

709/793



NSW GOVERNMENT
Department of Planning

ASSESSMENT REPORT

Section 75W Modification Marulan South Quarry

1. BACKGROUND

On 28 February 2007, the Minister approved the Marulan South Quarry approximately 10km south-east of Marulan in the Southern Highlands (see Figure 1).

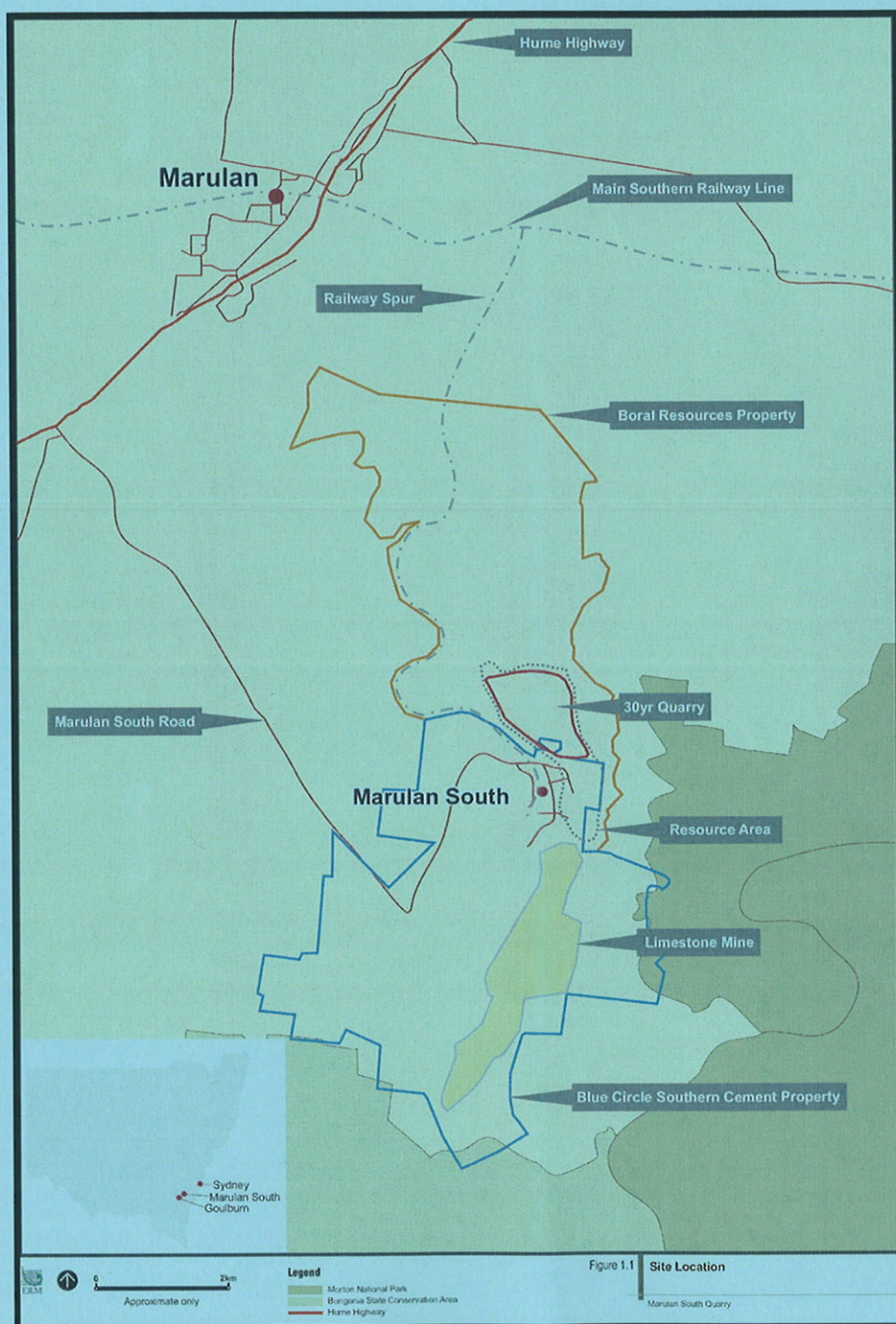


Figure 1 – Marulan South Quarry location map

The Minister's approval allows Boral Resources (NSW) Pty Limited (Boral) to:

- extract up to 105 million tonnes (Mt) of material from the quarry over a period of 30 years at a rate of 3.5 Mt a year; and
- process the extracted material on-site prior to railing to Sydney.

