

CORAKI QUARRY PROJECT

Truck Movement Modification (SSD 7036 MOD 2)

Environmental Assessment Report

Section 96(2) of the *Environmental Planning and Assessment Act 1979*

1. BACKGROUND

Quarry Solutions Pty Ltd (Quarry Solutions) operates Coraki Quarry, located adjacent to Seelems Road and Petersons Quarry Road, Coraki, on the Far North Coast. The site is in the Richmond Valley local government area, located approximately 2.5 kilometres northwest of the township of Coraki (see **Figure 1**).

Coraki Quarry was granted development consent (SSD 7036) on 18 April 2016 with approval to extract a maximum of 1 million tonnes per annum of basalt until 30 June 2023. A modification to SSD 7036 (MOD 1) was approved on 20 October 2016 to change the route that quarry trucks take when returning to Coraki Quarry and to subsequently delay the sealing of Seelems Road.

Quarry Solutions concurrently operates the neighbouring Petersons Quarry for Richmond Valley Council.

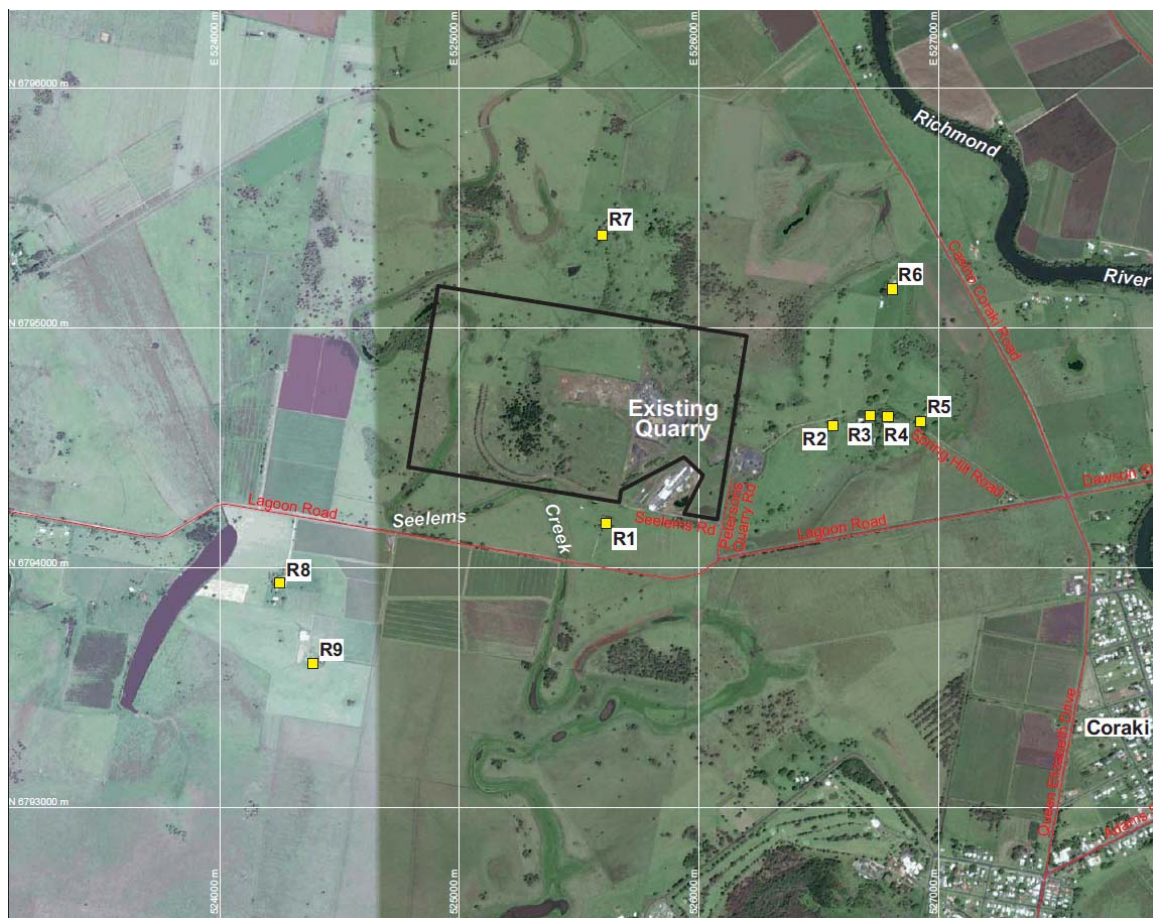


Figure 1: Location of Coraki Quarry

2. PROPOSED MODIFICATION

On 10 February 2017 Quarry Solutions submitted a second modification application for SSD 7036 under section 96(2) of the *Environmental Planning and Assessment Act 1979* (EP&A Act). The proposal primarily seeks to increase the maximum number of laden truck dispatches from the development, with other minor changes proposed to the schedule of land and the quarry layout.

2.1 Transport of Quarry Products

Condition 9 of Schedule 2 of SSD 7036 currently restricts Quarry Solutions to dispatching no more than 21 laden trucks from the development per hour. This rate was based on the number of trucks needed to meet the predicted demand for materials from the Pacific Highway Upgrade Project (PHUP) as forecast in the 2015 Environmental Impact Statement (EIS). However, since commencement of operations, demand from the PHUP has been higher than expected, particularly during the early morning period. Quarry Solutions is therefore proposing to increase its maximum hourly dispatch rates from 21 to 31 laden trucks. The Department was informed that 31 is based on maximum operational dispatch capacity due to machinery and labour limitations, rather than forecast demand.

2.2 Inclusion of Lot 1 DP1225621

Condition 18 of Schedule 2 of SSD 7036 requires Quarry Solutions to obtain approval for the closure of a small Crown road on the eastern boundary of Lot 401 DP633427 prior to undertaking stockpiling activities within the road reserve.

The small Crown road was closed on 19 October 2016 and the new lot was registered as Lot 1 DP1225621 (Lot 1), and the certificate of title issued on 16 February 2017.

