ASSESSMENT REPORT:
Proposed Duralie Coal Mine Extension

Environmental Assessment Report
Section 79C of the
Environmental Planning and Assessment
Act 1979

July 2006
Cover: Aerial view of Dualie coal mine.

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1. BACKGROUND

Duralie Coal Pty Ltd (Duralie Coal) owns and operates the Duralie coal mine, which is located approximately 75 kilometres north of Newcastle in the Gloucester valley (see Figure 1).

On the 13 August 1997, following a Commission of Inquiry, the Minister for Urban Affairs and Planning approved a development application (DA) from Duralie Coal for a new open cut coal mine at Duralie. Under this approval Duralie Coal was allowed to extract up to 18.4 million tonnes of coal at a rate of up to 1.8 million tonnes a year, and process this coal on-site for export by rail.

However, due to a downturn in coal prices, this consent was never implemented.

On 5 February 1999, the Minister approved a DA from Duralie Coal for a scaled-back version of the originally approved mine, and under this approval Duralie Coal was allowed to extract up to 8.9 million tonnes of coal at a rate of up to 1.5 million tonnes a year, and rail this coal to the nearby Stratford coal mine for processing and export by rail.

Duralie Coal is currently operating under this consent.

To maximise coal recovery at the mine, however, Duralie Coal is proposing to extend its approved mining operations by 24 hectares to secure an additional 3.4 million tonnes of coal and increase production rates up to 1.8 million tonnes a year.

On 28 February 2006, Duralie Coal lodged an application and Statement of Environmental Effects (SEE) with the Department seeking approval for this proposal under Section 96(2) of the Environmental Planning and Assessment Act 1979 (EP&A Act)(see Figure 2).
Figure 2: Proposed Extension Area
2. PROPOSED MODIFICATION

The major components of the proposed modification are summarised in Table 1 and depicted in Figure 2.

Table 1: Comparison of Approved and Proposed Activities at Duralie Mine

<table>
<thead>
<tr>
<th>Component</th>
<th>Approved</th>
<th>Proposed Modification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Coal extracted (total)</td>
<td>8.9 million tonnes</td>
<td>12.3 million tonnes</td>
</tr>
<tr>
<td>Annual coal production</td>
<td>Up to 1.5 million tonnes</td>
<td>Up to 1.8 million tonnes</td>
</tr>
<tr>
<td>Overburden</td>
<td>Up to 3.8 Mbcm a year</td>
<td>Up to 5.6 Mbcm a year 34.2 Mbcm total</td>
</tr>
<tr>
<td></td>
<td>19 Mbcm total.</td>
<td></td>
</tr>
<tr>
<td>Open cut mine area</td>
<td>79 hectares</td>
<td>103 hectares</td>
</tr>
<tr>
<td></td>
<td></td>
<td>(24 hectare increase)</td>
</tr>
<tr>
<td>Overburden emplacement height</td>
<td>100m RL</td>
<td>110m RL</td>
</tr>
<tr>
<td>Mining method</td>
<td>Truck and shovel</td>
<td>Unchanged</td>
</tr>
<tr>
<td>Mine fleet</td>
<td>10 fleet items</td>
<td>14 fleet items</td>
</tr>
<tr>
<td>Workforce</td>
<td>40</td>
<td>50</td>
</tr>
<tr>
<td>Life of mine</td>
<td>9 years</td>
<td>Unchanged</td>
</tr>
<tr>
<td>Trains</td>
<td>Average of 2 per day</td>
<td>Average of 2.5 per day</td>
</tr>
<tr>
<td></td>
<td>Max 4 per day</td>
<td>Unchanged</td>
</tr>
<tr>
<td>Hours for trains leaving the mine</td>
<td>7am to 10pm</td>
<td>Unchanged</td>
</tr>
<tr>
<td>Operating hours</td>
<td>24hrs per day, 7 days per week</td>
<td>Unchanged</td>
</tr>
<tr>
<td>Water management system</td>
<td>No discharge of mine water</td>
<td>Unchanged</td>
</tr>
<tr>
<td></td>
<td>Water disposal by irrigation of land</td>
<td></td>
</tr>
<tr>
<td>Coal processing</td>
<td>Rotary breaker only</td>
<td>Unchanged</td>
</tr>
<tr>
<td>Road transport</td>
<td>Workers vehicles and mine deliveries</td>
<td>Negligible change</td>
</tr>
</tbody>
</table>

The proposed modification has a capital investment value of $11 million, and would create 10 additional jobs at the mine (from 40 to 50 employees).

