



NSW GOVERNMENT
Department of Planning

MAJOR PROJECT ASSESSMENT: Ardglen Quarry Project



Director-General's
Environmental Assessment Report
Section 75I of the
Environmental Planning and Assessment Act 1979

September 2008

Cover Photos: Ardglen Quarry, looking east toward Nowlands Gap and the New England Highway.

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EXECUTIVE SUMMARY

Daracon Quarries proposes to extend its existing hard rock quarry at Ardglen, approximately 5 kilometres northwest of Murrurundi in the Liverpool Plains Local Government Area.

The proposal – known as the Ardglen Quarry Project – involves a 17.8 hectare extension to the northwest of the existing quarry, extraction of up to 500,000 tonnes of hard rock material a year for 30 years, transport of product material to markets by road and rail, and progressive rehabilitation of the site. The project would use existing surface infrastructure at the quarry including hard rock processing facilities and road/rail loading facilities.

The project involves a capital expenditure of around \$30,000, and would support 9 direct full-time jobs and between 20 and 30 indirect jobs associated with transport and maintenance activities.

The proposal constitutes a 'major project' under Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act), and consequently the Minister is the approval authority for the project application.

The Department exhibited the Environmental Assessment (EA) for the project for 6 weeks from 4 July 2007, and received 10 submissions on the project, including 6 from government authorities, 3 from the general public, and 1 from a local action group. All of the public submissions objected to the project, raising concerns about a broad array of potential impacts including noise, blasting, dust, water, traffic, visual and socio-economic impacts.

The Department has assessed the project application, EA, submissions on the project and Daracon's response to submissions, in accordance with the objects of the EP&A Act and principles of ecological sustainable development, and is satisfied that there is sufficient information available to determine the application.

This assessment has found that the project would have a number of environmental impacts, most notably potential noise impacts on local residents and the clearing of an Endangered Ecological Community (EEC) within the extension area.

Nevertheless, the Department is satisfied that the residual impacts of the project on local residents can be adequately mitigated and managed through appropriate conditions of approval to achieve an acceptable level of environmental performance. It is also satisfied that the impacts on the EEC would be adequately compensated for through the implementation of an offset strategy that has the potential to improve biodiversity values in the local area in the medium to long term.

In addition, the Department's assessment recognises the need for the project, particularly in terms of its strategic importance in providing a secure long term supply of hard rock aggregate products for construction projects within the Upper Hunter, Liverpool Plains and New England region, and its proximity to the Main Northern Railway which enables 50% of its products to be transported to customers via rail.

On balance, the Department believes, that the project's benefits outweigh its costs, and that it is therefore in the public interest. Consequently, the Department recommends that the Ardglen Quarry Extension Project be approved, subject to strict conditions of approval.

1. BACKGROUND

1.1 Project Background

Daracon Quarries (Daracon) owns and operates the Ardglen Hard Rock Quarry approximately 5 kilometres northwest of Murrurundi in the Liverpool Ranges (see Figure 1). The quarry has been operating for around 100 years and has traditionally been an important source of hard rock aggregate for rail, road and other engineering projects in the Upper Hunter Valley.

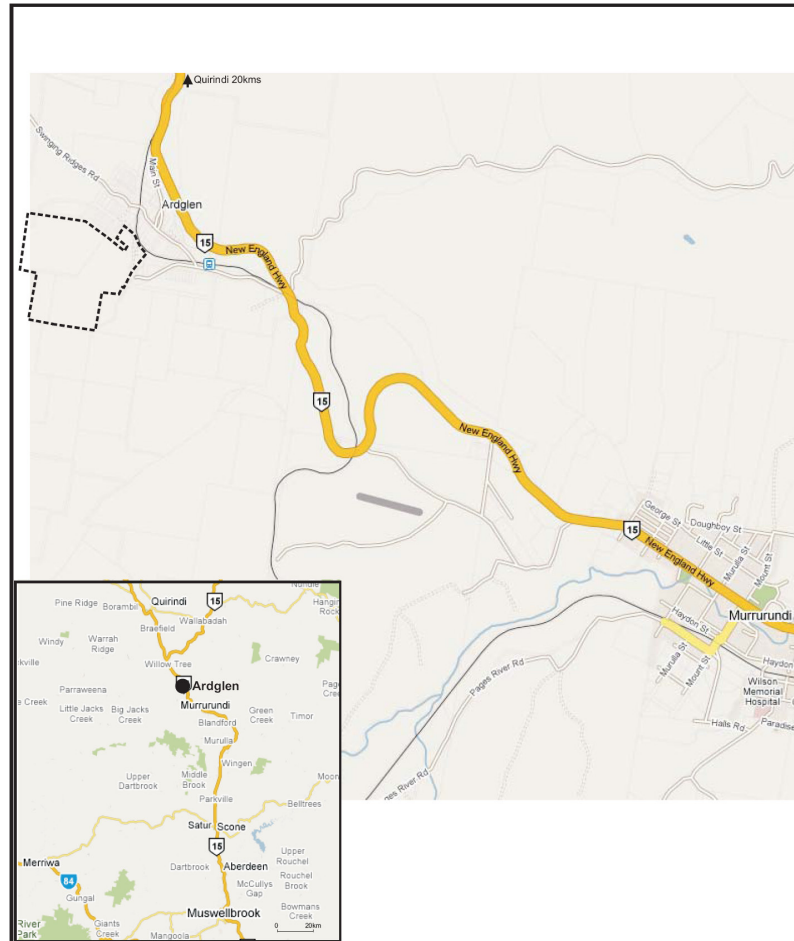


Figure 1: Regional Location

The quarry site was purchased by Daracon from the State Rail Authority in 2005, and currently operates under a combination of a development consent issued by Murrurundi Shire Council in 1994 and continuing use rights. The Council consent allows the extraction of up to 250,000 tonnes a year of hard rock material from the site (see Figure 2). However, this consent does not incorporate crushing, stockpiling, loading and transport of quarry products from the site which are covered by continuing use rights associated with the original quarry operations at the site.

The existing quarry operations involve:

- extracting up to 250,000 tonnes a year of extractive material from Portion 57 (Lot 1 DP 1001734);
- processing up to 500,000 tonnes a year of extractive material (comprising 250,000 tonnes of material from the original quarry and 250,000 tonnes from Portion 57);
- importing up to 80,000 tonnes a year of quarry materials by road, for the purposes of blending and aggregate quality improvement;
- loading and transporting up to 250,000 tonnes a year of quarry products by road and up to 250,000 tonnes a year of quarry products by rail.

The facilities at the existing quarry include (see Figure 2):

- an open cut quarry pit;
- a processing and handling area, which includes primary, secondary and tertiary stage crushers and several stockpiles;
- a rail siding off the Main Northern Railway line and rail loading facilities;
- an internal haul road network that joins the New England Highway;
- office, workshop and weighbridge facilities; and
- a water management system that utilises a 63 ML sump in the floor of the old quarry.

At the current level of production, the existing reserves would be exhausted within the next 2 to 3 years. Consequently, Daracon is now proposing to extend the quarry to secure the supply of hard rock aggregate products to local and regional markets for another 30 years.



Figure 2: Existing Quarry Operations

1.2 Project Setting

Ardglen Quarry is located adjacent to the Main Northern Railway, the New England Highway, and the small rural village of Ardglen (see Figure 3). There are 16 residences in the Ardglen village, 13 of which are privately-owned. The village has an estimated population of about 20, and the nearest privately-owned residence is approximately 150 metres from the quarry. However, it is important to note that the quarry has been operating for more than 100 years, and that the village has largely grown up around the quarry.

The site sits at the headwaters of the larger Namoi River Catchment, and Doughboy Hollow Creek, which is an ephemeral water course, lies to the southeast of the quarry and forms the major surface drainage in the area.