Boral proposes to commence construction of the quarry in late 2009.

Prior to commencing construction, Boral proposes to establish an exploratory test pit on site within the footprint of the approved quarry. The test pit would allow Boral to test the resource further, which in turn would inform the final design of its plant and equipment and the preparation of its management plans for the quarry.

Boral is seeking approval for the test pit under s75W of the *Environmental Planning and Assessment Act 1979*.

2. PROPOSED MODIFICATION

Boral is seeking a modification to its existing approval to allow it to establish an exploratory test pit within the approved quarry footprint. The test pit would cover an area of approximately one hectare.

Up to 4 metres of overburden would be removed from the pit and used to construct:

- a water diversion bund;
- a 4 m high noise and visual screen; and
- a stockpile pad.

Boral would then begin extracting the resource test pit by drilling and blasting. Boral estimates that these activities would take about six weeks to carry out.

Boral has proposed three different options for processing the extracted material:

Option 1: Trucking directly to the adjacent Limestone mine for processing.

Option 2: Processing the blasted rock on site with mobile crushing equipment.

Option 3: Primary crush the blasted rock on site using a mobile crusher and trucking to the Seaham Quarry near Newcastle for further processing.

The processed material would then be transported to Sydney for testing. Each option involves transporting up to 9,000 tonnes of rock material by rail or truck. Boral estimates the transporting of this material would occur over three two-week campaigns.

3. STATUTORY CONTEXT

3.1 Approval Authority

The Minister was the approval authority for the original project approval and is consequently the approval authority for this application. However, the Director General may determine this application under the Minister's delegation of 4 March 2009.

3.2 Exhibition and Notification

Under Section 75W of the EP&A Act, the Department is not required to notify or exhibit the application. Given the minimal environmental impacts of the modification, and that the modification would occur anyway as part of the project already approved by the Minister, the Department did not consult with other agencies or the community.

In December 2008, Boral held a meeting of the project Community Consultative Committee (CCC), during which the proposed test pit was discussed. The CCC did not raise any concerns about the proposal. ✓

4. ASSESSMENT

In order to determine the environmental impacts likely to occur from the proposed test pit, Boral has assessed the impacts from Option 2, which is considered to be the worst case scenario. This is due to Option 2 having 5 items of mobile plant equipment in use on site, and the potential road/rail dispatch of 9,000 tonnes of extracted material.

4.1 Noise and Vibration

Boral's assessment of noise associated with the test pit concluded that project specific noise limits (PSNL) would be comfortably met at all residential receivers (Figure 2 and Table 1) under calm weather conditions.

However, conservative modeling has predicted that a minor exceedance (of up to 3dB(A)) could occur at one residence under adverse wind conditions (wind speed of 3m/s at 10m height)(see Table 1). In light of this Boral has committed to monitor real time weather data and restrict test pit activities to calm weather conditions.