It should also be noted that the proposed extension area was allowed to be mined under the 1997 Ministerial consent, which has subsequently been surrendered, and the proposed production rate would be the same as the approved production rate in this consent.

3. STATUTORY CONTEXT

Consent Authority

The Minister was the consent authority for the original development application (DA 168/99), and is consequently the consent authority for this application.
**Section 96**

Under Section 96(2) of the EP&A Act, a consent authority may modify a development consent if it is satisfied that the “development to which the consent as modified relates is substantially the same development as the development for which consent was originally granted and before that consent as originally granted was modified (if at all)”.

The Department is satisfied that the development to which the consent as modified relates would be substantially the same as the development for which consent was originally granted as the proposed extension represents a relatively small increase in the mining area compared to what was approved by the Minister in 1999.

**Environmental Planning Instruments**

The following planning instruments are relevant to the proposal:

- State Environmental Planning Policy No. 11 – Traffic Generating Developments;
- State Environmental Planning Policy No. 44 – Koala Habitat Protection;
- State Environmental Planning Policy No. 55 – Remediation of Land; and
- Great Lakes Local Environmental Plan 1996.

The Department has assessed the proposal against the relevant provisions in these instruments (Appendix A), and is satisfied that the proposal is consistent with their aims, objectives and requirements.

**4. ISSUES RAISED IN SUBMISSIONS**

Between 6 and 26 April 2006, the Department exhibited the application in accordance with the requirements for public participation in the Environmental Planning and Assessment Regulation 2000.

During the exhibition period, the Department received 40 submissions on the proposal:

- 5 from Government agencies (Department of Environment and Conservation (DEC), Department of Primary Industries (DPI), Department of Natural Resources (DNR), Great Lakes Council (GLC), Hunter Regional Development Committee – Roads Transport Authority (RTA);
- 5 from interest groups (NSW Farmers Association - Stroud Branch, Garigal Aboriginal Community Inc, Gloucester Environment Group, Johnsons Creek Conservation Committee, Econetwork); and
- 30 from the general public.

None of the Government agencies objected to the proposed modification. However, the DEC raised concerns about the Duralie Coal's noise impact assessment and the need for additional mitigation measures by the mine; and both Council and the RTA recommended a number of conditions relating to road maintenance and inspection of local bridges.

All 35 submissions from the interest groups and general public objected to the proposal. The main grounds for objection in these submissions were:

- amenity impacts - including noise, dust, blasting and visual impacts;
- surface and ground water impacts - particularly on Mammy Johnson’s River; and
- cumulative impacts – particularly in relation to the proposed expansion of mining and gas exploration activities in the area.

The Department has assessed all the relevant issues raised in the various submissions in Section 5 of this report.
5. ASSESSMENT

5.1 Noise

Operational noise

Noise controls and criteria in the current consent for the Duralie coal mine pre-date the introduction of the DEC’s *Industrial Noise Policy* (INP). In 2003, Duralie Coal updated the noise criteria in the DEC’s Environmental Protection Licence (EPL) for the mine, but did not proceed to modify the noise criteria in the Minister’s consent. Consequently, Duralie Coal has an obligation to meet 2 different noise criteria; one from the EPL and one from the Minister’s consent. The proposed modification offers the opportunity to align the noise criteria in the consent with those of the mine’s EPL, and avoid the conflict and confusing of trying to ensure compliance with differing regulatory criteria.

The current consent requires Duralie coal to purchase, at the landowner’s request, 3 properties where noise impacts are predicted to significantly exceed (by more than 5 dB(A)) relevant noise criteria. To date, Duralie Coal has purchased 1 of these properties and included it in its buffer lands, while 2 properties (Holmes and Doherty) continue to have acquisition rights under the Minister’s consent.