The land within and surrounding Ardglen, including the existing quarry and the proposed extension area, is zoned 1(a) (Rural "A" Zone) under the *Murrumbidgee Local Environment Plan 1993*. This planning

zone does not include a village land use. Apart from quarrying, grazing is the dominant land use of the area.

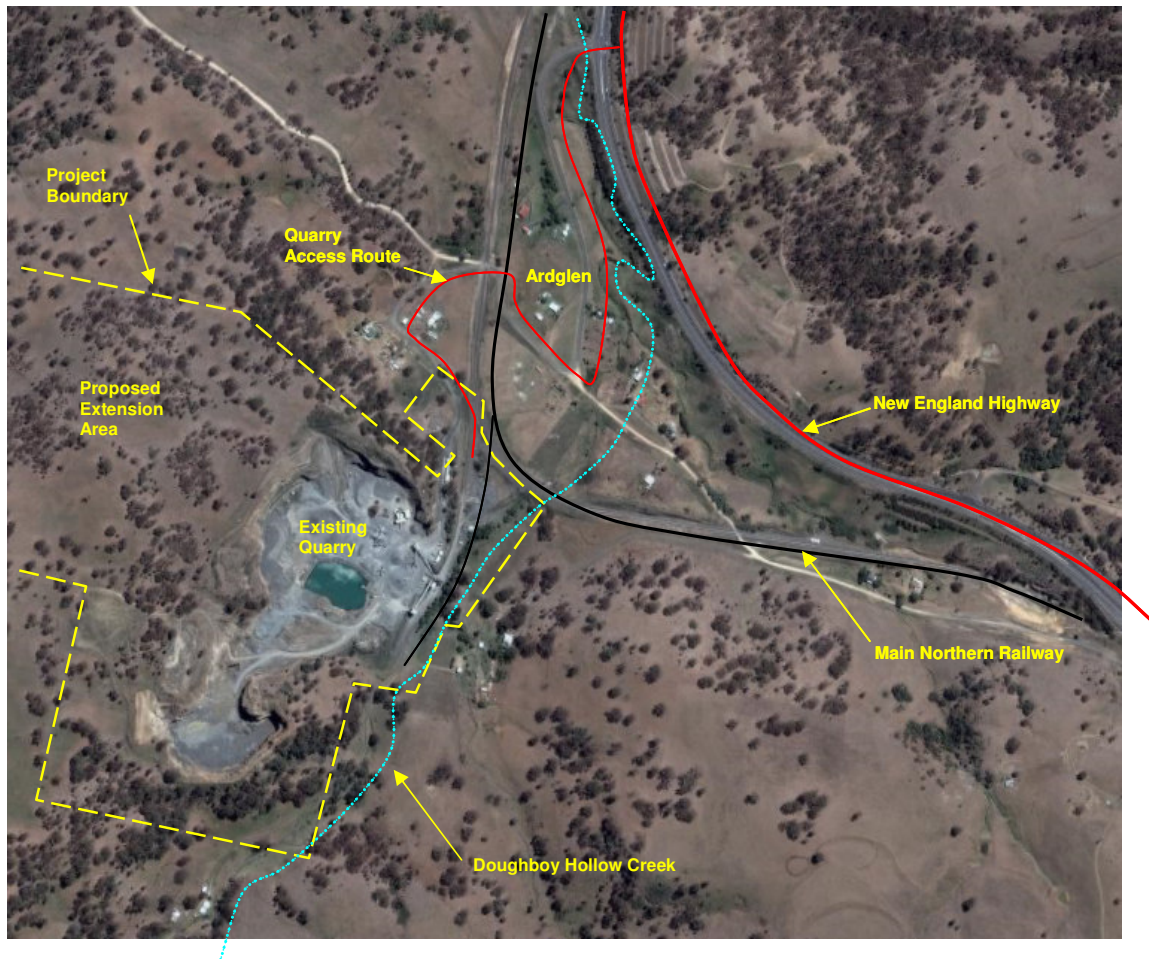


Figure 3: Project Setting

2. PROPOSED PROJECT

2.1 Project Description

The key components of the project are summarised in Table 1. The project is described in full in Daracon's Environmental Assessment (EA), which is attached as Appendix F.

The proposed extension covers an area of about 17.8 hectares comprising a hard rock extractive resource of about 15 million tonnes, and would be developed on Lot 218 DP 1751028 adjoining the existing quarry (see Figure 2).

The project has a capital investment value of around \$30,000, and would support 9 direct full time jobs, (8 of which are existing jobs). It would also support between 20 and 30 indirect jobs, mainly associated with product transport and repair and maintenance activities.

Table 1: Major Components of the Project

Aspect	Description
<i>Extraction and Resources</i>	A 17.8 hectare extension of existing quarry operations to extract up to 500,000 tonnes of hard rock aggregate a year. The total resource is about 15 million tonnes.
<i>Project Life</i>	Up to 30 years.
<i>Handling and Processing</i>	Continued use of existing on-site facilities, including crushing and screening plant, rail loading facilities, offices and weighbridge.
<i>Product Transport</i>	Up to 250,000 tonnes a year by rail and up to 250,000 tonnes a year by road. Importation by road of up to 80,000 tonnes a year of quarry materials for the purposes of blending and product quality improvement.
<i>Hours of Operation</i>	6 days a week. Quarry opening hours - 6:30am and 5:30am, Monday to Saturday. Extraction and processing - 7:00am and 5:00pm, Monday to Saturday. Truck loading and road transport - 6:30am and 5:30pm, Monday to Saturday. Rail loading - 7:00am and 6:00pm, Monday to Saturday. However, night time rail loading would be permitted on 2 occasions each year.
<i>Rehabilitation and Offsets</i>	The project would disturb up to 17.8 hectares of land. The project disturbance area would be progressively rehabilitated. The project also incorporates a biodiversity offset strategy comprising an additional 37 hectares of treed vegetation that would be protected in perpetuity.

2.2 Project Need and Justification

Ardglen Quarry is an important source of hard rock for the supply of high quality aggregate products for rail, road and other civil infrastructure and construction projects in the Upper Hunter and New England regions. The quarry is ideally located adjacent to major regional transport infrastructure and has existing rail access and train loading facilities. It is the only privately owned hard rock quarry in the Hunter and New England regions that has direct access to rail. Government policy supports the use of rail infrastructure for the distribution and supply of extractive materials, thus reducing the number and impact of heavy vehicles on the State's road network.

Under existing arrangements, there is no requirement for Daracon to rehabilitate the historical quarry site. Therefore cessation of quarrying would result in a poor environmental outcome and would leave the onus of rehabilitating the site with the people of NSW. A contemporary approval would encapsulate the whole site (existing and proposed) and provide an integrated, updated and more acceptable approach to managing the impacts of the quarry, as well as providing security for the acceptable restoration of the whole site.

The proposed extension would utilise existing quarry infrastructure and make for the efficient extraction, processing, and transport to market of a valuable extractive material resource. Consequently, the project represents the efficient use of an existing capital investment and available extractive material resources.

The Department is satisfied that there are demonstrable benefits associated with the project, and that with appropriate conditions of approval, these benefits can be achieved without significant adverse social or environmental impacts.

3. STATUTORY CONTEXT

3.1 Major Project

The proposal is classified as a major project under Part 3A of the *Environmental Planning and Assessment Act 1979* (EP&A Act), because it is development for the purpose of extractive industry that extracts more than 200,000 tonnes of extractive materials per year, and hence triggers the criteria in Clause 7 of Schedule 1 of State Environmental Planning Policy (Major Projects) 2005.

Consequently, the Minister for Planning is the approval authority for the project.

3.2 Permissibility

The land subject to the application is zoned 1(a) (Rural "A" Zone), under the *Murrurundi Local Environmental Plan 1993*, and extractive industry development is permissible with development consent in this zone.

3.3 Exhibition

Under Section 75H(3) of the EP&A Act, the Director-General is required to make the Environmental Assessment (EA) of a project publicly available for at least 30 days.

