

ASSESSMENT REPORT

LANGLEY HEIGHTS QUARRY

Section 75W Modification DA 92/164 – Short Term Extension to the Life of the Quarry

1 BACKGROUND

Oberon Quarries Pty Ltd (Oberon Quarries) operates the Langley Heights hard rock quarry near Oberon in the Oberon local government area (see Figure 1).

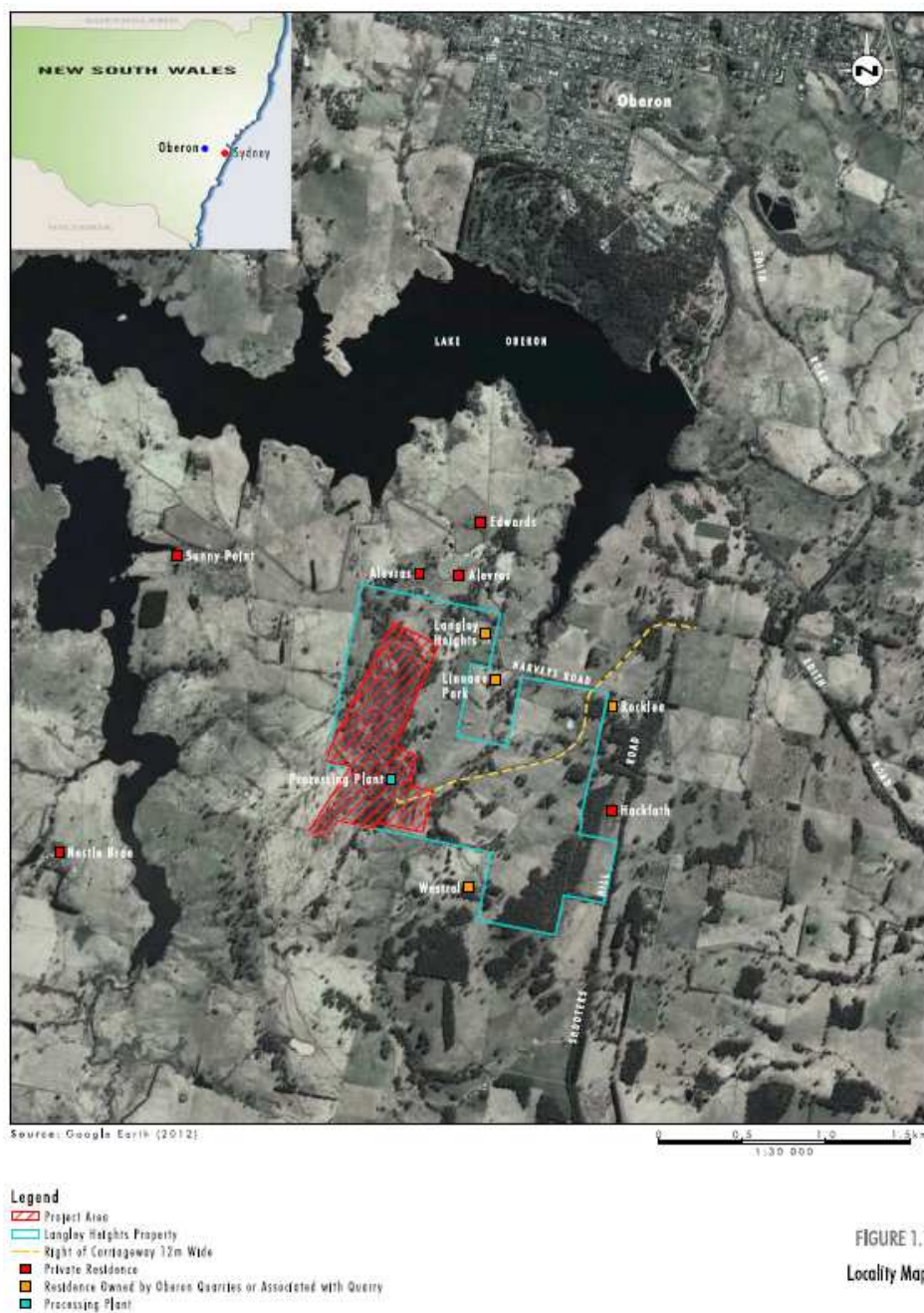


Figure 1: Location of the Langley Heights Quarry

The quarry was originally approved by the Minister for Planning in 1993, following a Commission of Inquiry. Since then, the consent has been modified three times. The current development consent allows Oberon Quarries to:

- extract the high quality basalt resource on site with a ten year annual average production rate of 200,000 tonnes and a maximum annual production rate of 400,000 tonnes;
- transport quarry products to market via road; and
- operate the quarry for 20 years (i.e. until 1 October 2013).