Duralie Coal has implemented a Noise Management Plan required by the Minister’s consent, and generally been complying with the noise criteria in the EPL, although on some occasions exceedances of noise criteria have been recorded. Also, the mine has recorded relatively few complaints from the public about noise from its mining operations.

Duralie Coal has undertaken a noise impact assessment for the proposed modification in accordance with DEC’s INP. The results of the assessment indicate that the development (as modified) would increase noise impacts by, at most, 2 dB(A) and exceed the project specific noise levels at 11 privately owned residences and 6 parcels of privately owned vacant land (see Table 2). It is important to note that most of these exceedances are the result of the application of more stringent INP noise assessment criteria, rather than the marginal increase in predicted noise impacts.

### Table 2: Noise Exceedances – Private Residences

<table>
<thead>
<tr>
<th>Period</th>
<th>Noise Management zone</th>
<th>Noise Affectation zone</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>1 dBA to 2 dBA above criteria (36 - 37 dBA)</td>
<td>3 dBA to 5 dBA above criteria (38 – 40 dBA)</td>
</tr>
<tr>
<td>Daytime</td>
<td>Nil</td>
<td>22 Holmes 59 Hattam</td>
</tr>
<tr>
<td>Evening</td>
<td>51 Woodley</td>
<td>22 Holmes 52 Trigg 59 Hattam 60 Gibson</td>
</tr>
<tr>
<td>Night time</td>
<td>51 Woodley 129N Relton (old)</td>
<td>52 Trigg 53 Lyall 133 Guidice 134 Zulomovski 135 Hare-Scott 129S Relton (new)</td>
</tr>
</tbody>
</table>

Note: Refer to Figures 3A and 3B of the Duralie Extended Modification SEE for information about the numbering of properties in these tables.

The assessment assumes that Duralie Coal would continue to implement a range of noise mitigation measures in accordance with its approved Noise Management Plan, but argues that further mitigation is not warranted for the extension because:
• the proposed modification would only increase the noise levels of the mine as a whole by around 2 dB(A),
• the geometry of the pit, overburden emplacements and surrounding topography, combined with the fact that adverse weather conditions include temperature inversions, means that using noise bunds or barriers would not appreciably reduce the noise impacts of the mine; and
• the cost of further mitigation of noise through additional noise attenuation of mining equipment is not justified given the significant cost involved in fitting this equipment and the minor increase in noise associated with the proposed modification.

However, in response to concerns raised by DEC, the Applicant is also proposing to undertake additional noise mitigation measures (such as double-glazing, insulating residences, and installing air conditioning) at affected residences at the request of the landowner, and has committed to acquire quieter equipment when purchasing or replacing mining plant and/or equipment in the future.

Both the DEC and the Department are generally satisfied that the existing and proposed noise mitigation measures are reasonable and feasible, and accept that further mitigation of noise through additional noise attenuation of mining equipment is not warranted for the proposed modification.

However, the Department notes that even with the implementation of the additional mitigation measures, the residual noise levels are expected to exceed the project specific noise levels at a number of residences and parcels of vacant land.

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 3 dB(A) to 5 dB(A) to be marginal, and an exceedance of greater than 5 dB(A) to be significant.

Using this as a guide, the Department believes the project would cause significant exceedances (> than 5dB(A)) of the project specific noise levels at 5 privately owned residences (see Table 2) and 1 privately owned parcel of vacant land (106 – Mudford). For these properties, the Department believes that Duralie Coal should be required to acquire these properties, at the request of the landowner, in accordance with the Department’s land acquisition procedures.

For the remaining properties where noise levels are expected to exceed the project specific noise levels by between 1 and 5 dB(A), the Department has recommended conditions of consent that set appropriate noise limits. Exceedances of these limits would trigger a process of implementing strategies to mitigate noise levels (e.g. double glazing, air conditioning, etc); and, if at some stage these noise levels were to exceed 40 dB(A), then Duralie Coal would also be required to acquire the property at the owner’s request.