After accepting the EA for the project, the Department:

- made the EA publicly available from 4 July until 24 August 2007:
 - on the Department's website, and
 - at the Department's Information Centre, Liverpool Plains Shire Council Offices in Quirindi, at the Murrurundi visitors information centre and at the office of the Nature Conservation Council of NSW;
- notified landowners in the vicinity of the site about the exhibition period by letter;
- notified relevant State Government authorities and Liverpool Plains Shire Council by letter; and
- advertised the exhibition in the Sydney Morning Herald, Quirindi Advocate and Scone Advocate.

This satisfies the requirements in Section 75H(3) of the EP&A Act.

3.4 Environmental Planning Instruments

Under Section 75I of the EP&A Act, the Director-General's report is required to include a copy of or reference to the provisions of any environmental planning instruments that substantially govern the carrying out of the project.

The Department has considered the proposal against the relevant provisions of relevant SEPPs and other environmental planning instruments (see Appendix C), and is satisfied that none of these instruments substantially govern the carrying out of the project. It is noted that *SEPP (Mining, Petroleum Production and Extractive Industries) 2007* does not apply to the project since the project application was lodged prior to the commencement of the SEPP on 16 February 2007.

3.5 Objects of the EP&A Act

The Minister is required to consider the objects of the EP&A Act when he makes decisions under the Act. The objects of most relevance to the Minister's decision on whether or not to approve the proposed modifications are found in section 5(a)(i),(ii),(vi)&(vii). They are:

'The objects of this Act are:

(a) to encourage:

- (i) the proper management, development and conservation of natural and artificial resources, including agricultural land, natural areas, forests, minerals, water, cities, towns and villages for the purpose of promoting the social and economic welfare of the community and a better environment,*
- (ii) the promotion and co-ordination of the orderly and economic use and development of land,*
- (vi) the protection of the environment, including the protection and conservation of native animals and plants, including threatened species, populations and ecological communities, and their habitats, and*
- (vii) ecologically sustainable development (ESD).*

The Department is satisfied that the project encourages the proper use of resources and the promotion of orderly and economic use of the land, particularly as the subject extractive material resource is located directly adjacent to existing quarrying activities and is able to be undertaken using existing equipment, facilities and infrastructure.

Consideration of environmental protection is provided in Section 5 of this report. Based on its consideration, the Department is satisfied that the project is able to be undertaken in a manner that would not result in a net loss of biodiversity values over the medium to long term.

With regard to ecologically sustainable development (ESD), the EP&A Act adopts the definition in the *Protection of the Environment Administration Act 1991*. Section 6(2) of that Act states that ESD 'requires the effective integration of economic and environmental considerations in decision-making processes' and that ESD 'can be achieved through' the implementation of the principles and programs including the precautionary principle, the principle of inter-generational equity, the principle of conservation of biological diversity and ecological integrity, and the principle of improved valuation, pricing and incentive mechanisms. In applying the precautionary principle, public decisions should be guided by careful evaluation to avoid, wherever practicable, serious or irreversible damage to the environment and an assessment of the risk-weighted consequences of various options.

The Department has considered the encouragement of ESD in its assessment of the project application. This assessment integrates all significant economic and environmental considerations and seeks to avoid any potential serious or irreversible damage to the environment. Daracon has also considered a number of alternatives to the proposed project (including the alternative of not proceeding) and considered the proposal in the light of the ESD principles (see Appendix F).

3.6 Statement of Compliance

Under Section 75I of the EP&A Act, the Director-General's report is required to include a statement relating to compliance with the environmental assessment requirements with respect to the project.

The Department is satisfied that the environmental assessment requirements have been complied with.

4. ISSUES RAISED IN SUBMISSIONS

During the exhibition period, the Department received 10 submissions on the project:

- 6 from public authorities; and
- 4 from the general public, including 1 from the Ardglen Action Group.

A summary of the issues raised in these submissions is provided below. A full copy of the submissions is attached as **Appendix E**.

4.1 Public Authorities

None of the public authorities objected to the project. However, key issues raised in agency submissions included:

- **Department of Environment and Climate Change** (DECC) raised concerns about the potential noise and air quality impacts of the project, and the adequacy of the proposed offset strategy. The DECC also recommended a number of conditions to manage the environmental impacts of the project, which the Department has incorporated into the recommended conditions of approval;
- **Department of Water and Energy** (DWE) requested additional information in regard to the potential groundwater impacts of the project;
- **Department of Primary Industries** (DPI) generally supports the project as an appropriate use of extractive material resources, but requested that detailed geological information about the size and quality of the resource be provided by Daracon;
- **Roads and Traffic Authority** (RTA) (and the *Regional Development Committee*) requested additional information in regard to the traffic impacts of the project;
- the **Namoi Catchment Management Authority** (CMA) supports the proposed measures to offset the clearing of native vegetation;
- **Liverpool Plains Shire Council** (Council) raised a number of concerns about the project, including:
 - the need to adequately rehabilitate the existing quarry area;
 - the potential for significant noise and traffic impacts on residents in the Ardglen Village;
 - the large number of complaints from residents associated with the existing quarry operations;

- the flora and fauna impacts of the project, and the adequacy of the biodiversity offsets;
- that there were no continuing rights for the original quarry development;
- that the hours of operation should be restricted;
- that the EA did not adequately consider various State environmental planning policies; and
- that Daracon should be required to undertake various road upgrade works, and pay ongoing road maintenance contributions to Council.

4.2 Public Submissions

The 4 submissions from the general public (including the Ardglen Action Group) objected to the project. The key concerns of the community related to noise, blasting, air quality, surface and groundwater, traffic, visual amenity, and the social and economic impacts (particularly impacts on rural amenity and property values) of the project.

4.3 Response to Submissions

Daracon has provided responses to the issues raised in submissions, and a revised Statement of Commitments for the project (see Appendix D).

The Department has considered the issues raised in submissions, and Daracon's responses to these issues, in its assessment of the project.

5. ASSESSMENT

5.1 Noise

Both the Department and the DECC consider noise impacts to be the major environmental issue for the project.

The locality of Ardglen is affected by the noise from New England Highway road traffic, Main Northern Railway line rail traffic and from existing activities at the Ardglen Quarry. The Department is aware that Ardglen has been impacted by noise from these sources for a long time, and that the village and quarry were most likely established at a similar time to facilitate development of rail infrastructure in regional NSW.

The EA includes a Noise Impact Assessment (NIA) carried out by ERM Australia. The assessment has been undertaken generally in accordance with the DECC's *Industrial Noise Policy* (INP) (see Annex E of the EA).

The assessment has identified 16 privately-owned residences within 1 km of the project boundary. 8 of these currently experience noise impacts above the project specific noise criteria, and in many cases existing noise levels are well above the criteria (see Table 2 and Figure 4).

To address the existing and future noise impacts of the quarry, Daracon has acquired 3 noise affected properties close to the quarry, and is proposing to implement a range of noise mitigation measures including:

- cladding of the rail loading facilities;
- cladding and bunding around the crushing and screening plant; and
- use of temporary acoustic barriers for mobile plant such as the drill rig.

With the implementation of these measures, the assessment indicates that noise levels can be reduced by around 13 dB(A) compared with existing noise levels. The Department is generally satisfied that Daracon is implementing all reasonable and feasible noise mitigation, and considers that the reductions achieved through the implementation of these measures would significantly improve the amenity of residents in the Ardglen Village.

However, the Department notes that even with the implementation of these measures, the project would result in exceedances of the project specific noise criteria at 4 privately-owned residences.

