



DOC19/288059-04
Date: 22 October 2019

Department of Planning, Industry and Environment
GPO Box 39
SYDNEY NSW 2001

Attention: Lauren Evans

Email: lauren.evans@planning.nsw.gov.au

Dear Ms Evans

RE: Response to Submissions - Marulan South Limestone Mine Continued Operations Project (SSD 7009)

I refer to the Response to Submissions report (the RtS) for the Marulan South Limestone Mine Continued Operations Project (the project), provided to the NSW Environment Protection Authority (EPA) through the Major Projects planning portal on 3 October 2019. The Department of Planning, Industry and Environment (DPIE) is seeking comments on the RtS and the EPA provides the following comments and recommendations for the consideration by DPIE.

Groundwater and Air Quality

The EPA has reviewed the RtS and acknowledges that the proponent has satisfactorily addressed the comments raised by the EPA in relation to groundwater and air quality. If the proposal is approved, the EPA will continue to liaise with the proponent regarding the EPA's comments on these two matters, as they relate to a post-approval scenario and will require various amendments to the existing Environment Protection Licence 944 (EPL 944).

Noise

With regard to the noise and blasting assessment, the EPA is satisfied that the RtS has addressed the EPA's comments as submitted to DPIE on 1 May 2019. Subsequently, the EPA has proposed draft conditions of consent with regard to noise and blasting for DPIE's consideration for inclusion in any approval for the project. The EPA's recommended conditions are at **Attachment A**.

Surface Water and discharge points

With regard to the RtS and the proponent's comments on the EPA's recommendations regarding potential impacts of the project on surface water, the EPA notes that the proponent has largely rejected the recommendations made by the EPA in relation to post-approval assessments and monitoring.

The EPA still believes that there is merit in conducting a post-approval assessment and monitoring verification process and has provided for consideration by DPIE, draft conditions to be included in any approval in **Attachment B**.

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Regardless of the additional comments below, the EPA sees no reason for the planning decision making process for the project to be stalled with regard to surface water quality.

The *Protection of the Environment Operations Act 1997* (POEO Act) provides the statutory framework for managing water pollution in NSW. One of the key mechanism for regulating water pollution is through an environmental protection licence.

When exercising its licensing functions, the EPA must consider any of the matters in Section 45 of the POEO Act that are relevant, even in the event of a licence variation. If the proponent rejects EPA's post-approval assessment and monitoring considerations, the EPA will be unable to approve any discharge points or pollutant limits on EPL 944 and consequently offsite water quality impacts will be managed under Condition L1 of EPL 944 (pollute waters).

The EPA has no further comments to make on the RtS but would appreciate the opportunity to review any draft conditions of consent which DPIE might propose for the project, should it consider approval of the proposal.

Should you have any queries or wish to discuss this matter, please contact Michael Heinze on 6229 7002.

Yours sincerely



JANINE GOODWIN
UNIT HEAD
Environment Protection Authority

ATTACHMENT A

Marulan South Limestone Mine Continued Operations – Recommended Noise and Blasting Conditions

Noise Limit Conditions

L6.1 Noise generated at the premises must not exceed the noise limits at the times and locations specified in the table below. The locations referred to in the table below are indicated by “Marulan South Limestone Mine Continued Operations – Environmental Impact Statement prepared for Boral Cement March 2019 – Appendix F Noise and Blasting Assessment - Figure 5.1”.

Location	Noise Limits in dB(A)			
	Day	Evening	Night	Night
	L _{Aeq} (15 minute)	L _{Aeq} (15 minute)	L _{Aeq} (15 minute)	L _{AFmax}
R9	40	36	36	52
All other privately-owned residential receivers	40	35	35	52

L6.2 For the purposes of condition L6.1:

- a) Day means the period from 7am to 6pm Monday to Saturday and the period from 8am to 6pm Sunday and public holidays.
- b) Evening means the period from 6pm to 10pm.
- c) Night means the period from 10pm to 7am Monday to Saturday and the period from 10pm to 8am Sunday and public holidays.