**Rail noise**
The Duralie Coal is proposing to increase the number of train trips from the site to the nearby Stratford coal mine from an average of 2 to 2.5 per day. There would be no changes to the maximum number train trips per day (currently 4) or the hours of operation (currently 7 am to 10 pm).

The ARTC operates the North Coast Railway and noise emissions are regulated by its Environmental Protection Licence 3142. Duralie Coal has adopted the noise goals in the ARTC licence for its rail noise assessment:

- **day time** - 65 dB(A) L_{Aeq(15 hour)}
- **night time** - 60 dB(A) L_{Aeq(9 hour)}
- **maximum** - 85 dB(A) L_{Amax}
The assessment indicates that the proposed increase in average train journeys would result in an increase in the existing noise level of around 1 dB(A) (from 61 to 62 dB(A)) at 50 metres from the rail line.

Both the DEC and the Department are satisfied that the proposed increase train movements would not result in any additional exceedances of the relevant rail noise goals, and would not have a significant impact on the amenity of residents along the rail line between Duralie and Stratford coal mines.

Notwithstanding, some submissions raised concerns about the existing rail noise impacts from the mine, and the Department believes Duralie Coal should be required to investigate ways to reduce off-site rail noise impacts, and report on the implementation and effectiveness of these measures.

**Conclusion**

The Department and the DEC are satisfied that Duralie Coal has assessed the potential noise impacts of the proposal in accordance with relevant DEC guidelines, and that the proposed extension would not appreciably increase the noise impacts of the mine.

Nevertheless, the results of the INP noise assessment indicate that, even after the implementation of all reasonable and feasible mitigation, the proposed modification would result in exceedances of the noise criteria at up to 17 properties (including 11 residences) during adverse weather conditions. The noise exceedances at 6 of these properties (5 residences and 1 vacant land) would be significant, and the Department believes these landowners should be entitled to have their properties purchased by Duralie Coal should they wish to do so.

To minimise and manage the residual noise impacts of the proposed modification, the Department believes Duralie Coal should be required to:

- implement all reasonable and feasible mitigation measures;
- comply with operational noise criteria;
- establish an ongoing noise monitoring program, to assess compliance with the noise criteria;
- investigate ways to reduce the noise generated by the development, including off-site rail noise;
- notify potentially affected landowners about their rights under the consent;
- implement additional noise mitigation measures (at the request of the landowner) at residences in the acquisition zone, and for those properties where subsequent noise monitoring demonstrates the project is exceeding operational criteria by 3 dB(A) or more; and
- acquire affected properties if the subsequent noise monitoring demonstrates that the project is exceeding the operational noise criteria by more than 5 dB(A), unless there is a valid noise agreement between Duralie Coal and the affected landowner.

### 5.2 Air Quality

Duralie Coal has undertaken an air quality assessment for the proposed modification using the modelling results from the 1996 EIS and recent monitoring data from the mine’s dust monitoring network.

The assessment indicates that the development (as modified) would not result in a significant increase in dust emissions, and would comfortably comply with relevant DEC air quality criteria (deposited dust, Total Suspended Particulates, and PM$_{10}$) at all residences surrounding the mine. This conclusion is supported by monitoring data which indicates that the annual average concentrations for deposited dust, PM$_{10}$ and TSP (which include the existing operations at Duralie) are well below the relevant DEC criteria (see Table 2). It is
also supported by the fact that the proposed extension would be within the envelope originally approved by the Minister in 1997, and would not bring open cut mining operations much closer to any privately owned residences when compared with the current mine footprint.

**Table 2 – Air Quality Assessment and Monitoring Results**

<table>
<thead>
<tr>
<th>Parameter</th>
<th>1996 Prediction</th>
<th>Background (Based on 2005 Monitoring Results)</th>
<th>Assessment Criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Dust Deposition</td>
<td>1 g/m²/month</td>
<td>0.5 g/m²/month</td>
<td>2 g/m²/month</td>
</tr>
<tr>
<td>TSP</td>
<td>20 µg/m³ + background</td>
<td>*17 µg/m³</td>
<td>90 µg/m³ (annual)</td>
</tr>
<tr>
<td>PM₁₀</td>
<td>*12 µg/m³ + background</td>
<td>10 µg/m³</td>
<td>30 µg/m³ (annual) 50 µg/m³ (project only)</td>
</tr>
</tbody>
</table>

* Based on a assumed ratio of PM₁₀:TSP of 60%.