In its Response to Submissions (RTS, see **Section 4.4**), Quarry Solutions requested that the recent lot changes be considered in this modification. Quarry Solutions proposed that Lot 1 be added to the schedule of lands and that the approved extraction area be extended into the southern portion of Lot 1. This adjustment would increase the extraction area by 0.126 hectares to a total of 10.4 hectares and reduce the stockpile space by the same amount. The extended extraction area would provide an additional 17,051 cubic metres of basalt resource. However, Quarry Solutions is not proposing to increase either the annual extraction limits or the life of the quarry.

3. STATUTORY CONTEXT

3.1 Section 96(2)

SSD 7036 was granted on 18 April 2016 under Part 4, Division 4.1 of the EP&A Act. Section 96 of the EP&A Act allows for a development consent to be modified by the consent authority that granted the original consent.

The proposal would not change any of the core elements of the project which include the approved disturbance limits, quarrying methods, operational hours and annual extraction volumes and processing rates. Given that the proposal could result in nearly a 50% increase in hourly truck movements and that the transport route uses 20 kilometres of local roads in around the Coraki township, the Department was not satisfied that the proposed modification would be of minimal environmental impact and therefore the Department considered the modification under section 96(2) instead of section 96(1A).

The Department is satisfied that the project as proposed to be modified would be substantially the same as that originally approved and is within the scope of section 96(2) of the EP&A Act, and may be determined accordingly.

3.2 Environmental Planning Instruments

A number of environmental planning instruments (EPIs) apply to the modification, including the:

- *State Environmental Planning Policy (State and Regional Development) 2011*;
- *State Environmental Planning Policy (Mining, Petroleum and Extractive Industries) 2007*;
- *State Environmental Planning Policy No.33 (Hazardous and Offensive Development)*;
- *State Environmental Planning Policy (Infrastructure) 2007*;
- *Richmond Valley Local Environmental Plan 2012*; and
- *Richmond Valley Development Control Plan 2015*.

The Department has considered the modification against the relevant provisions of these EPIs, as well as Quarry Solutions' consideration of these matters. The Department considers the proposed development can be undertaken in a manner that is generally consistent with the aims, objectives and provisions of these EPIs.