L6.3 - Standard Meteorological Conditions

- a) The noise limits set out in condition L6.1 apply under the following meteorological conditions:

Assessment Period	Meteorological Conditions
Day	Stability Categories A, B, C and D with wind speeds up to and including 0.5m/s at 10m above ground level
Evening	Stability Categories A, B, C and D with wind speeds up to and including 0.5m/s at 10m above ground level
Night	Stability Categories A, B, C and D with wind speeds up to and including 0.5m/s at 10m above ground level

- b) For those meteorological conditions not referred to in condition L6.3(a), the noise limits that apply are the noise limits in condition L6.1 plus 5dB.

L6.4 For the purposes of condition L6.3:

- a) The meteorological conditions are to be determined from meteorological data obtained from the meteorological weather station identified in Figure 2.4 of “Marulan South Limestone Mine Continued Operations – Environmental Impact Statement prepared for Boral Cement March 2019” (Note: the weather station would be added to EPL 944 as a monitoring point following any project approval by DPIE).
- b) Stability category shall be determined using one of the following methods from Fact Sheet D of the *Noise Policy for Industry* (NSW EPA, 2017) (Note: the exact method would be chosen following discussion with Boral and included in EPL 944, following any project approval by DPIE):
 - i. Direct measurement of temperature lapse rate (section D1.2).
 - ii. Pasquill-Gifford stability classification scheme (section D1.3.1).

- iii. Turner scheme (section D1.3.2).
- iv. Use of sigma-theta data (section D1.4).

L6.5 To assess compliance:

- a) with the $L_{Aeq(15 \text{ minutes})}$ or the L_{Amax} noise limits in condition L6.1 and L6.3, the noise measurement equipment must be located:
 - (i) approximately on the property boundary, where any residence is situated 30 metres or less from the property boundary closest to licensed premises; or where applicable,
 - (ii) in an area within 30 metres of a residence façade, but not closer than 3 metres where any residence on the property is situated more than 30 metres from the property boundary closest to the licensed premises; or, where applicable,
 - (iii) in an area within 50 metres of the boundary of a National Park or Nature Reserve,
 - (iv) at any other location identified in condition L6.1
- b) with the $L_{Aeq(15 \text{ minutes})}$ or the L_{Amax} noise limits in condition L6.1 and L6.3, the noise measurement equipment must be located:
 - (i) at the reasonably most affected point at a location where there is no residence at the location; or,
 - (ii) at the reasonably most affected point within an area at a location prescribed by condition L6.5 (a).

L6.6 A non-compliance of conditions L6.1 and L6.3 will still occur where noise generated from the premises is measured in excess of the noise limit at a point other than the reasonably most affected point at the locations referred to in condition L6.5 (a) or L6.5 (b).

NOTE to L6.5 and L6.6: The reasonably most affected point is a point at a location or within an area at a location experiencing or expected to experience the highest noise generated from the premises.

L6.7 For the purpose of determining the noise generated from the premises, the modifying factor corrections in Table C1 in Fact Sheet C of the *Noise Policy for Industry* (NSW EPA, 2017) should be applied, as appropriate, to the noise measurements by the noise monitoring equipment.

L6.8 Noise measurements must not be undertaken where rain or wind speed at microphone level will affect the acquisition of valid measurements.

L6.9 Where it can be demonstrated that direct measurement of noise from the premises is impractical at location/s nominated in L6.1, the EPA may accept alternative means of determining compliance. See Chapter 7 of the *Noise Policy for Industry*.

L7 Blasting Limits

L7.1 The airblast overpressure level from blasting operations at the licensed premises must not exceed 120dB (Lin Peak) at any time at any noise sensitive locations. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.

L7.2 The airblast overpressure level from blasting operations at the licensed premises must not exceed 115dB (Lin Peak) at any noise sensitive locations for more than five per cent of the total number of blasts over each reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.

L7.3 Ground vibration peak particle velocity from the blasting operations at the licensed premises must not exceed 10mm/sec at any time at any noise sensitive locations. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.