A number of submissions raised concerns about dust emissions from the transportation of coal in uncovered rail wagons. However, Duralie Coal argues that the use of uncovered coal rail wagons is standard operating procedure throughout Australia, and that once loaded, the surface of the coal armours rapidly with finer particles being protected by coarser material that is resistant to wind erosion. In addition, Duralie Coal notes that the transport of coal from Duralie to Stratford via rail would not significantly increase as a result of the modification. The Department is satisfied with this response, and believes that the additional dust emissions from trains would be negligible.

The Department and the DEC are satisfied with Duralie Coal’s assessment of air quality impacts, and are confident that the development (as modified) can comply with relevant DEC air quality criteria, and is unlikely to have a significant impact on the amenity of surrounding residents. However, to ensure that the residual air quality impacts of the development are minimised and managed, the Department believes Duralie Coal should be required to:

- comply with the relevant DEC air quality criteria;
- establish and maintain an air quality monitoring program; and
- implement the mitigation measures proposed in the SEE.

### 5.3 Water Resources

The proposed extension would not result in any significant changes to the operational water management system at Duralie, except for some augmentation of existing upslope clean water diversion systems, and some changes to the mine’s water balance as a result of the additional 24 hectares of open cut mining in the extension area.

At present, dirty water for mine operational areas is pumped to the mine water dam and used for dust suppression and irrigation of several areas within the Mining Lease. Rainfall runoff from irrigation areas and catchment areas unaffected by mining activities (clean water) is discharged to Mammy Johnson’s River.

Duralie Coal has reviewed the water balance for the mine. This review indicates that there would be a small increase in the water pumped to the mine water dam of around 5 percent, but that this additional inflow can be managed through the mine’s existing water management system with no increase in the risk of off-site discharges to local waterways, including Mammy Johnson’s River. The review also indicates that the proposed extension would not significantly alter the existing groundwater impacts of the development, and that groundwater inflow into the pit would essentially remain unchanged.
The Department is generally satisfied with Duralie Coal’s surface and ground water assessment, and believes that the proposed modification is unlikely to result in any significant impacts on surface and ground water resources in the areas surrounding the mine.

Notwithstanding, the Department believes that Duralie Coal should be required to revise its Site Water Management Plan to reflect current best practice in the mining industry, and take into account the changes associated with the proposed extension. To this end, the Department believes the revised Site Water Management Plan should include:

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

### 5.4 Rehabilitation and Final Landform

The proposed extension, together with an increase in the projected overburden production from the approved pit, would increase total waste rock production from 19 million bank cubic metres (Mbcm) to around 35 Mbcm over the life of the mine.

The majority of the additional overburden would be accommodated by increasing the maximum elevation of the existing in-pit emplacement to RL 110 metres (10 metres higher than currently approved). The remainder would be accommodated by extending the existing out-of-pit emplacement area by approximately 5 hectares across an area between the existing pit and the emplacement area (see Figure 2). The resultant final landform would extend directly from the current waste emplacement area westwards and slope down towards the existing pit limit near the mine water dam.

The extension of the open cut to the north would be backfilled to the current ground level, consistent with the adjacent open cut area, and there would be no significant changes to the geometry of the final void to the north of the site.

Duralie Coal proposes to progressively rehabilitate the site in accordance with its approved Mining Operations Plan and Landscaping and Revegetation Management Plan, and return the land to a mixture of woodland and agricultural land uses.