3.3 Other Licences

Quarrying activities above a certain scale are regulated under an Environmental Protection Licence (EPL 3397) granted under the *Protection of the Environment Operations Act 1997*. The Department recognises that the proposed modification would require a minor variation to the site's EPL to allow extraction to occur within Lot 1.

3.4 Approval Authority

The Minister for Planning is the approval authority for the application. However, under the Minister's delegation of 16 February 2015, the Executive Director, Resource Assessments and Compliance may determine the application, as 1 public objection was received, Council did not object to the proposal and Quarry Solutions reported no political donations.

4. CONSULTATION

4.1 Exhibition and Notification

Under clause 118 of the EP&A Regulation, the Secretary is required to make the modification application publicly available. Consequently, the Department placed a public exhibition notice in the *Lismore Northern Star* on 21 February 2017 and made the application and supporting documents publicly available from Wednesday 22 February 2017 until Wednesday 8 March at:

- the Department's Information Centre in Sydney;
- Richmond Valley Council Offices in Casino; and
- Nature Conservation Council Offices in Sydney.

The Department also notified all adjoining residents and previous submitters and invited them to comment on the proposed modification. In total, eight members of the public were notified of the proposed modification. The neighbouring industrial facility, Total Precast Systems Pty Ltd, located on Seelems Road, was also notified.

The Department invited comment from the **Environmental Protection Authority (EPA)**, the **Department of Primary Industries (DPI)**, the **Office of Environment and Heritage (OEH)**, **Roads and Maritime Services (RMS)** and **Richmond Valley Council (Council)**.

The Department is satisfied that the notification process met the requirements of the EP&A Act and the *Environmental Planning and Assessment Regulation 2000* (EP&A Regulation).

4.2 Agency Submission

The **EPA**, **Heritage Council of NSW**, **DPI**, **Council** and **OEH** had no objections to the proposed modification. **RMS** requested that the Transport Management Plan and Drivers' Code of Conduct be updated to reflect the increase in heavy vehicle movements prior to this occurring.

4.3 Community Submission

One submission from the community was received. It objected to the proposal on the grounds that the increased truck movements would further deteriorate the condition of Woodburn-Coraki Road and that additional road noise would further impact the quality of life. The Department's assessment of road condition and road noise are addressed in **Section 5** below.

4.4 Response to Submissions

On 26 April 2017, Groundwork Plus (on behalf of Quarry Solutions) submitted an RTS. This document addressed the submissions and additional questions from the Department. Quarry Solutions also acknowledged previous errors in Section 3.4.4 *Outcomes of Traffic Noise Modelling* of the original *Noise and Dust Assessment* prepared in 2015 by MWA Environmental, and provided additional information on cumulative traffic impacts from both Coraki and Petersons Quarries.

5. ASSESSMENT

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

- application documentation;
- existing conditions of consent;
- relevant EPIs, policies and guidelines; and
- requirements of the EP&A Act, including the objects of the Act.

The Department considers that the proposed modification to trucking limits has the potential to result in impacts relating to traffic, road noise and road dust. The Department's assessment of the proposal's potential impacts is provided below.

The Department considers the inclusion of Lot 1 to be a minor change that would not cause extraction to occur closer to nearby sensitive receptors, would not increase the extraction limits, nor alter the disturbance footprint. Consequently, the incorporation of Lot 1 and the minor amendment to the quarry footprint is not addressed in further detail.

5.1 Traffic

The 2015 EIS included a traffic report that estimated Coraki Quarry would generate an average of 7 laden truck dispatches per hour from the site with a peak hour factor of 3. The maximum dispatch rate was therefore modelled at 21 laden trucks per hour from the site.

This traffic report found that intersections affected by the development would have more than sufficient capacity to accommodate these 21 laden trucks, and that even if the total volume of traffic were to double, there would still be no significant impact on the level of service of any affected local road.

Quarry Solutions now proposes to increase the maximum dispatch rate from 21 to 31 laden trucks per hour. To determine if the proposed increase would have significant traffic impacts on the local road network, Quarry Solutions engaged MRCagney to re-assess the key affected intersections for operational performance in the peak operational year of the development (2023).

The results of the re-assessment indicated that when compared to the original traffic report, the key affected intersections (Petersons Quarry Road / Lagoon Road, Lagoon Road / Queen Elizabeth Drive and Coraki Woodburn Road / Pacific Highway) would continue to operate satisfactorily.