- L7.4** Ground vibration peak particle velocity from the blasting operations at the licensed premises must not exceed 5mm/sec at any noise sensitive locations for more than five per cent of the total number of blasts over each reporting period. Error margins associated with any monitoring equipment used to measure this are not to be taken into account in determining whether or not the limit has been exceeded.
- L7.5** Blasting at the licensed premises may only take place between 9:00am-5:00pm Monday to Friday. Blasting is not permitted on weekends or public holidays.
- L7.6** Blasting outside of the hours specified in L7.5 can only take place with the written approval of the EPA.
- L7.7** The airblast overpressure and ground vibration levels in conditions L7.1 to L7.4 do not apply at noise sensitive locations that are owned by the licensee or subject to a private agreement, relating to airblast overpressure and ground vibration levels, between the licensee and land owner.

Monitoring Conditions

- M7.1** The meteorological weather station identified in Condition 6.4(a) must be maintained so as to be capable of continuously monitoring the parameters specified in condition M7.2.
- M7.2** For each monitoring point specified in the table below the licensee must monitor (by sampling and obtaining results by analysis) the parameters specified in Column 1. The licensee must use the sampling method, units of measure, averaging period and sample at the frequency, specified opposite in the other columns.

Point (As identified in Condition 6.4(a))

Parameter	Units of Measure	Frequency	Averaging Period	Sampling Method
Air temperature	°C	Continuous	1 hour	AM-4
Wind direction	°	Continuous	15 minute	AM-2 & AM-4
Wind speed	m/s	Continuous	15 minute	AM-2 & AM-4
Sigma theta	°	Continuous	15 minute	AM-2 & AM-4
Rainfall	Mm	Continuous	15 minute	AM-4
Relative humidity	%	Continuous	1 hour	AM-4

Additions to Definition of Terms of the licence

- Noise Policy for Industry - the document entitled "*Noise Policy for Industry*" published by the NSW Environment Protection Authority in October 2017.
- Noise – ‘sound pressure levels’ for the purposes of conditions L6.1 to L6.7.
- $L_{Aeq(15\text{ minute})}$ - the value of the A-weighted sound pressure level of a continuous steady sound that, over a 15 minute time interval, has the same mean square sound pressure level as a sound under consideration with a level that varies with time (AS1055.1-1997).
- L_{AFmax} – the maximum sound pressure level of an event measured with a sound level meter satisfying AS IEC 61672.1-2004 set to ‘A’ frequency weighting and fast time weighting.

Attachment B

Marulan South Limestone Mine Continued Operations - Suggested draft conditions of approval for surface water

To address the matters discussed in the EPA's original submission on the EIA, the EPA suggests the following draft conditions should be included in any project approval, in addition to the standard conditions for surface water discharges.

1. ***A post-approval assessment report to inform licence conditions must be provided to the Environment Protection Authority and include but not be limited to:***
 - a) ***potential impacts of bicarbonate alkalinity, total suspended solids and settling agents***
 - b) ***recommendations for the final set of analytes requiring ongoing monitoring and limit conditions on the Environment Protection Licence and propose the appropriate limits if a limit is required.***
 - c) ***consideration of natural background levels of alkalinity in receiving waters based on good quality reference sites unaffected by mining activities.***
 - d) ***consideration of the full range of potential impact mitigation measures that could be put in place for any identified alkalinity, total suspended solids, settling agents or other analyte risks, e.g. addition of grassed swales and vegetative strips below the discharge point from the sediment basins, use of low risk settling agent products or operating procedures, additional treatment options.***
 - e) ***consideration of the sensitivity of downstream waters such as streams through national parks and above drinking water supplies, e.g. a lower limit for total suspended solids may be appropriate and able to be achieved by implementing all practical mitigation measures.***
2. ***A post-approval verification monitoring program must be developed and implemented and, subject to any residual risks identified in the post-approval assessments, include a basic suite of metals, alkalinity, bicarbonate alkalinity, settling agents and current licence analytes.***
3. ***Haul roads and access roads must be managed following the practices and principles in Managing Urban Stormwater: Soils and Construction - Volume 2C Unsealed Roads.***