The Department is generally satisfied that the proposed extension would not significantly alter the final landform or the potential future uses for the site. However, the Department believes that Duralie Coal should be required to strengthen and clarify the rehabilitation objectives for the site, including consideration of future uses of any final void/s, in consultation with relevant government agencies and Council. To this end, the Department believes Duralie Coal should prepare a comprehensive Rehabilitation and Landscape Management Plan for the development which includes:

- the rehabilitation objectives for the site;
- a description of the short, medium and long term measures that would be implemented to rehabilitate the site, and manage remnant vegetation and habitat on the site;
- detailed assessment and completion criteria for the rehabilitation of the site;
- a final void management plan;
- a mine closure plan; and
- a program to monitor the performance of the rehabilitation over time.
5.5 Flora and Fauna

The proposed modification would disturb approximately 23 hectares of land including 8 hectares of regenerating woodland, 4 hectares of Riparian Open Forest, and 11 hectares of secondary grassland.

Eight-part tests of significance were prepared for 10 threatened species and 2 endangered ecological communities considered to possibly occur within the extension area, and it was determined that the proposal is unlikely to significantly affect any threatened species or endangered ecological communities.

To minimise the potential flora and fauna impacts of the proposal, Duralie Coal proposes to implement a range of flora and fauna management measures and revegetate areas disturbed by mining as part of the rehabilitation plans for the mine.

The Department notes that the regenerating woodland to be cleared as a result of the proposed extension has only regenerated because of improved land practices implemented by Duralie Coal since the mine was approved in 1997, and the Department believes that the clearing of regenerating woodland and the Riparian Open Forest can be adequately compensated for through the rehabilitation and revegetation of the site. In the longer term, the Department also believes that the progressive rehabilitation and revegetation of the site has the potential to achieve significant biodiversity benefits in the area.

Both DEC and the Department are generally satisfied with Duralie Coal’s flora and fauna assessment, and agree that the proposed extension would not significantly affect any threatened species or endangered ecological communities. However, the Department believes that Duralie Coal should be required to better articulate how the progressive rehabilitation and revegetation of the site would achieve long term beneficial biodiversity outcomes as part of the Rehabilitation and Landscape Management Plan described above.

5.6 Cumulative Impacts

A large number of submissions raised concerns about the cumulative impacts of mining activities in the area, and the lack of consideration of Duralie Coal’s future expansion plans at the Duralie coal mine in its current SEE.

The Department understands that many of these concerns have arisen as a result of recent information published by Duralie Coal which outlined various options for the future expansion of Duralie coal mine. However, the Department notes that these potential options for expansion do not form part of the current modification application, and would be subject to a separate assessment process if Duralie Coal lodges an application for these works at some stage in the future.

In regard to cumulative impacts, the Department notes that the only other coal mine in the area is the Stratford coal mine which is owned and operated by Duralie Coal. The Stratford mine is located approximately 20 kilometres north of Duralie, and is located within a different catchment area. Consequently, the Department does not believe there would be any significant cumulative impacts (dust, noise or water-related impacts) associated with the proposed extension to Duralie and the Stratford mine.
## 5.6 Other Issues

