Corkery & Co. Pty. Limited and dated December 2017. The EPA has also reviewed other relevant appendices to the EA, including but not limited to the "*Ardmore Park Quarry Noise Impact Assessment Project Modification 3*", prepared by VMS Australia Pty Ltd and dated 19 December 2017 (NIA), and the "*Proposed Modification to PA 07_0155 Ardmore Park Quarry Via Bungonia, NSW Air Quality Impact Assessment*", prepared by Ramboll Environ Australia Pty Ltd and dated November 2017 (the AQIA).

The EPA has identified several issues in relation to the modification proposal for the Department of Planning and Environment's further consideration in its determination of the modification. These are provided in detail in **Attachment 1** to this letter. Based on the information provided in the EA, the NIA, and the AQIA, the EPA considers that we are not in a position to recommend support of the modification proposal at this time and are consequently unable to provide recommended conditions for the modification proposal.

I trust that the EPA's submission is of assistance and should you wish to discuss this matter further, please contact Michael Heinze on 6229 7002.

Yours sincerely

Stefan Press 01/03/18.

STEFAN PRESS
Unit Head
NSW Environment Protection Authority

ATTACHMENT 1

EPA comments on Ardmore Park Quarry Modification 3 proposal

The comments below reference the following documents:

- The **EA** - 'Ardmore Park Quarry via Bungonia, NSW Environmental Assessment For Modification 3 to PA 07_0155 (Ardmore Park Quarry)', prepared by R.W. Corkery & Co. Pty. Limited and dated December 2017.
- The **NIA** - 'Ardmore Park Quarry Noise Impact Assessment Project Modification 3', prepared by VMS Australia Pty Ltd and dated 19 December 2017.
- The **AQIA** - 'Proposed Modification to PA 07_0155 Ardmore Park Quarry Via Bungonia, NSW Air Quality Impact Assessment', prepared by Ramboll Environ Australia Pty Ltd and dated November 2017.

Inaccuracies/errors

1. The EPA believes that Plates 1-4 of the EA are labelled incorrectly, with Plates 1 and 2 being of Jerrara Road, Marulan and Plates 3 and 4 being of Oallen Ford Road, Bungonia.
 - **Recommendation: this error be corrected.**
2. Table 3 in the NIA provides details of noise related complaints recorded by Multiquip. The EPA has provided details to Multiquip of complaints lodged to the NSW Environment Line in November 2013 and August 2016, however these complaints do not appear in Table 3 of the NIA.
 - **Recommendation: Update Table 3 in NIA with an accurate register of complaints reported to Multiquip and the EPA.**
3. Figure 3 Sensitive Receptor Locations in the NIA appears to indicate that Residence 6 is project related, however the NIA provides calculations for that Residence as if it were not project related. Table 1 of the AQIA indicates that Receptor R6 is a project owned residence.
 - **Recommendation: Clarify which sensitive receptors are project related and which are not, as this has implications from a noise perspective in terms of agreed/acceptable impacts.**

Waste

4. Excavated Natural Material

The EPA notes the proposal to import Excavated Natural Material (ENM) into the quarry primarily to backfill the extraction area as part of final landform creation and rehabilitation of the Quarry, or to stockpile and on-sell within 12 months of receipt at the quarry. The EPA acknowledges these proposals and recommends that the proponent adhere to the requirements of the excavated natural material exemption 2014 (the ENM exemption). The EPA also notes however, that the proponent intends to screen and blend ENM with extracted sand and/or basalt to meet specific customer requirements. This intention is contrary to the conditions of the ENM exemption which explicitly state that the ENM is, or is intended to be, applied to land as engineering fill or for use in earthworks. Further, the excavated natural material order 2014 does permit any material that has been processed to be considered as ENM. Therefore blending with natural quarry products would trigger the waste processing provision of the *Protection of the Environment Operations Act 1997* (POEO Act), for which the proponent does not have consent.

- **Recommendation: That the proponent clarify their intentions with regard to the future use of ENM, and what other actions or consent would be required in order to undertake waste processing.**

5. Treated drilling mud

Similar to the issue of ENM, the EPA notes that treated drilling mud is mentioned in passing on page 121 of the EA. Under the treated drilling mud exemption 2014, the treated drilling mud can only be

applied to land as engineering fill or for use in earthworks. It would not be possible to blend this material with natural quarry products for on selling as this would also trigger the waste processing provision of the POEO Act. Again, it would appear that the proponent does not have consent for this activity.

- **Recommendation: That the proponent clarify their intentions with regard to the future use of treated drilling mud, and what other actions or consent would be required in order to undertake waste processing.**

Noise

On-site noise impacts

The following comments relate to the Noise Impact Assessment as it relates to impacts associated with on-site activities at the Ardmore Park Quarry, and for which the NSW EPA is the Appropriate Regulatory Authority (ARA).