Quarry Solutions also confirmed in the RTS that the background traffic counts used in the above traffic reports included vehicle movements from Petersons Quarry. However, the traffic reports did not consider the increased traffic associated with the current modification application for Petersons Quarry currently with Council. Nevertheless, the RTS justified that the modification to Petersons Quarry, if approved, would only result in one additional laden truck per hour and therefore this minor traffic increase would be insignificant.

The traffic reports are further supported by the recent completion (March 2017) of an independent Road Safety Audit conducted by TTM Consulting. The Audit identified the potential for unsafe interactions between passing quarry trucks at the intersection of Lagoon Road/ Casino Coraki Road and the site entrance. TTM recommended that an appropriate response to reduce the collision risk would be through driver education rather than alteration of the intersections at these two locations. In addition to addressing these issues during pre-starts and driver inductions, the Department considers that the Drivers' Code of Conduct should be updated to ensure that all truck drivers are made aware of the intersections where there is potential for unsafe interactions. No other concerns were raised in the Audit with regards to the performance of the road network, truck movements or the effectiveness of the existing Transport Management Plan.

The Department is satisfied that the increased truck movements would have minimal additional traffic related impacts around the vicinity of Coraki Quarry. Traffic impacts would continue to be appropriately managed under the existing conditions of consent, which include conditions related to road maintenance, road safety, product transportation and the preparation of a Transport Management Plan. As recommended by RMS, the Department agrees that this plan would need to be updated, subject to this modification being approved, to address the increased truck movements and to update the Drivers' Code of Conduct.

5.2 Road Noise

The 2015 EIS included a *Noise and Dust Assessment* prepared by MWA Environmental. The road noise component of this assessment predicted traffic noise levels at residential dwellings located within 100 metres of the transport route, between Coraki Quarry and the Pacific Highway at Woodburn. This included one residence (R14) on a local road (Lagoon Road) and 43 residences on the remaining sub-arterial roads (see **Figure 2**).

This road noise assessment found that noise levels at 29 of the 43 residences along the sub-arterial roads would comply with the day time criteria of 60 dB(A) and 30 of the 43 residents would comply with the night time criteria of 55 dB(A) under the NSW *Road Noise Policy* (RNP). For the residences where noise levels were predicted to exceed the noise criteria, the increase would not exceed the relevant increase criteria of 2 dB(A) and therefore under the RNP would represent a minor change with impacts considered small enough to not warrant mitigation works.

The assessment also found that noise levels at the single residence on Lagoon Road would comply with the RNP's local road noise criteria.

To support MOD 2, MWA Environmental updated part of the road noise assessment to reflect the proposed increase in truck movements. MWA Environmental re-assessed the potential impacts for the single residence on Lagoon Road, which is categorised as a local road with a 1-hour day time criteria of 55 dB(A) and night time criteria of 50 dB(A) under the RNP. The modification would cause predicted noise levels at R14 to increase from 43.4 to 46.9 dB(A) during the day time period and 41.1 to 45.3 dB(A) in the night time period. These predictions continue to remain below the relevant assessment criteria.

MWA Environmental did not update the assessment for the sub-arterial road category, which applies a 15-hour averaging period, because it considered that the proposed modification would not affect the long-term average traffic generation from the development. The Department notes that, other than a few peak hours in the morning, the daily rate of truck movements would not change. Therefore there should be no change to the 15-hour noise predictions.

In the absence of a fully updated road noise assessment and to ensure that Quarry Solutions meets the sub-arterial road criteria in the RNP, the Department has proposed revising condition 9 to include daily limits of 231 laden truck dispatches (Monday to Friday) and 105 laden truck dispatches (Saturday), in addition to the proposed hourly limit of 31. These daily limits are based on the original road noise assessment which considered 21 laden trucks dispatched per hour. While peak hour dispatches of up to 31 laden trucks per hour would be permitted, daily average dispatches of 21 laden trucks per hour would have to be maintained, unless Quarry Solutions can obtain and maintain agreements with 9 near neighbours to adopt extended operating hours (under condition 2 of Schedule 3 of the consent). The Department understands that Quarry Solutions has already obtained these agreements and is therefore operating under the extended operating hours.