The quarry provides an important regional source of crushed aggregates, including rail ballast, gravel, and road pavement materials for customers in the Sydney and Central Tablelands areas, and employs approximately 25 people full time.

The total hard rock resource identified on the site is approximately 12.7 million tonnes (Mt), but only around 20% of the resource has been extracted. As such, there is still almost 10 Mt of resource remaining on site. Oberon Quarries has advised the Department that it is currently preparing an Environmental Assessment to support a longer term extension of quarry operations to recover the remaining resource on the site.

However, the existing development consent for the quarry lapses on **1 October 2013**, and Oberon Quarries is seeking to modify its consent to allow quarry operations to continue for another 2 years and 8 months within the approved extraction area (i.e. until 13 May 2016). This would allow the quarry to continue to operate while Oberon Quarries prepares its application for an extension to the extraction area at the quarry.

2 PROPOSED MODIFICATION

Oberon Quarries has lodged a modification application under Section 75W of the *Environmental Planning and Assessment Act 1979* (EP&A Act) for a 2 year and 8 month extension to the life of the quarry. The modification does not involve any other changes to the approved operations. The Environmental Assessment (EA) for the proposed modification is provided in Appendix A.

3 STATUTORY CONTEXT

3.1 Section 75W

The project was approved in 1993 under Section 89 and 101(8) of the EP&A Act as 'State Significant Development'. Clause 8J(8) of the *Environmental Planning and Assessment Regulation 2000* prescribes that development consent granted under Section 89 or Section 101(8) of the EP&A Act can be modified under Section 75W of the Act. The Department is satisfied that the proposed modification is within the scope allowed under Section 75W of the EP&A Act as it involves no changes to the quarry operations or the approved footprint of the quarry.

3.2 Approval Authority

The Minister for Planning and Infrastructure is the approval authority for the modification application. However, under the Minister's delegation of 14 September 2011, the Director, Mining & Industry Projects, may determine the application as no public submissions were received, Oberon Quarries did not make any reportable political donations and Oberon Council has not objected to the proposed modification.

3.3 Environmental Planning Instruments

In accordance with Section 75I of the EP&A Act, the Department has considered the proposal against the relevant environmental planning instruments and is satisfied that none of these instruments substantially govern the carrying out of the proposal.

4 CONSULTATION

The Department made the modification application and EA publicly available on its website from 3 September 2013, and referred these documents to relevant agencies for comment.

The Department received submission on the application, all from government agencies. Copies of the submissions are provided in Appendix B. No submissions from the general public were received.

Crown Lands advised that the existing haul road at the quarry traverses a Crown road reserve and recommended that the Crown road be closed or transferred to Council. Oberon Quarries has commenced proceedings to close the Crown road, as per the recommendation from Crown Lands. The Department is satisfied that the proposed modification would not affect this process, and is unlikely to have any adverse impacts on Crown land or Crown road reserves. The Department also notes that Crown Lands has given its landowner's consent for the modification application.

Oberon Council advised that it is generally supportive of the proposed modification, but expressed concern over the lack of public notification and consultation undertaken during the assessment process. However, the Department notes that Oberon Quarries has consulted with local landowners in the immediate vicinity of the quarry, and none of the landowners has raised any objections to the ongoing operation of the quarry. Furthermore, recent correspondence between Oberon Quarries and Council indicates that there may have been some confusion about this modification and the future longer term extension of the quarry, and Council is now satisfied with the level of consultation undertaken by Oberon Quarries for this modification. Council also raised concerns about the lack of compliance with reporting obligations under the existing consent, and complaints from the community about the behaviour of quarry trucks on public roads.

EPA advised that it had no concerns with the proposed modification, and noted that the quarry has a large buffer area between its operations and local residents, and there have historically been no issues with air quality, noise or water pollution.

Department of Primary Industries (including NSW Office of Water) raised no issues with the proposed modification.

5 ASSESSMENT

In assessing the merits of the proposal, the Department has considered:

- the Environmental Impact Statement for the original project;
- the existing conditions of consent;
- the EA for the modification;
- relevant environmental planning instruments, policies and guidelines; and
- the objects of the EP&A Act.

The Department notes that the proposed modification would not result in any additional environmental impacts as there would be no change to the nature and extent of the existing operations at the quarry. However, as the proposed modification would increase the duration of the quarry operations, the Department believes it is appropriate to assess the key amenity impacts that have the potential to affect surrounding residents and the local community, namely noise, blasting and traffic. The assessment of each of these issues is summarised below.