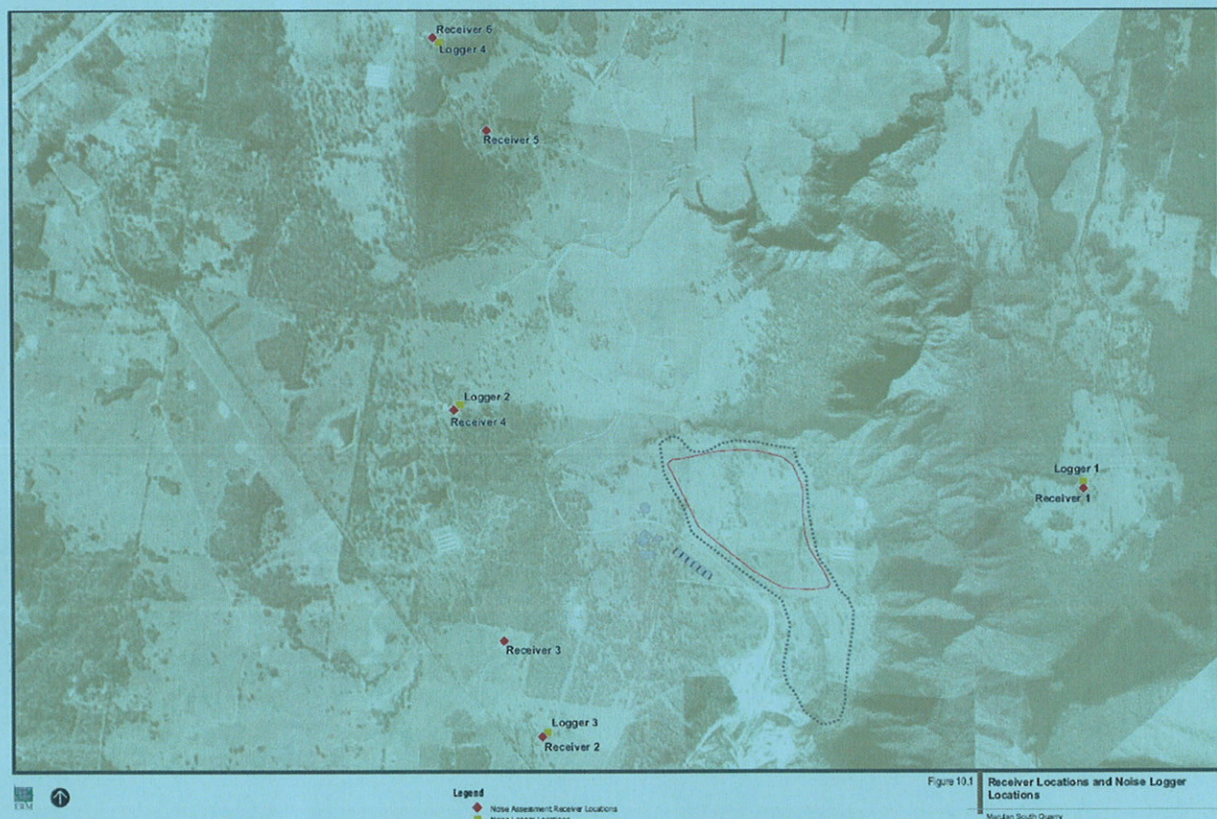


Figure 2: Closest residences to the project site

#	Receiver	Distance from Test Pit (m)	LAeq 15min under Calm Conditions (dB(A))	LAeq 15min under adverse winds (dB(A))	Project Approval Daytime Noise Limits (LAeq 15min)
1	Montgomery	1908	30	38	35
2	Ordasi	2216	21	35	39
3	Brown	2091	23	40	44
4	Armitt	2342	21	36	37
5	Clarke	3225	12	23	35
6	Bortollo	3920	12	19	35

Table 1: Predicted noise levels at the closest residences

In order to minimise potential noise impacts, Boral has proposed a number of mitigation measures. These include:

- notifying nearby residents identified as most likely to be affected by noise impacts prior to the commencement of activities;
- limiting test pit operations to 7am - 6pm Monday to Friday;
- restricting activities to calm conditions; and
- undertaking attended noise monitoring at the most sensitive receiver locations (1 and 4) during excavation, extraction and processing activities.

A single blasting event would be required for the test pit, which would be designed using criteria established in the environmental assessment. Boral would monitor ground vibration and airblast pressure at the two closest residences (1 and 3 in Table 1) as well as inform all residents in the area of its intention to undertake the blast a week prior to, and on the day of, the blast.

Trucking of material would generate an additional 18 vehicles per day over a two week period, which would occur on three occasions (refer section 4.2). This is equivalent to a 4% increase in total daily traffic numbers or a 20% increase in heavy vehicles over a six week period.

The Department is satisfied that this temporary increase in truck movements would not significantly increase the noise impacts at sensitive receivers and is not predicted to result in exceedance of the criteria in the NSW Department of Environment and Climate Change's *Environmental Criteria for Road Traffic Noise* guideline.

As the modelled noise levels simulate worst-case conditions and through restriction of operations, the Department is satisfied that the predicted exceedances during adverse conditions are unlikely to occur during the operation of the test pit and noise impacts of the proposed modification would be minimal.

4.2 Transport

The proposed modification would either involve trucking material to the adjacent Limestone quarry for processing and railing to Sydney for testing, or trucking to either Sydney or Newcastle. Railing of processed material would be as per the project approval.

