



11 February 2020

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The Secretary
Department of Planning, Industry & Environment
Planning Assessments
GPO Box 39
SYDNEY NSW 2001

Submission via email

Attn: Joel Herbert

Dear Joel,

Dunmore Sand and Soil, Modification 3: Addendum Response to Submissions

Reference is made to correspondence from the Environment Protection Authority (EPA) dated 29 November 2019 in response to Boral's response to submission (RtS) letter dated 31 October 2019 and subsequent discussions and emails with the Department of Planning, Industry and Environment (DPIE) on 10 and 19 December 2019.

The referenced correspondence seeks further information in relation to the proposed modification to Development Application (DA), DA 195-8-2004 to permit the processing of Virgin Excavated Natural Material (VENM) at Dunmore Sand and Soil.

This letter responds to matters raised by the EPA and DPIE.

1.0 Response to EPA

The following matters were raised by the EPA and are addressed separately below:

- Clarification of the source and availability of VENM;
- Confirmation that VENM sourced from the Sydney region will comply with existing specific resource recovery orders and resource recovery exemptions made under clauses 91 and 92 of the *Protection of the Environment Operations (Waste) Regulation 2014*; and
- Confirmation that Boral will stop reusing VENM when Modification 2 is approved.

VENM source, availability and verification procedures

The EPA is seeking further information regarding the source and availability of VENM intended to be processed and reused, raising concern regarding use of tunnel spoil in particular, the



availability of supply, and incidents involving operators attempting to “pass off contaminated soils as VENM (or ENM)” and fraudulent documents.

We note that neither the Statement of Environmental Effects (SEE) nor the Response to Submissions (RtS) references tunnel spoil, but rather seeks to process any material that meets the VENM specification.

Boral has no definitive source of the VENM intended for processing and reuse. The source of potential material and market availability is considered to be a commercial matter for Boral. In the event that suitable material is not available, processing for recovery would not occur. Similarly, market competition between Boral and other companies are not considered relevant to the assessment of environmental impact.

A review of currently submitted applications on the DPIE Major Projects Register, specifically those for Resource Recovery Facilities, indicates that the inclusion of detailed descriptions regarding the source of materials is atypical, with no applications currently providing this information.

Boral recognises that well defined acceptance and inspection criteria for VENM is necessary to prevent the introduction of contaminants to site. This recognition is based on many years of experience at Dunmore Sand and Soil (DSS), the earlier Buckley Road Quarry and a range of recycling and bulk earthwork operations where Boral has implemented and maintained a rigorous inspection and receivals protocol that is well understood by the contractors delivering materials to the site.

Boral has established industry connections and verification processes to ensure that material brought on to site is “fit for purpose”.

DSS operates in accordance with an existing and approved Waste Management Plan (WMP). The existing WMP sets out “operational waste management” protocols for the verification, acceptance and disposal of VENM on site. At present the plan includes site processes for the purpose VENM emplacement for rehabilitation. The verification processes and procedures for the determining if a material is VENM or ENM will be similarly implemented for the proposed modification. The only change being the nature of the material and its use once verified as VENM or ENM.

Resource Recovery Orders and Exemptions

The EPA has requested confirmation that VENM proposed to be sourced from the Sydney region will not contravene any order or exemptions.

As set out in both the SEE and the RtS, Boral currently has approval to accept VENM to the site for the purposes of backfilling. The modification is limited to how the VENM is used once on site,



there is no proposed modification to the verification criteria or procedures for the receipt of VENM/ENM currently adopted and set out in the existing WMP. Verification procedures for the acceptance of VENM/ENM adopted under this plan would continue in relation to material intended for reuse.

The RtS acknowledged that the orders and exemptions did not extend the action of processing the VENM to extract useable sand products and that the necessary licences would be sought for these activities as a post-consent requirement.

In this regard, Boral confirms that they will continue to source appropriate VENM in accordance with the regulatory framework.

Confirmation of consent terms (time period)

The modification to the existing consent is sought in perpetuity. It is not proposed to cease the processing of VENM in the event the Modification 2 for Stage 5 is approved. References to the “short term” demand were made in the context of current and sustained demand for sand resources that are increasingly under pressure.

For the purpose of the clarity, this statement can be amended to read *“to meet continued and sustained demand”*. It is envisaged that even when accounting for the potential approval of Modification 2, natural sand reserves will continue to be under pressure. This pressure for sand is driven by existing infrastructure projects and heightened by demand generated by recovery projects following the 2019/2020 bushfires.

Diversification of natural sand sources, such as through reuse of suitable VENM is key to maximizing and extending the life of existing sand reserves. Moreover, it is consistent with the waste hierarchy to reuse waste prior to disposal.