5.1 Noise

Operational Noise

Condition 23(i) of the current consent establishes noise limits for three private receivers (NM1, NM2 and NM3) in proximity to the quarry (refer to Figure 2). Oberon Quarries has undertaken periodic noise monitoring over recent years to determine compliance with the noise criteria in the development consent. Unfortunately, this data is not reliable due to the fact that it was conducted during adverse weather conditions, and Oberon Quarries has not been able to gain access to two of the three properties listed in the consent (i.e. NM2 and NM3).

However, recent noise modelling has been undertaken which predicts that noise from the quarry would exceed the noise criteria at NM1 by 2 dB(A) in calm conditions, and 6 dB(A) in temperature inversion conditions (see Table 1), but would comply with the noise criteria at other receivers in the consent (i.e. NM2 and NM3).

In considering this matter, it is important to note that the landowner of NM1 has provided a letter of support for the quarry, stating that he does not object to predicted noise levels of up to 42 dB(A) (see Appendix C). The Department has reviewed the letter, and believes that it is reasonable to consider the letter in a similar manner to a noise agreement between Oberon Quarries and the landowner, at least in regard to the current noise impacts from the quarry.

Table 1: Noise Modelling Results

Location	Period	Existing Consent Noise Limit dB(A) LAeq(15 minute)	Predicted Noise dB(A) LAeq(15 minute) - Calm	Predicted Noise dB(A) LAeq(15 minute) - Inversion
NM1	Day	36	38	42
	Evening	35		
	Night	35		
NM2	Day	35	32	34
	Evening	35		
	Night	35		
NM3	Day	35	31	28
	Evening	35		
	Night	35		