The EA assessed existing traffic conditions of the Hume Highway and Marulan South Road, and found that Marulan South Road has a capacity of up to 2000 vehicle per day (vpd), with traffic counts indicating an existing average of 443 vpd comprising 93 heavy vehicles (21%).

If the proposed 9,000 tonnes of extracted material were to be dispatched by road, Boral propose three campaigns of 3,000 tonnes over a 2 week period, limited to Mondays to Fridays. This equates to 180 truck movements over 10 working days, or an increased of 18 vpd. This is a 4% increase on current total traffic levels or 20% increase in heavy vehicles.

Due to the temporary nature of impacts and the relatively minor increase in heavy vehicles, the Department is satisfied that traffic impacts of the proposed modification would be minimal.

4.3 Other Issues

<i>Issue</i>	<i>Consideration</i>	<i>Conclusion</i>
Air Quality	Processing the hard rock on site is likely to generate an equivalent level of dust, compared with the rock being processed at the Limestone Mine.	The Department considers these mitigation measures to be adequate in minimising

Issue	Consideration	Conclusion
	Boral would implement dust management measures including water suppression of working areas and fitting drilling plant with dust extraction units.	dust emissions from the test pit site.
Water Quality	<p>The test pit would be situated in the east of the quarry site, which drains to a tributary of Tangarang Creek. Boral would construct a diversion bund with stripped overburden material to direct clean water around the disturbed areas. The bund would be seeded with pasture grasses to prevent erosion.</p> <p>In addition, run-off from disturbed areas such as the stockpile and the haul road to the test pit would be directed to an existing farm dam in a gully to the north of the test pit. The farm dam would also be used as a sediment basin and water in the dam would be used to suppress dust on the haul road and stockpile when necessary.</p> <p>Boral has prepared an erosion and sediment control plan as part of the SEE and has committed to implementing best practice sediment and erosion control measures prior to commencing test pit operations.</p>	With the implementation of these safeguards, the Department is satisfied that the proposed works would not result in significant impacts to water resources at the site.
Aboriginal Heritage	<p>Two Aboriginal heritage sites exist in the vicinity of the test pit; however the sites are highly disturbed and have been assessed as having low archaeological significance.</p> <p>The sites would not be disturbed during construction and operation of the test pit.</p> <p>Boral has committed to consult with DECC and relevant Aboriginal stakeholders should further sites be discovered.</p>	The Department is satisfied the proposed modification is unlikely to result in any significant impacts on Aboriginal heritage.
Flora and Fauna	The proposed test pit is within the area approved for the quarry, which is covered by introduced pasture species. The environmental assessment found no significant impacts to native flora and fauna.	The Department is satisfied the proposed modification is unlikely to impact on flora and fauna.
Visual	The proposed test pit is within the area approved for disturbance by the quarry. No additional disturbance is proposed and Boral propose to construct a visual bund which would be seeded with pasture grasses.	The Department is satisfied the proposal is unlikely to result in significant impacts on visual amenity.

5. CONCLUSION

The Department has assessed the project application, SEE and supporting information, in accordance with the requirements of the EP&A Act, including the objects of the Act and the principles of ecologically sustainable development.

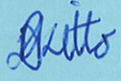
The Department's assessment has found that the proposed exploratory test pit would not generate any adverse environmental impacts above and beyond those associated with the approved project, besides a temporary, marginal increase in traffic levels along Marulan South Road and the Hume Highway intersection.

Consequently, the Department is satisfied that the proposed modification is in the public interest and should be approved, subject to conditions.

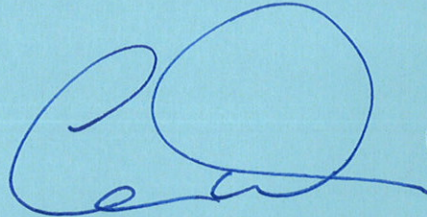
6. RECOMMENDATION

It is RECOMMENDED that the Director General:

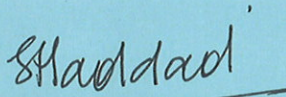
- consider the findings and recommendations of this report;
- approve the proposed modification under section 75W of the EP&A Act, subject to conditions set out in the attached notice of modification; and
- sign the attached notice of modification (Tag A).

 11/3/09

David Kitto
Director
Major Development Assessment

 14.3.09

Chris Wilson
Executive Director
Major Project Assessment


Sam Haddad
Director General
17/3/2009