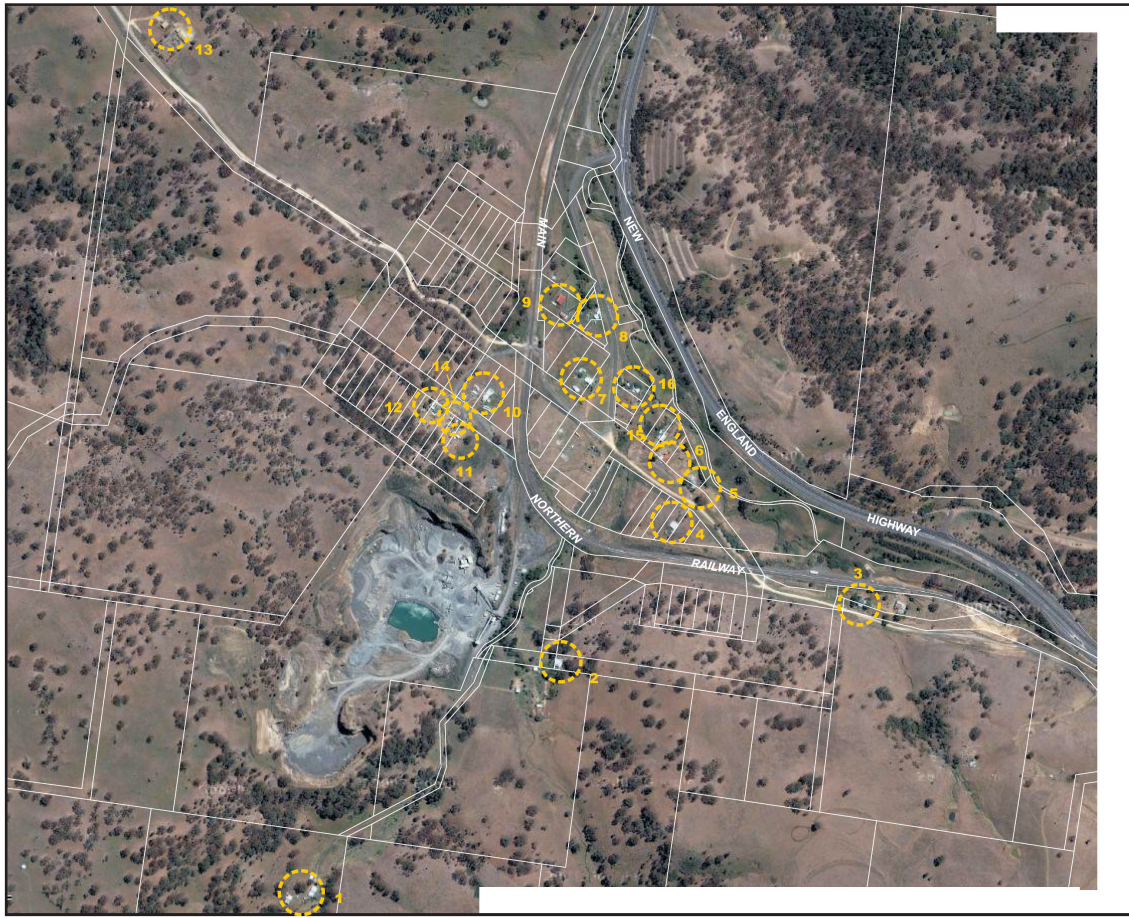


Figure 4: Location of Residences

Typically, the Department considers an exceedance of the project specific noise level of up to 2 dB(A) to be minor, an exceedance of between 3dB(A) to 5 dB(A) to be moderate, and an exceedance of greater than 5 dB(A) to be significant.

Using this as a guide, the Department believes the project would cause moderate exceedances (3 to 5dB(A)) of the project specific noise criteria at 3 privately-owned residences, and a minor exceedance (1 to 2 dB(A)) at 1 other privately-owned residence (see Table 2).

Table 2: Existing and Predicted Noise Levels (LA_{eq} dB(A))

Residence	Existing Noise Levels	Project Specific Noise Criteria	Worst-Case Noise Levels
1 – Burraston	37	35	32
3 – Rose	34	41	30
4 – CM Thompson	55	41	44
5 – M Taylor	56	41	45
6 – S Thompson	57	41	45
9 – Bates	48	41	37
10 – Avery	42	41	38
11 – Shipman	40	41	37
12 – Hall	38	41	36
13 – McGhie	<30	35	<30
14 – Purtell	38	41	36
15 – J Taylor	57	41	43
16 – Bojba	53	41	40

In accordance with current practice, the Department proposes to set noise limits for the residences in Table 2 that would require Daracon to comply with the project specific noise criteria. Where the predictions are less than the project specific noise criteria, then noise limits would be set at the predicted levels, and for those under 35 dB(A), limits would be set at the default level of 35 dB(A) in accordance with the INP.

The Department also believes that Daracon should be required to implement a comprehensive noise monitoring program for the project to demonstrate compliance with noise criteria.

If subsequent noise monitoring demonstrates that the project specific noise criteria are being exceeded by between 3 and 5 dB(A), Daracon would be required to undertake architectural noise treatments (such as double glazing, insulation and/or air conditioning) at those residences; and, if at some stage these noise levels were to exceed the project specific noise criteria by more than 5 dB(A), then Daracon would be required to acquire the property at the owner's request.

Hours of Operation

The proposed hours of operation for the project are shown in Table 1. These are the same arrangements currently used by Daracon to operate the site and to transport quarry products to markets.

In its submission, Council raised concerns about the proposed operating hours for the project. It indicated it had received numerous complaints from Ardglen residents in relation to early morning activities at the quarry, specifically trucks waiting in the village with motors idling prior to quarry opening hours. This was also expressed in 3 of the 4 public submissions on the proposal.

The Department notes the EIS in support of the 1994 application to Council to extend the quarry states that operating hours, including road transport activities, would commence at 6:30am Monday to Saturday. Consequently, both the Council and the Department believe that the subsequent consent (DA1/1994 granted to the State Rail Authority) does not allow the existing quarry to operate any earlier than 6:30am.

However, as outlined in Table 1, Daracon is seeking to commence truck loading and distribution from 6:00am Monday to Saturday, which it argues is the same as the existing operations. It also argues that road despatch activities should be permitted from 6:00am (Monday to Saturday) to provide a flexible and profitable operation, and that it has implemented measures that require trucks to wait on the quarry site with engines switched off prior to 6:00am. It also proposes to implement a driver code of conduct to address this issue. Daracon believes these measures would be sufficient to address the concerns of the residents and Council in regard to early morning noise impacts.

The Department has considered the impact of Daracon's proposed hours of operation on surrounding residents. It notes that for a similar development on a green fields site close to residences, operating hours would most likely be restricted to:

- day-time hours Monday to Friday (i.e. 7:00am to 6:00pm);
- half-day operations on Saturday (8:00am to 1:00pm); and
- no operations on Sundays or public holidays.

It is also important to note that under the INP the early morning period (i.e. prior to 7:00am) is considered to be night-time, and that if allowed, residents in the Ardglen Village would be subjected to noise impacts that have the potential to result in sleep disturbance for the next 30 years (i.e. for the life of the project).

Based on Daracon's proposed worst case scenario of 5 truck movements (two-way) an hour, restricting truck loading and despatch activities to a 6:30am start would equate to a loss of 1.5 loaded despatches prior to this time on a daily basis. The Department considers that this is unlikely to result in any significant reduction in the flexibility or profitability of the operations.

Overall, the Department considers Daracon has not provided sufficient justification to warrant truck loading activities to commence prior to 6:30am, and believes that the residents in the Ardglen Village should be protected from early morning noise impacts where possible. Consequently, the Department believes that truck loading and despatch activities should not commence prior to 6:30am, which would be consistent with the current development consent for the quarry.

Sleep Disturbance

With the exception of early morning (between 6 am and 7 am) truck traffic and occasional evening and night-time rail loading activities, no other quarry activities are proposed during evening or night-time periods (i.e. between 5:30 pm and 7:00 am).

The noise assessment indicates that while early morning truck traffic is not predicted to exceed DECC's sleep disturbance criteria, night-time loading of trains would exceed the criteria at all surrounding residences by up to 23 dB(A).