The Department considers it necessary to include these daily transport limits as a condition of consent due to the high number of residents that live along the transport route which are already experiencing exceedances of the sub-arterial road noise criteria. While this is largely due to high background levels, rather than as a result of the development, MWA Environmental's assessment offers no certainty that the worst-case scenario of 31 laden trucks dispatched per hour for 13 operating hours (403) would remain below the relevant RNP criteria.

Other than changing condition 9 in Schedule 2, the Department is satisfied that the existing conditions of consent remain adequate to manage road noise. Under the existing consent, Quarry Solutions is required to implement best practice management to minimise road transportation noise from the development and to prepare a Transport Management Plan.

5.3 Road Dust

Road dust was addressed in the air quality component of the original *Noise and Dust Assessment* prepared by MWA Environmental in 2015. The assessment considered potential road dust emissions from the transportation of quarry products and identified that a key source of dust emissions was vehicular operations along unsealed roads. While Quarry Solutions committed to sealing the access

road off Seelems Road, Richmond Valley Council also raised concerns with the condition of roads and intersections along the transport route.

To address these concerns, the Department applied conditions of consent requiring Quarry Solutions to undertake additional road upgrade works. These conditions included the sealing of dirt or degraded Council roads along the transport route to minimise amenity impacts from dust and noise emissions. These road upgrades were in addition to the required Council contributions of \$1.12 per tonne of transported quarry products for the ongoing maintenance of the local road network.