2.0 Response to DPIE

The DPIE has requested further clarification on site rehabilitation, including:

- whether the diversion of VENM from rehabilitation purposes would extend the timeframe to rehabilitate the site,
- whether the proposal would require additional material to be brought to the site to complete rehabilitation;
- whether the rehabilitation management plan would need to be updated; and
- the potential for the modification to contribute to additional vehicle movements.



Rehabilitation timeframes and volumes required

As discussed in our meeting of 10 December 2019, the original EIS allowed for a range of VENM volumes to be imported for use in rehabilitation works. VENM volumes vary based on the stage of works and provide for minimum and maximum requirements.

For example works in Stage 3B1/3B2 allowed for estimates of between 90,000 tonnes and 1,000,000 tonnes and averages across the rehabilitation program of between 150,000 and 250,000 tonnes per year.

Over the 12 month period between, July 2018 and June 2019, VENM imported to site totaled 122,753 tonnes. Using the yearly average, there would have been capacity within the existing allowance to utilise appropriate VENM (if sourced) for the purposes of reclaiming product.

Fundamentally the idea is not to cannibalise VENM intended for rehabilitation, but to seek flexibility within the consent provisions to utilise available and appropriate VENM for reuse as viable product.

The type of VENM for reprocessing will be different to the type of VENM currently used on site for rehabilitation purposes. It is intended that sandstone based VENM will be used for reprocessing, while the more widely available VENM with high clay content will continue to be used for rehabilitation.

Need to update the rehabilitation plan

The rehabilitation plan is unlikely to require amendment as a result of the modification. Measures managing and reporting the reuse of VENM for processing would most likely to be incorporated into the Waste Management Plan.

Potential to generate additional vehicle movements

The potential for the modification to generate additional vehicle movements beyond those anticipated and assessed under the original consent, could only occur where it was proposed to increase the importation or dispatch volumes of VENM/ENM or product, respectively.

The dispatch volumes from the site for the calendar year of 2018 (the last reporting period of 2018-2019) was approximately 460,500 tonnes (by road and rail). The site is currently consented to produce or dispatch up to 800,000tpa from the site. The modification to process up to 120,000 tonnes of appropriate VENM would not drive Boral's production or dispatch volumes beyond the condition limit and therefore would not alter the assessed traffic volumes. Moreover, given the current modal between road and rail for product dispatch the potential impact on the receiving public road network is further reduced.



There is no condition limit to the importation of VENM/ENM with respect to vehicle movements. It is noted that the original EIS contained estimated average incoming and outgoing loads onto the public road system over the life of the quarry (refer to table 2.11 on page. 2-47).

Notably the assumption was made that importation (i.e. incoming loads) would commence in year one (assumed to be 2005) and increase substantially in year four (assumed to be 2008). However, the quarry did not commence operations until the later stages of 2007, with extraction in the first three months being only 971 tonnes. Extraction of product on a large scale not readily commence until the following calendar year of 2008. Similarly, Boral did report importation of VENM/ENM for backfilling until 2017, making 2017 year one, with incoming loads estimated at 10,249 loads.

At an average importation rate of 250,000 tonnes annually of VENM/ENM (irrespective of use), the operation (including VENM backfilling and VENM for reuse) would only generate incoming 8,333 loads.

The proposed modification is considered to be within the assessed limits of potential traffic generation associated with the approved use.

3.0 Conclusion

The proposed processing of VENM is consistent with the waste hierarchy which places reuse second to avoidance and reduction. While the rehabilitation of Dunmore Lakes is an important element of the existing consent, it is tantamount to waste disposal (akin to landfilling) that is the least preferable tier of the hierarchy.

While Boral respects the EPA's conservative approach is based on the need to ensure minimal environmental harm, they should have sufficient comfort that there are adequate regulatory measures and site processes in place to ensure minimal environmental impacts and reporting of material received.

The original EIS adopted a wide range of VENM importation volumes, allowing on average for around 150,000 to 250,000 per annum. As set out in section 2.0 above, in the 2018/19 financial year 122,000 tonnes was imported to the DSS site. This leaves a gap between estimated and actual VENM volumes currently imported site and creates an opportunity to import VENM suitable for reprocessing to extend sand reserves without impacting on assessed traffic and noise levels.

Given the need for the proposed development in meeting existing and likely future demand for sand used to support ongoing construction projects within the identified regions and the minimal environmental impacts likely to result as consequence, we are of the view that the modification is worthy of support.



Should any further additional information or clarification be required in relation to the modification, please contact the undersigned on phone 0401 894 110 or email rachael.snape@boral.com.au

Yours sincerely,

A handwritten signature in blue ink, appearing to be "R. Snape", with a stylized, cursive script.

Rachael Snape
Planning and Development Manager (NSW/ACT)