However, Daracon argues that scheduling of trains to avoid night-time loading is beyond its control, and based on past experience, night-time train loading would be unlikely to occur more than once each year.

The Department accepts this position and notes that arrival, loading and departure of trains typically takes around 1 hour. However, it believes that a condition should be imposed that restricts night-time train loading to only 2 occasions each year. The Department also believes Daracon should develop a protocol to notify all surrounding residents in advance in the event of night-time loading, and investigate ways to avoid night-time loading (wherever possible) and minimise noise and lighting impacts associated with this activity.

Road and Rail Noise

Daracon is not proposing to increase the amount of material to be transported from the quarry by road or rail. Hence, there would be no increase to the existing number of truck and train movements.

In regard to off-site traffic noise, Daracon's noise assessment assumes a maximum of 5 truck movements an hour as a worst case scenario. Based on this level of traffic, traffic noise associated with the project is predicted to be below the relevant DECC road noise criteria.

In regard to off-site rail noise, the project would generate approximately 5 train movements a week (i.e. less than 1 train per day) on the rail network. Rail noise on the Main Northern Railway is regulated under the Australian Rail Track Corporation's Environment Protection Licence issued by the DECC. However, given that there is no increase in the number of trains associated with the proposed extension, both the DECC and the Department are satisfied that the project would not result in any additional rail noise impacts.

Conclusion

Both the DECC and the Department are generally satisfied that Daracon has assessed the potential noise impacts of the project in accordance with the INP, and appropriately considered reasonable and feasible noise mitigation measures. Furthermore, the Department notes that this is the first time that the quarry operations have been assessed under the INP, and that while there are some exceedances of the project specific noise levels predicted, the overall noise environment in the Ardglen Village should be improved through the implementation of the proposed mitigation measures at the quarry.

Nonetheless, to manage the operational noise impacts of the project, the Department believes Daracon should be required to:

- comply with strict operational noise criteria;
- establish an ongoing noise monitoring program, to assess compliance with the noise criteria;
- implement additional noise mitigation measures (at the request of the landowner) at residences where subsequent noise monitoring demonstrates the project is exceeding the noise criteria by 3 dB(A) or more;
- acquire affected properties if the subsequent noise monitoring demonstrates that the project is exceeding the noise criteria by more than 5 dB(A);
- restrict truck loading and distribution prior to 6:30am;
- restrict night time loading of trains to twice a year; and
- notify potentially affected landowners about their rights under the project approval.

5.2 Blasting

The EA includes an assessment of blasting impacts on surrounding residences. This assessment predicts that the project would exceed ANZECC blasting criteria for airblast overpressure and ground vibration at a number of residences during some stages of the project.

However, existing monitoring data indicates that actual site conditions result in lower airblast overpressure and ground vibration at the site than is otherwise predicted using empirical formulae. Hence, Daracon argues that the modelled predictions are conservative. It also argues that blasting design is within its control, and appropriate charge masses would be used to ensure it meets relevant blasting criteria at surrounding residences.

The Department generally accepts Daracon's approach to the management of potential blasting impacts. However, it is concerned that there are a number of properties within 150 metres of the project boundary which could be impacted by flyrock generated by blasting at the quarry. Consequently, the Department believes that Daracon would need to ensure it implemented appropriate blast design controls to minimise the risk to surrounding residents, and implement a blast notification protocol to let nearby residents know when the blasts were going to occur.

In addition to these measures, the Department also believes Daracon should be required to:

- comply with ANZECC blasting criteria at all privately-owned residences;
- prepare and implement a blast monitoring program to demonstrate compliance with ANZECC blasting criteria;
- limit blasting to between 10am and 3pm on weekdays only;
- limit the number of blasts to 30 each year; and
- conduct property inspections at any residences within 1 kilometre of blasting operations if requested by the landowner, and implement any recommended repairs.

With the implementation of these measures, the Department is satisfied that the safety and amenity of local residents, property, and livestock would be appropriately protected.

5.3 Traffic

The project would continue to produce up to 500,000 tonnes of quarry products a year with up to 250,000 tonnes to be transported by road, the remainder by rail. An average of 50 daily truck movements would be generated by the project. This is the current level of heavy vehicle movements at the quarry and the type of trucks used to transport material from the site would not change as a result of the project. There would also be around 16 light vehicle movements associated with quarry employees and deliveries which is also similar to the current situation.

Road access to the quarry is currently via the New England Highway and along local roads (Ardglen Street, High Street (Swinging Bridges Road), St Stephen Street and Warra Street) through the village of Ardglen, referred collectively in the EA as Quarry Road (see Figure 3). It is proposed that trucks and other quarry-related traffic would continue to use these roads for the life of the project.

Local and Regional Road Network

The EA includes a detailed traffic impact assessment. This assessment indicates that peak daily traffic volumes on the New England Highway are currently around 6000 vehicle movements per day, and operates at a good level of service (i.e. LOS B). As mentioned above, the existing quarry generates around 66 vehicle movements each day, which represents around 1% of the current traffic volumes on the New England Highway. The Department also notes that over the last 10 years there have been very low levels of traffic growth on the highway, and this is not expected to change significantly in the foreseeable future. Given these considerations, the Department is satisfied that the traffic generated by the proposed quarry extension would have a negligible impact on the current capacity and level of service of the regional road network.

The volume of traffic on local roads within Ardglen Village is dominated by the quarry, with approximately 70 of the 100 vehicles entering or leaving Ardglen being related to the quarry operations. The traffic assessment indicates that local intersections within the village operate satisfactorily and that because the project would not increase traffic volumes this would continue to be the case. The Australian Rail Track Corporation (ARTC) has recently completed the Ardglen Loop

Extension which included an overbridge to replace the existing level crossing of the Main Northern Railway into Ardglen Village and the quarry.

Daracon also reviewed the safety and performance of the Quarry Road- New England Highway Intersection against the requirements of the RTA's *Road Design Guide*. This assessment indicates that the intersection meets relevant AUSROAD standards and currently operates at a satisfactory level of service. Consequently, Daracon argues that there is no need to upgrade the intersection at this stage, although it has committed to install appropriate signage advising motorists that trucks may be entering or exiting the intersection.

The Department notes that Daracon has not assessed the safety performance of the intersection for use by heavy vehicles larger than truck and dog combinations, such as B-double combinations. Consequently, the Department has recommended a condition that limits the size of trucks to those assessed in the EA (i.e. 35 tonnes or less). Any proposal to increase the size of vehicles accessing the quarry would require further detailed assessment and approval.

The Department notes that the RTA considers the traffic assessment has not addressed all of its requirements. However, Daracon argues that the EA includes a comprehensive traffic assessment that addresses the issues raised by the RTA. The Department is generally satisfied with Daracon's assessment and believes that the issues raised by the RTA are addressed in the EA. Nonetheless, the Department believes that Daracon should be required to undertake a comprehensive road safety audit of the haulage route from the quarry to the New England Highway (including the intersection with the Highway) to ensure it meets relevant RTA standards, and implement any recommended upgrade works prior to commencing operations in the extension area.

Road Maintenance

Council believes that Daracon should be required to carry out a number of major improvements to the local road network in Ardglen. These improvements include the full reconstruction of the Quarry Road - New England Highway intersection, full reconstruction of local roads used by the quarry to a B-double standard, and resealing of the access route every 7 years.

However, Daracon argues that Council's recommendations are excessive given that the project would not increase the existing traffic volumes on the local road network. Nonetheless, it has committed to pay "reasonable" section 94 contributions to maintain the local road network.

The Department notes that Daracon is currently not required to pay road maintenance contributions to Council, but given the quarry generates the majority of traffic along local roads (i.e. 70 %), and that quarry trucks would increase the rate and level of deterioration of local roads when compared to light vehicles, the Department supports the payment of reasonable contributions to Council to maintain these roads.