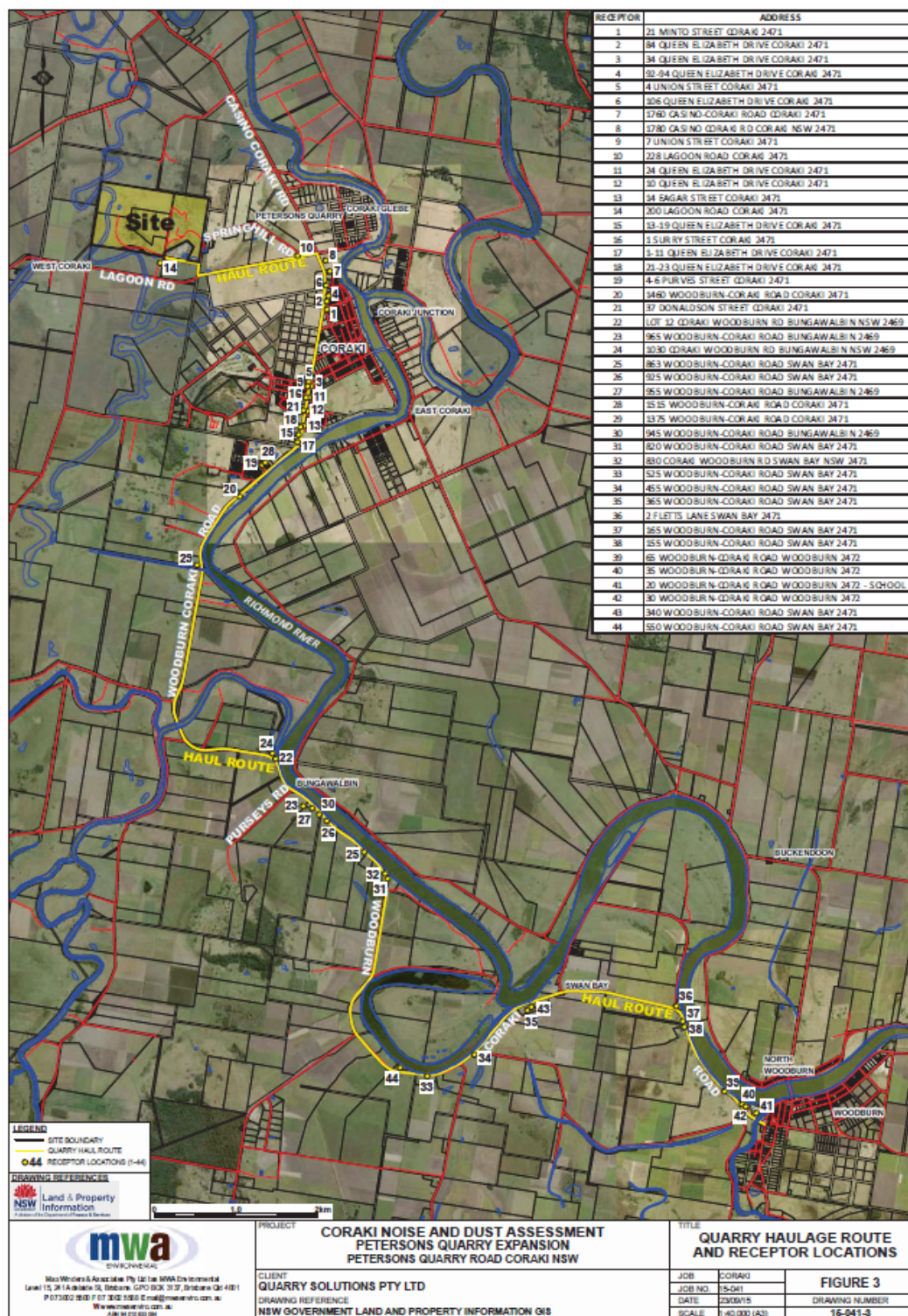


Figure 2: Neighbouring residences along quarry haulage route

The Department has been informed that all external roads currently being used for product transportation are now sealed. Consequently, the proposed increase in truck movements is unlikely to cause additional air quality impacts of any rate. The Department is therefore satisfied that the 2015 dust assessment remains sufficient to demonstrate that air quality impacts from road dust would be minimal, even with the increased truck movements proposed in this modification.

The Department considers that the existing air quality criteria and management plan requirements remain adequate to manage road dust. No additional air quality conditions or amendments are considered necessary.

6. CONCLUSION

The Department has assessed the merits of the proposed modification in accordance with the requirements of the EP&A Act. The modification application and supporting assessments have shown that the increase in truck movements and the revised site layout would have very limited increased impacts on the environment and community. The primary impact (i.e. increased truck numbers on local roads) has been mitigated by maintaining the daily maximum number of truck movements.

The Department considers the project would continue to provide benefits to the region by supplying construction materials, namely basalt, to the State's road projects. In particular, the proposed modification would provide greater flexibility to better meet the growing demands of the PHUP during the morning peak period.

The Department is therefore satisfied that the proposed modification is in the public interest and should be approved.

7. RECOMMENDED CONDITIONS

A notice of modification (see **Appendix D**) and a consolidated version of the Coraki Quarry consent (see **Appendix E**) as proposed to be amended have been prepared. The Department considers that the environmental impacts of the project can be appropriately managed through the proposed amended conditions of consent.

The primary modification is to the transport limits in condition 9 of Schedule 2. With the inclusion of Lot 1 and the minor adjustment to the site layout, the Department has proposed new figures for Appendices 2, 5 and 6. The Department has also taken the opportunity to update existing conditions to reflect current drafting standards, including providing further clarity on compliance and consultation requirements.

Quarry Solutions has accepted the proposed modified conditions of consent.

8. RECOMMENDATION

It is RECOMMENDED that the Executive Director, Resource Assessments & Compliance, as delegate of the Minister for Planning:

- **considers** the findings and recommendations of this report;
- **determines** that the modification request falls within the scope of section 75W of the EP&A Act;
- **approves** the modification application SSD 7036 MOD 2, subject to conditions; and **signs** the attached notice of modification (**Appendix D**).



Howard Reed
Director
Resource Assessments

30.5.17

Oliver Holm
Executive Director
Resource Assessments & Compliance

APPENDIX A: ENVIRONMENTAL ASSESSMENT

(Refer to the following link:

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8246)

APPENDIX B: SUBMISSIONS

(Refer to the following link:

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8246)

APPENDIX C: RESPONSE TO SUBMISSIONS

(Refer to the following link:

http://majorprojects.planning.nsw.gov.au/index.pl?action=view_job&job_id=8246)

APPENDIX D: NOTICE OF MODIFICATION

APPENDIX E: CONSOLIDATED CONSENT