6. The EPA notes that as part of the modification process, the quarry proposes to extend its operating hours (product transportation) during part of the 'night' period as defined in the *NSW Industrial Noise Policy* (INP), from 5am to 7am. The EPA notes that the proponent identifies F-class and G-class temperature inversions as a feature of the area according to the methodology in the INP, but does not consider temperature inversions in the NIA due to "the significantly reduced morning shoulder period operations". The EPA disagrees with this approach and believes that as the increased hours of operation specifically occur during the defined night period, temperature inversions should be considered.

- **Recommendation: That the NIA considers temperature inversions.**

7. No prevailing winds were included in the modelling, yet the NIA states in Section 3.4 that there was 'a prevailing south to south-westerly wind' during attended monitoring in response to a complaint. A south to south-westerly wind would enhance the noise levels at some of the identified residential receivers, especially at any sensitive receivers to the north and north-east of the site.

- **Recommendation: That the NIA should be clear on whether any winds are 'prevailing' in accordance with the methodology in the INP.**

8. The predicted noise levels for equipment operating in-pit are significantly lower than those calculated by the EPA with a simple distance calculation to R3. The proponent should provide adequate detail on the modelled depth of the equipment operating in the quarry pit, as the EPA cannot verify the modelled results in the NIA without modelling details such as equipment heights/in-pit depths.

- **Recommendation: That the proponent provide adequate detail on the modelled depth of the equipment operating in the pit.**

9. The EPA notes that some of the proposed equipment appears to have not been included in the modelling. For example, Figures 4 and 5 of the NIA indicate 'front-end loader x 2', however Table 8 indicates only one front-end loader was included in the model. Similarly, the conveyors indicated in Figure 4 (Basalt processing) are also not included in Table 8 of the NIA.

- **Recommendation: That the proponent provide adequate detail on proposed equipment used in the modelling.**

10. The EPA notes that although the NIA states "that basalt and sand extraction operations are not undertaken concurrently", there is no discussion on whether sand extraction and basalt extraction *can* occur simultaneously and if so, what the predicted noise levels will be from the combined operations.

- **Recommendation: That the proponent clarify why sand and basalt extraction cannot occur simultaneously and what management practices would be put in place to ensure**

this. In the absence of this, the NIA should consider a worst-case scenario of sand and basalt extraction occurring simultaneously.

11. The EPA notes that the NIA does not include an assessment of any applicable annoying noise characteristics as per Fact Sheet C of the Noise Policy for Industry.
 - **Recommendation: That the NIA include an assessment of annoying noise characteristics and, where necessary, add a correction to the predicted noise levels.**
12. The EA describes a proposed 2 metre to 3 metre high visual amenity bund in Section 2.2.4. The NIA does not mention this bund and therefore it is not clear if the modelling in the NIA included the proposed visual amenity bund.
 - **Recommendation: The NIA should clarify if the modelling in the NIA included the proposed visual amenity bund.**
13. The EPA notes that the EA states there is a proposed increase in the size of the product trucks to 50 tonnes, in order to increase product transport capacity without increasing the number of truck movements. It is reasonable to expect that there would be a corresponding increase in the sound power level (SWL) of the product trucks given the increase in size. Table 8 of the NIA, however, states that the SWL of the product trucks will be the same as is currently approved.
 - **Recommendation: That the NIA include a discussion on the sizes of existing and proposed product trucks and their associated SWLs.**

Off-site noise impacts

While it is acknowledged that the EPA is not the ARA for noise impacts occurring from activities outside of the Ardmore Park Quarry (i.e. along the transport routes), the following comments regarding off-site traffic movements are provided for completeness.

14. As noted above, the SWL used for product trucks is unclear. There is also no information about what modelling method/standard was used for noise predictions. Consequently, the EPA is unable to verify the results for the modelling of noise from off-site traffic movements.
 - **Recommendation: Additional information must be provided in the NIA.**
15. To assess the off-site traffic movements in Section 8, the NIA includes the daytime criteria for a freeway/arterial/sub-arterial road from the NSW Road Noise Policy (RNP) of LAeq15hr 60dBA. The EPA notes that both the Project Approval and the Noise Management Plan for the premises include traffic noise criteria of LAeq1hr 55dBA.
 - **Recommendation: The proponent should clarify why they have chosen to assess the off-site traffic movements against a different criteria to the limits included in the Project Approval for the site. Alternatively, the NIA should include an assessment of off-site traffic noise against the current Project Approval traffic noise criteria.**
16. Section 5.3.3.2 of the EA states 'The increased hours of transportation would allow for scheduling to minimise, where practical, truck movements during the following periods
 8:00am to 9:00am Monday to Friday during school terms
 3:00pm to 4:00pm Monday to Friday during school terms.'

However, Tables 9 to 11 of the EA (and Tables 13 to 16 of the NIA) do not indicate a change in the proposed heavy vehicle movements during those hours.

- **Recommendation: That the NIA clarify truck movement times along the transport route.**

Dust Management

17. The EPA notes that the air quality assessment of the EA predicts small increases in emissions received off site, but that these would still be below applicable criteria. The EPA does however note that unless reasonable and feasible measures are employed at the quarry at all times to control dust there is the potential for dust emissions to have potential off site impacts.