However, as the EA does not assess the existing pavement condition of local roads, the Department is not in a position to determine whether any specific road upgrade works are warranted. Consequently, the Department believes that prior to commencing extraction activities in the proposed extension area, Daracon should be required to conduct a road condition audit of the quarry access route (as part of the road safety audit), and implement any upgrade works identified in this audit to the satisfaction of Council.

The Department believes this arrangement would ensure that any necessary road upgrade works are undertaken prior to the project commencing, and establish a suitable base line for ongoing contributions to Council for the maintenance of local roads.

Other Issues

The majority of public submissions raised truck driver behaviour as a reason for objecting to the proposal, citing excessive truck speeds and intimidating behaviour as the main areas of concern.

Daracon states that it is committed to addressing community concerns about this issue through the implementation of a code of conduct at the quarry. This commitment is supported by the Department, and a condition has been incorporated accordingly.

Conclusion

The Department is generally satisfied with Daracon's traffic assessment, and believes that as the project would not generate any additional traffic it is unlikely to result in any significant impacts on the safety or performance of the surrounding road network.

However, to ensure the ongoing satisfactory performance of the local road network, the Department has recommended conditions that require Daracon to:

- undertake a road safety audit (including a road condition audit) of local roads and the Quarry Road – New England Highway intersection, and implement any recommendations from the audit prior to operations commencing in the extension area;
- pay reasonable road maintenance contributions to Council;
- limit the size of the trucks that access the quarry;
- install appropriate signage at the Quarry Road- New England Highway intersection; and
- prepare and implement a code of conduct to manage traffic impacts on local residents.

5.4 Flora and Fauna

The EA includes a detailed assessment of the flora and fauna values of the project area. This assessment was carried out by ERM Australia, and comprised literature and State and Federal agency database record searches, and seasonally based detailed and targeted site surveys.

Up to 17.8 hectares of land would be disturbed to enable hard rock resources in the extension area to be extracted. This would lead to the loss of 10.2 hectares of woodland and 7.6 hectares of derived grasslands, and associated habitat.

The vegetation communities within the extension area are consistent with the definition of *White Box, Yellow Box, Blakely's Red Gum Woodland* (WBYBBRGW) endangered ecological community (EEC), listed in the *Threatened Species Conservation (TSC) Act 1995*. They are also consistent with the definition for *White Box - Yellow Box - Blakely's Red Gum Grassy Woodland and Derived Native Grassland* critically endangered ecological community, listed in the *Commonwealth Environment Protection and Biodiversity (EPBC) Act 1999*. However, it is important to note that the vegetation in the extension area has been significantly degraded as a result of past agricultural activities (see Figure 2).

The assessment did not identify any listed threatened flora or fauna species, or critical habitat, in the project area. However, 3 threatened grass species (lobed bluegrass, bluegrass and finger panic grass), 1 threatened tree (slaty red gum), 4 threatened bird species (regent honey eater, superb parrot, turquoise parrot and squatter pigeon), 1 threatened bat (greater long-eared bat), and 2 threatened reptile species (five clawed worm skink and pale headed snake) were identified as having a moderate to high likelihood of occurrence on the site.

To compensate for the immediate loss of 17.8 hectares of White Box EEC, Daracon proposes to implement a biodiversity offset strategy (see Figure 5). To this end, it has purchased 3 adjacent properties (Lots 187, 39 and 49) each of which contains areas of White Box EEC in varying amounts and condition. The strategy would protect and enhance existing remnant vegetation on the adjoining allotments, and through progressive rehabilitation would create and enhance habitat linkages with surrounding woodland remnants. Long term security of the offset areas would be achieved through a Voluntary Conservation Agreement, or other such measure acceptable to the Department and the DECC.

The key components of the offset strategy are summarised in Table 3. In each of the offset areas, Daracon proposes to undertake stock removal, fencing, and weed control. It also proposes additional planting of EEC tree species to augment the areas of existing EEC in the medium to long term in one of the offset areas. Daracon believe this would result in the long term protection and enhancement of about 36.1 hectares of White Box EEC, and would provide slightly more than 2:1 "like for like" compensation for the loss of 17.8 ha of the EEC in the extension area.



Figure 5: Biodiversity Offset Strategy

Table 3: Biodiversity Offset Strategy

Land Parcel	Total Area (hectares)	Existing EEC Extent (hectares)	Proposed Offset EEC Extent (hectares)
Extension Area	24.8	19.67	1.87
Lot 1 DP 1001734	17.9	5.4	5.4
Lot 187 DP 751028	8.2	8.2	8.2
Lot 39 DP 751028	17.15	5.5	17.15
Lot 49 DP 751028	16.3	16.3	16.3
Total	84.35	55.07	48.92

The DECC has raised some concerns about whether the 2:1 offset ratio is sufficient to offset the immediate loss of 17.8 hectares of EEC and associated habitat. However, the Department notes that Daracon's estimate of the extent of White Box EEC in the proposal area is conservative. Of the 17.8 hectare to be cleared only 10.2 hectares consists of treed vegetation. The remainder consists of derived grasslands that may contain seed material to support regeneration of the EEC provided appropriate land management measures are put in place. Furthermore, the density of trees in the extension area is relatively low, and varies from isolated individuals to open woodland, which is typical of disturbed remnants on agricultural grazing land. The offset areas contain approximately 28 hectares of treed White Box EEC. Consequently, in terms of treed EEC, the biodiversity offset strategy provides a ratio of almost 3:1, which the Department believes provides reasonable compensation for the immediate loss of the EEC within the extension area.

Notwithstanding, the Department notes that the offset strategy relies on the successful re-establishment of EEC in some areas to achieve the offset ratios described above. The Department believes there is considerable scientific uncertainty associated with the re-establishment of EEC within disturbed areas. Given this uncertainty, the Department believes Daracon should be required to increase the area proposed for re-establishing White Box EEC in its biodiversity offset strategy. This would increase the likelihood of successful re-establishment of the EEC, and maximise the ability of Daracon to achieve the 2:1 offset ratio in the medium to long term. To this end, and in accordance with a recommendation from DPI, the Department believes the additional areas of planting should incorporate the riparian corridor along Doughboy Hollow Creek – a measure that Daracon has agreed to implement.

Both the Council and the Department are concerned about the lack of information about the final rehabilitation plans for the existing quarry operations at the site. There are a number of rehabilitation obligations under the 1994 Council consent. However, these obligations do not apply to the entire area of the existing quarry and require rehabilitation to be addressed as part of the erosion and sediment control plan for the site. The Department believes that the rehabilitation obligations at the existing quarry should be strengthened and that Daracon be required to prepare a rehabilitation and landscape management plan that applies to both the proposed extension area and the existing operations. This would provide a robust framework for the long term rehabilitation of the entire site, and enable both the quarry operator and regulators to work towards an appropriate final landform and end use for the site. It would also provide an opportunity to augment the biodiversity offset strategy through additional planting of the White Box EEC, and create habitat linkages with surrounding woodland corridors.

Conclusion

With the inclusion of the areas of additional riparian vegetation, and the re-establishment of woodland within the disturbance footprint of the quarry, the Department is satisfied that in the medium to long term, the project can provide a net biodiversity benefit at the local level.

However, to ensure that these beneficial biodiversity outcomes are realised, the Department believes the Proponent should be required to prepare and implement a comprehensive Rehabilitation and Offset Management Plan for the project that includes:

- at least a 2:1 replacement for the White Box EEC that would be cleared;
- a rehabilitation and revegetation program for Doughboy Hollow Creek;

- a description of the short, medium and long term measures that would be implemented to rehabilitate the site, implement the offset strategy, and manage remnant vegetation and habitat on the site;
- detailed assessment and completion criteria for the offset strategy and the rehabilitation of the site;
- a program to monitor the performance of the rehabilitation over time;
- the measures that would be implemented to minimise and manage impacts on flora and fauna; and
- measures to ensure the long term protection of the offset areas.