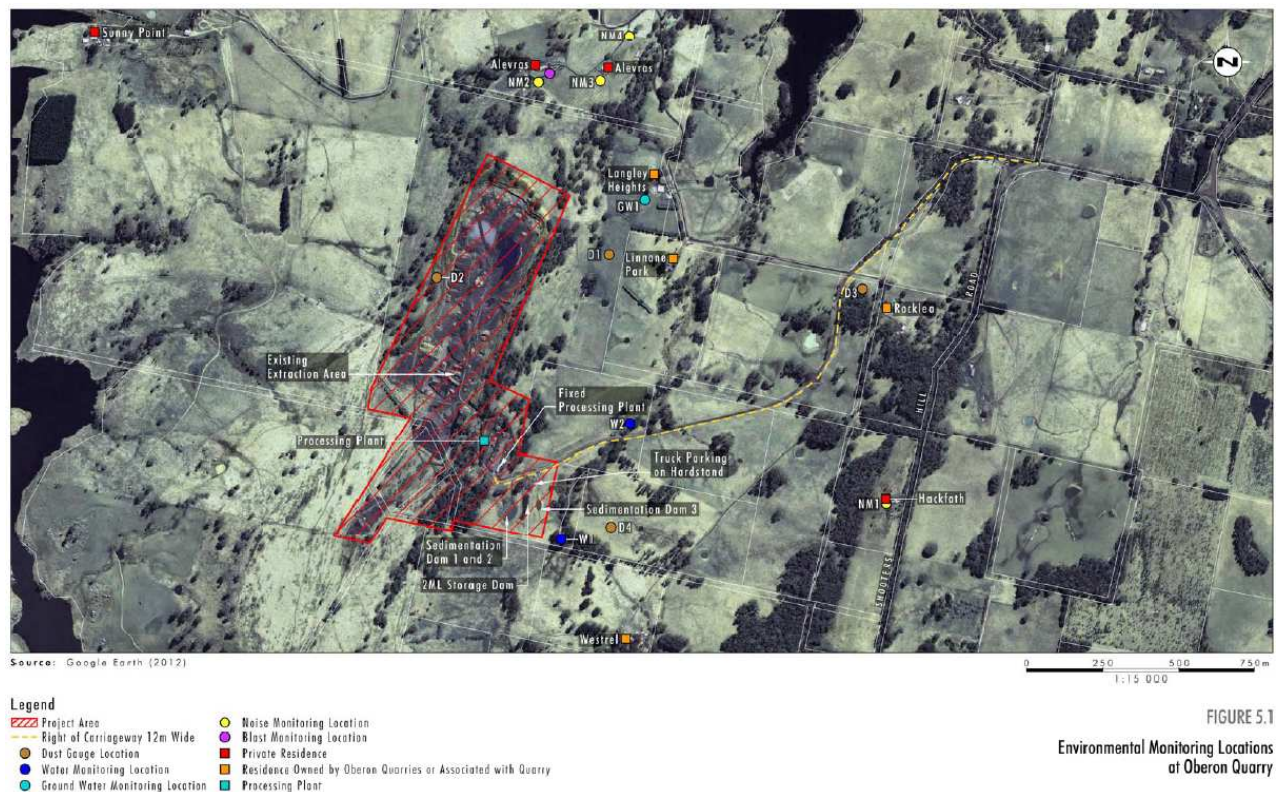


Figure 2: Location Noise Receivers

Furthermore, the Department notes that the quarry operates only during the day from Monday to Saturday, with very limited truck deliveries allowed during the shoulder period from 6 to 7am. The EPA has also advised that Oberon Quarries is complying with its Environment Protection Licence (EPL) and has no concerns about the noise associated with the quarry.

Nonetheless, the Department believes Oberon Quarries needs to improve its noise monitoring and reporting. The existing consent requires Oberon Quarries to undertake annual noise monitoring to assess compliance with the noise criteria in the consent for operational and traffic noise. The consent also requires Oberon Quarries to report on these results to the Department and Council.

The Department is generally satisfied with these arrangements, but believes it would be appropriate to increase the frequency of noise monitoring and reporting from annually to quarterly to ensure that seasonal fluctuations in noise impacts are adequately captured. With these arrangements in place, the Department is generally satisfied that the continuing operations at the quarry are unlikely to result in any significant impacts on the amenity of local residents.

Road Noise

In regard to road noise, recent modelling undertaken for the longer term extension assessed road noise from the quarry at three setback distances representative of the residential receivers likely to be impacted by transportation of product from the quarry. The results indicate that predicted road traffic noise levels associated with product trucks travelling to/from the quarry do not exceed the applicable day and night time road traffic criteria in the NSW *Road Noise Policy* (DECCW, 2011) or the road noise criteria in condition 23(i) of the existing development consent.

However, it is important to note that no noise monitoring has been undertaken to verify the modelling predictions, which is a requirement under the current development consent. Nonetheless, for assessment purposes, the Department believes it is reasonable to rely on the road noise modelling predictions to demonstrate that the quarry can comply with the applicable road noise limits. The Department notes that the existing noise monitoring obligations in the consent require Oberon Quarries to monitor off-site transportation noise, and hence increasing the frequency of monitoring from annually to quarterly would also strengthen the monitoring and reporting arrangements for road noise.

5.2 Blasting

Blast monitoring is undertaken at the site to monitor the limits for blast overpressure levels and ground vibration peak particle velocity as per the requirements of the consent. Blast monitoring was conducted by the blasting contractor at the nearest privately-owned residence to the quarry (NM2) (refer to Figure 2).

The blasting limits are specified in the EPL and include:

- airblast overpressure: must not exceed 115 dB for more than 5% of all blasts and 120 dB at any time; and
- ground vibration peak particle velocity: must not exceed 5mm/s for more than 5% of all blasts and 10mm/s at any time.

Blast monitoring results for 2010 and 2011 indicate that none of the blasts monitored were above the maximum overpressure and vibration limits of 120 dB and 10mm/s respectively. However, one blast recorded vibration above the 5 mm/s limit, which because of the limited number of blasts undertaken at the site equated to 10% of all blasts exceeding the ground vibration criteria in the reporting period. Blast monitoring results for 2012 also recorded two exceedances of the maximum airblast overpressure limit, but no further exceedances of the vibration limit.

The EA indicates that airblast overpressure exceedances in 2012 were due to irregularities along the blasting face, when blasting was undertaken on the upper level of the northern end of the extraction area. Oberon Quarries has not provided an explanation for the causes of the 2010 and 2011 blasting exceedances. As the proposed modification would involve the continuation of existing operations, there is a risk of future exceedances unless changes are made to current blasting procedures on the site.

To this end, Oberon Quarries has acknowledged deficiencies in blast monitoring by the blasting contractor and as a result has purchased its own blast monitoring equipment and the Quarry Manager has undergone blast monitoring training. Oberon Quarries has also indicated that it is committed to ensuring that sufficient distance is maintained between the blast hole and the quarry face, that appropriate delays are used, and that all blasts are adequately monitored and recorded.

The Department also notes that there has not been a history of complaints relating to blasting at the quarry, and the EPA has not raised any concerns in this regard. However, to ensure that the current weaknesses in blast design and management are adequately addressed, the Department has recommended the inclusion of a condition requiring Oberon Quarries to undertake a review of the current blasting procedures by the end of 2013. Oberon Quarries would also be required to provide a report on the outcomes of this review to the Department, and to implement the recommendations of the review to the satisfaction of the Director-General.