In addition, to ensure that the biodiversity offset strategy and rehabilitation of the site is satisfactorily completed the Department believes that Daracon should be required to lodge an environmental security with the Department that is commensurate with the cost of fully implementing the elements of the offset strategy and the rehabilitation of the site.

5.5 Water Resources

Surface Water

The quarry is located in the Liverpool Ranges in the headwaters of the Namoi catchment. Doughboy Hollow Creek lies adjacent to the southeastern boundary of the quarry, but there are no watercourses within the extension area itself (see Figure 3). Doughboy Hollow Creek is a non-permanent watercourse, which flows in response to rainfall run-off from the surrounding hills. The creek provides water for downstream domestic users and provides unfenced access for stock watering. A small weir was previously established on the creek as the water supply access point for the quarry.

Clean run-off from surrounding areas would be diverted around areas of disturbance using standard contour drains and bunds. Sediment traps would be installed to intercept any sediment or other contaminants in the run-off water. A 63 ML sump which has been constructed in the floor of the original quarry and now operates as a detention basin for run-off from disturbed areas and as the main water storage for the quarry. The sump alleviates the need for water to be pumped from the creek, and as part of the project Daracon would remove the weir and rehabilitate the creek. This would provide an environmental benefit, and the Department and DPI (Fisheries) are supportive of this approach.

The predicted project water balance indicates that up to 220 kL of water a day (about 67 ML a year) would be required, mainly for dust suppression. Daracon believes it has sufficient storage capacity in the sump to supply all the water needs of the project. Water to the sump would be supplied from rainfall run-off from disturbed areas. Further, it expects that as the total area of disturbance increases, run-off from these areas will be in excess of on-site water demand, and from time to time water would need to be released to Doughboy Hollow Creek and/or used to irrigate vegetation on adjacent areas. Water levels in the sump would also need to be managed to accommodate detention of run-off during significant storm events. For average rainfall, Daracon predicts that up to 460 kL a day may need to be released or used in irrigation to prevent overflow of the sump. However, larger releases may be required to maintain the dam at lower levels. Daracon proposes to monitor all water discharges from the site to ensure compliance with relevant ANZECC water quality criteria, and the DECC licence, which would also include discharge limits.

The conceptual final landform plans in the EA show that the existing 63 ML sump would be the primary run-off collection point following the cessation of quarrying activities on the site. However, it is not clear how this sump would function as a part of the landscape in the long term. Consequently, the Department believes that further information should be provided as part of the Rehabilitation and Biodiversity Offset Management Plan to justify and clarify the proposed final landform.

Groundwater

As the quarry is near the top of the Liverpool Ranges it is not expected that the quarry would intersect any groundwater aquifers. This is supported by evidence from the existing quarry where no groundwater seepage has been observed from the quarry walls or from drill holes. However, the Department notes that there are alluvial sediments along Doughboy Hollow Creek downstream from the quarry, which would most likely be recharged directly from rainfall infiltration and surface flow in the creek.

One public submission was concerned that the project would impact on a domestic bore drawing from this aquifer. However, the project is not expected to impact on this aquifer, and would most likely

improve its condition with the cessation of pumping from the weir and subsequent rehabilitation of the Doughboy Hollow Creek.

The EA reports that rainfall on the floor of the existing quarry extension soaks away into cracks and fissures. Hence infiltration through the exposed quarry floor may contribute a small amount of recharge to more regional groundwater sources. This presents a potential pathway for oil and other industrial wastes to contaminate regional groundwater sources. The Department consider this to be a low risk, and can be managed through the implementation of standard sediment and erosion control measures, and spill containment procedures.

Conclusion

The Department is generally satisfied with Daracon's surface and groundwater impact assessment, and believes that the project is unlikely to result in any significant impacts on water resources in the local area or adversely impact local water users. If anything the cessation of pumping from Doughboy Hollow Creek would improve the availability of water for downstream users.

Nonetheless, to ensure that surface and groundwater impacts are appropriately managed and monitored the Department believes that Daracon should be required to prepare and maintain an integrated Site Water Management Plan for the existing quarry and the extension area that includes:

- a site water balance;
- a surface water monitoring program;
- an erosion and sediment control plan; and
- a contingency plan to address any unforeseen impacts.

A plan to address the design, management and monitoring of the final void/s should also be prepared by Daracon as part of the Rehabilitation and Biodiversity Offset Management Plan.

5.6 Dust

The potential air quality impacts of the project were assessed by ERM Australia in accordance with the DECC's *Approved Methods and Guidance for Modelling and Assessment of Air Pollutants in NSW* (DEC 2005).

There are a number of activities that would be (and continue to be) carried out at the quarry which are dust generating. This includes the stripping of overburden, drilling and blasting, internal haulage, dumping, crushing and screening, and loading and off-site rail and road transport. In addition dust would be generated from disturbed areas and product stock piles through wind erosion.

Air quality modelling indicates that worst case dust emissions generated by the project would comply with the DECC criteria for dust deposition, total suspended particulates (TSP), and small particulate matter (PM₁₀) at all privately-owned residences in the vicinity of the site.

Further, Daracon has committed to additional dust mitigation measures at the site. Some of the measures proposed include revegetating exposed surfaces where possible, wetting or chemical coating of static stock piles, sealing the haul road, watering of unpaved roads and limiting speeds to 15 km/hr on unpaved surfaces, constructing a wheel wash bay and the covering of all loads leaving the site. Daracon would also implement a dust monitoring program to ensure that it complies with the DECC's air quality criteria.

The Department is satisfied with Daracon's air quality assessment and is confident that the project would comply with DECC's air quality criteria at nearby residences. However, the Department has recommended a range of conditions that would require Daracon to minimise and manage its dust impacts to comply with DECC air quality criteria at all privately owned residences, and to prepare and implement an air quality monitoring program for the quarry.

5.7 Visual Impact

The EA includes an assessment of the visual impacts of the project. This assessment considered visual impacts from a number of representative view locations around the site, including residences within Ardglen Village, the New England Highway, and a nearby lookout (Nowlands Gap Lookout).

In summary, the assessment found that most residences in the village would have limited views of the extension area due to topographic and vegetative shielding. However, there would be several residences that would have direct views of the quarry extension.

Daracon argues that the visual impacts on these residences are not significant because these residents currently have views of the existing quarry, and the proposed extension therefore represents a continuation of the existing land use. It also believes that partial rehabilitation of the existing quarry and surrounding area would reduce the visual impacts over time.

The Department accepts that many residents have views of the existing quarry, but believes that the visual impacts of the quarry would increase appreciably as a result of the proposed extension, due to the elevated nature of the extension area, and the fact that the quarry would continue to operate for another 30 years.

In its response to submissions, Daracon has committed to providing vegetative screening at any residence in the Ardglen Village. The Department supports this initiative, and believes that with the implementation of these screens (along with progressive rehabilitation of the quarry), the visual impacts of the project can be significantly reduced.

The Department also notes that the extension area is visible from the New England Highway and from various other vantage points around the site (including Nowlands Gap Lookout). However, the Department believes that the views from the Highway are transient in nature, and views from other publicly accessible viewing locations are sufficiently distant or screened by vegetation such that the resultant visual impact is not significant.

5.8 Heritage

The EA includes a cultural heritage assessment that was prepared in consultation with the local Aboriginal community. No sites of Aboriginal heritage significance were found on the site, and members of the Local Aboriginal Land Council indicated that the proposed extension area did not contain any areas of particular cultural heritage value. The lack of Aboriginal heritage values on the site is not unexpected given the disturbed and elevated nature of the area. Similarly, the assessment did not identify any structures or other items of European historical heritage significance.

Both the Department and DECC are satisfied with Daracon's cultural heritage assessment, and believe that the project would not result in any significant impacts on cultural heritage.

5.9 Other Impacts

The project is likely to generate a range of other environmental impacts – including waste management, and greenhouse gas emissions. However, these impacts are not predicted to be significant, and the Department is satisfied that they can be controlled, mitigated or managed through appropriate conditions of approval.

6. RECOMMENDED CONDITIONS

The Department has prepared recommended conditions of approval for the project. These conditions are required to:

- prevent, minimise, and/or offset adverse impacts of the project;
- set standards and performance measures for acceptable environmental performance;
- ensure regular monitoring and reporting; and
- provide for the ongoing environmental management of the project.

The Department has provided the draft conditions of approval for the project to relevant government authorities for comment, and has incorporated these comments into the conditions of approval where appropriate.

Daracon has reviewed and accepts the recommended conditions.

7. CONCLUSION

The Department has assessed the project application, EA, submissions on the project, and Daracon's response to submissions, and is satisfied that there is sufficient information available to determine the application.

This assessment has found that the project would have a number of environmental impacts, most notably noise impacts on local residents and clearing of 17.8 hectares of an Endangered Ecological Community. However, the Department is satisfied that the impacts of the project can be adequately mitigated, managed, offset and/or compensated for, to ensure an acceptable level of environmental performance.

The Department also notes that the project would provide social and economic benefits including the provision of continuing direct employment for 9 people, and indirect employment for an additional 30. It would also provide a valuable long term supply of hard rock aggregate for local and regional markets in the Upper Hunter, Liverpool Plains and New England areas. The transport by rail of 50% of quarry products also provides an environmental benefit over alternative sources that rely solely on road transport.

On balance, the Department believes that the project's benefits outweigh its costs, and is therefore in the public interest. Consequently, the Department recommends that the project be approved, subject to strict conditions of approval.

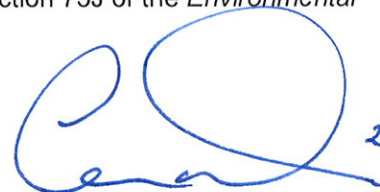
8. RECOMMENDATION

It is RECOMMENDED that the Minister:

- consider the findings and recommendations of this report;
- approve the project application, subject to conditions, under section 75J of the *Environmental Planning and Assessment Act 1979*; and
- sign the attached project approval (see Appendix B).

 20/11/08

David Kitto
Director
Major Development Assessment

 21.11.08

Chris Wilson
Executive Director
Major Project Assessment



Sam Haddad
Director-General

25/11/2008.

APPENDIX A - SUMMARY OF CONDITIONS OF APPROVAL

Aspect	Condition	Requirement
Schedule 2: Administrative Conditions		
Limits of Approval	5	Approval for 30 years only
	6	Restriction on production to 500,000 tonnes of quarry product a year
	7	Up to 250,000 tonnes to be transported by rail, and up to 250,000 to be transported by road
Surrender of Consent	9	The previous consent shall be surrendered prior to extracting material in the extension area.
Contributions	15	Contributions to be paid to Council, upon commencement of approval
Schedule 3: Specific Environmental Conditions		
Noise	1	Noise impact assessment criteria
	2	Acquisition criteria
	3-4	Noise mitigation measures
	5	Requirement to seek continual improvement of noise performance
	6	Noise Monitoring Program
		Hours of Operation
Blasting	9-10	Blast impact assessment criteria
	11-13	Restriction on blasting hours and frequency of blasting
	14-17	Blast related operating conditions, including requirement for public notification of blasting operations
	18-20	Rights for structural property inspections for properties potentially affected by blasting
	21	Blast Monitoring Program
Air Quality	22-23	Air quality impact assessment criteria
	25	Air Quality Monitoring Program
	27	Meteorological monitoring
Surface and Ground Water	28	Restriction on discharging water from the site
	29-34	Water Management Plan
Rehabilitation and Landscape Management	36	Requirement to prepare and implement an Offset Strategy, and to arrange for long term security of the offset areas
	37-40	Rehabilitation, Offsets, and Landscape Management Plans
Transport	42	Requirements to keep records of road and rail transport
	42	Restrictions on number and size of road transport trucks
Visual Impact	43-45	Requirement to minimise project's visual and lighting impacts
Heritage	41	No unauthorised destruction of known Aboriginal objects
Waste Minimisation	48	Requirement to monitor and minimise waste
Emergency and Hazards Management	48	Requirement to ensure safe storage, handling and transport of hazardous materials, and to secure the site
Production Data	46-47	Requirement to provide production data to DPI
Quarry Exit Strategy	46-47	Requirements to prepare and implement an Quarry Exit Strategy
Schedule 4: Additional Procedures		
Notification of Landowners	1	Requirement to notify landowners of exceedances of relevant criteria during monitoring
Independent Review	2-6	Procedures for independent review if landowners believe the project to be exceeding relevant impact assessment criteria
Land Acquisition	7-9	Procedures for land acquisition
Schedule 5: Environmental Management, Monitoring Auditing and Reporting		
Environmental Management Strategy/ Program	1-2	Environmental Management Strategy/ Environmental Management Program
Incident Reporting	3	Requirement to report incidents
Annual Reporting	4	Annual Environmental Management Report
Auditing	5-7	Requirement to undertake regular independent environmental audits
CCC	8	Requirement for Community Consultative Committee
Access to Information	9-10	Requirement to publicly report environmental management plans/programs/strategies, and monitoring results

APPENDIX B – CONDITIONS OF APPROVAL

APPENDIX C - ENVIRONMENTAL PLANNING INSTRUMENTS

1 State Environmental Planning Policy (SEPP) No.11 – Traffic Generating Development

The project is affected by the provisions of SEPP 11, as an 'extractive industry or mining' (Schedule 1(m) – now repealed by the *Mining, Petroleum Production and Extractive Industries SEPP 2007*). As such, the application was referred to the RTA, who subsequently advised that it required a detailed Road Safety Audit to be completed for the Ardglen Street - New England Highway intersection to demonstrate that it complies with relevant RTA standards, and to undertake any recommended road upgrade works to its satisfaction. The Department has included a condition to this effect in the project approval.

2 SEPP No.33 – Hazardous and Offensive Development

The Department considers that the project represents a 'potentially offensive industry' as defined under clause 3 of SEPP 33, but does not represent a 'potentially hazardous industry'.

Clause 4 of the SEPP provides a definition of 'offensive industry', namely:

'offensive industry means a development for the purposes of an industry which, when the development is in operation and when all measures proposed to reduce or minimise its impact on the locality have been employed (including, for example, measures to isolate the development from existing or likely future development on other land in the locality), would emit a polluting discharge (including, for example, noise) in a manner which would have a significant adverse impact in the locality or on the existing or likely future development on other land in the locality.'

Clause 8 requires that consideration be given to the Department's guidelines (ie. *Applying SEPP 33, 1994*) in determining whether a development is an 'offensive industry'. The guidelines state that compliance with DECC requirements should be sufficient to demonstrate that a proposal is not an offensive industry. The guidelines also state that if the DECC considers that its EPL licence requirements can be met, then the proposal is not likely to be 'offensive industry'. In this case, DECC has indicated it can issue an EPL for the project, and as such the Department considers that the project is not an offensive industry under the SEPP. Notwithstanding, the Department has recommended conditions of approval that require Daracon to meet strict noise, dust and blasting criteria, and monitor its operations to demonstrate compliance with these criteria.

3 SEPP No.44 – Koala Habitat Protection

The EA states that the development area does not provide core or potential Koala habitat and does not have a resident population of Koalas. As such, the Department is satisfied that the proposal is generally consistent with the aims, objectives, and requirements of SEPP 44.

4 SEPP No.55 – Remediation of Land

The Department is satisfied that the land subject to the project application does not have a significant risk of contamination given its historical land use, and that the proposal is generally consistent with the aims, objectives, and requirements of SEPP 55.

APPENDIX D – DARACON’S RESPONSE TO SUBMISSIONS

APPENDIX E – SUBMISSIONS

APPENDIX F – ENVIRONMENTAL ASSESSMENT