Subject to these conditions, the Department is satisfied that the blasting at the quarry can be appropriately managed in a manner that would comply with relevant criteria and not unduly affect the amenity of local residents.

5.3 Transport

Oberon Council indicated in its submission that it has concerns regarding the behaviour of heavy vehicles associated with the quarry on public roads in and around Oberon. To address these concerns, the Department has recommended the inclusion of a condition requiring Oberon Quarries to prepare and implement a Driver Code of Conduct for all quarry related heavy vehicles using public roads. This Code of Conduct would need to be prepared in consultation with Council, and address the following:

- appropriate speed restrictions;
- staggering of truck departures;
- compliance with designated haulage routes;
- general safety measures including protocols regarding overtaking ; and
- procedures for ensuring compliance with and enforcement of the Code.

The Department is satisfied that with the implementation of the Code of Conduct, the concerns raised by the local community about the behaviour of quarry trucks on local roads would be largely addressed. However, to assess the efficacy of the Code of Conduct, the Department believes Oberon Quarries should be required to engage an independent consultant to undertake random audits at least twice a year to assess the compliance with the Code of Conduct, and to implement any recommendations from the audit to improve the Code, to the satisfaction of the Director-General. This approach has worked effectively at other quarry and mining projects where driver behaviour has been a concern, and has led to a noticeable reduction in community complaints.

In regard to road maintenance, the Department notes that there is an existing condition in the development consent (i.e. condition 29) requiring a levy to be paid to Council for the maintenance of local roads. As of December 2006, the levy was set at \$0.39/tonne with provisions for the contribution to be indexed annually to account for changes in the Consumer Price Index. The Department notes that Council did not raise any concerns about road maintenance or the existing road levy arrangements. As such, the Department is satisfied that the current road maintenance contributions to Council are appropriate, and does not see any need to alter these contributions as part of this modification.

5.4 Other Issues

Other issues associated with the proposed modification have been considered by the Department. As no changes to operating conditions are proposed, the Department is satisfied that all other issues are likely to have negligible environmental impacts over and above those already assessed and approved for the Langley Heights Quarry, and can be managed in accordance with the existing conditions of consent.

6 RECOMMENDED CONDITIONS

The Department has drafted a notice of modification (see Appendix D) for the proposed modification as well as a consolidated version of the project approval as modified (see Appendix E). In summary, these revised conditions:

- permit the extension of the operating life of the quarry;
- increase the frequency of noise monitoring from annually to quarterly;
- require Oberon Quarries to undertake a review of current blasting procedures to address recent overpressure and ground vibration exceedances; and
- require Oberon Quarries to prepare a Driver Code of Conduct, and audit the success of this Code over time.

The Department has also taken the opportunity to update the agency names in the project approval.

7 CONCLUSION

The Department has assessed the merits of the proposed modification in accordance with the relevant requirements of the EP&A Act. Based on this assessment, the Department believes that additional conditions are warranted to improve the management and monitoring of noise, blasting and traffic impacts at the quarry. With the implementation of these additional measures, the Department is satisfied that the continuation of operations for another 2 years and 8 months would not significantly affect the amenity of the local community. The Department is also satisfied that the proposed modification would not result in any increase in the environmental impacts of the quarry as the proposal would not change the nature and extent of the extraction on the site.

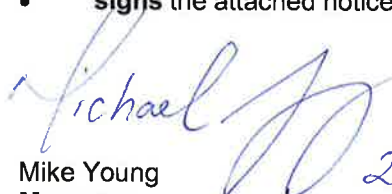
The Department notes that the quarry is an important regional supplier of hard rock quarry products, and the continuation of the quarry operations would allow Oberon Quarries to continue to operate without interruption while it develops its plans for a longer term extension to the quarry. The continuation of the quarry operations on the site would also reduce the need to develop alternative resources in the region, and provide continued employment for the 25 people that work at the quarry.

Overall, the Department is satisfied that the benefits of the short term extension to the quarry operations outweigh any residual costs. Consequently, the Department believes that the proposed modification is in the public interest and should be approved, subject to conditions.

8 RECOMMENDATION

It is recommended that the Director, Mining Projects, as delegate of the Minister:

- **considers** the findings and recommendations of this report;
- **determines** that the modification is within the scope of Section 75W of the EP&A Act;
- **approves** the modification application under Section 75W, subject to conditions; and
- **signs** the attached notice of modification (**Appendix D**).


Mike Young
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Mining Projects 27.9.13

 27/9/13

David Kitto
Director
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