<table>
<thead>
<tr>
<th>Impact</th>
<th>Consideration</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visual Impact</td>
<td>Duralie Coal argues that potential visual impacts associated with the proposed modification would be limited because the proposed extension to the open cut and overburden emplacement areas are located in an areas that would be generally screened from residences and other public viewing locations by the existing overburden emplacement area and Tombstone Hill. The Department generally accepts Duralie Coal’s arguments, and agrees that the proposed modification would not significantly alter the visual impacts of the approved development. Notwithstanding, as part of the Rehabilitation and Landscape Management Plan, the Department believes Duralie Coal should be required to rehabilitate and landscape the site to minimise visual impacts.</td>
</tr>
<tr>
<td>Aboriginal Heritage</td>
<td>Land disturbance associated with the modification would be within an area that has previously been surveyed in 1981 and 1995. Based on these surveys there are no known Aboriginal sites and the likelihood of identifying Aboriginal sites is considered low. Duralie Coal has an Aboriginal Heritage Management Plan in place which involves pre-clearance surveys and monitoring of top-soil stripping works. Existing conditions require Duralie Coal to cease work and contact DEC if any artefacts are identified. The Department is satisfied that the proposed modification would not have a significant affect on Aboriginal heritage, and considers that the ongoing implementation of the Aboriginal Heritage Management Plan would provide an appropriate level of protection.</td>
</tr>
<tr>
<td>Road Transport</td>
<td>The increased intensity of mining on the site would require a minor increase in the number of deliveries for fuel, parts, explosives, and labour. Duralie Coal believes that the predicted increase would not be discernable from the general weekly traffic flows along The Bucketts Way and would not lead to any capacity or road safety issues on the local road network. However, both the RTA and Council believe that Duralie Coal should be required to pay road maintenance contributions to Council and to contribute to structural engineering inspections of bridges along The Bucketts Way. Duralie Coal has agreed to pay the contributions recommended by the RTA and Council, and the Department has incorporated these requirements in the recommended conditions of consent.</td>
</tr>
<tr>
<td>Potential Acid Forming (PAF) Waste Rock Management</td>
<td>Approximately 14% of waste rock over the remaining life of the mine would be PAF. There are existing separation, storage and monitoring procedures in place for handling the PAF waste rock at the mine. These measures would also be applied to the management of the any additional PAF waste rock mined in the proposed extension area, and the Department is satisfied that no additional management or monitoring requirements over and above those already being implemented by Duralie Coal at the site are warranted.</td>
</tr>
</tbody>
</table>
6. RECOMMENDED CONDITIONS

The recommended conditions are required to:

- prevent, minimise, and/or offset any adverse impacts of the proposal;
- update the existing conditions to reflect current regulatory standards for acceptable environmental performance;
- require regular monitoring and reporting in accordance with current best practice; and
- ensure that long term rehabilitation and final land use objectives for the mine are satisfactorily achieved.

The Department believes these conditions strengthen the existing conditions of consent and appropriately reflect current best practice for the regulation of coal mines in NSW.

Duralie Coal has accepted the recommended conditions of consent.

7. CONCLUSION

The Department has assessed the modification application, SEE and submissions on the proposal in accordance with section 79C of the EP&A Act, and is satisfied that Duralie Coal has adequately assessed the environmental impacts of the proposed modification, and that the proposed modification and associated environmental impacts remain substantially unchanged from those of the approved development.

Notwithstanding, the Department has recommended a range of conditions to ensure the Applicant complies with relevant environmental performance criteria, and updates its existing management and monitoring programs for the development to reflect current best practice.

Additionally, the application of stringent INP noise impact criteria would provide improved protection for local residents, either by provision acquisition rights, at the landowner’s request, for an increased number of affected properties, or access to noise mitigation measures (such as double glazing or air conditioning) for residents who do not wish to sell their property.

While it is recognised that the proposed modification would extend the footprint of the mining area by 24 hectares, the Department believes that with the progressive rehabilitation of the site and the implementation of a Rehabilitation and Landscape Management Plan long term beneficial biodiversity outcomes would be achieved. The Department is also satisfied that Mammy Johnsons River would be protected by the implementation of comprehensive water monitoring and management plans at the mine.

Importantly, the proposed extension would also generate social and economic benefits by creating additional employment for up to 10 people and allowing the recovery of an additional 3.4 million tonnes of ROM coal over the life of the mine.

The Department is satisfied that the site is suitable for the development, and on balance, the benefits of the proposal outweigh the potential costs. Consequently, the Department considers that the proposed modification is in the public interest, and should be approved, subject to strict conditions of consent (see Tag B).
8. RECOMMENDATION

It is RECOMMENDED that the Minister:
• consider the findings and recommendations of this report;
• determine that the development to which the consent as modified relates is substantially the same development as the development for which consent was originally granted and before that consent as originally granted was modified (if at all);
• approve the proposed modification under section 96(2) of the *Environmental Planning and Assessment Act 1979*; and
• sign the attached notice of modification (Tag B).

Mike Young  
**Mining & Extractive Industries**

Yolande Stone  
**A/Executive Director**  
**Sustainable Development Assessments**
APPENDIX A - ENVIRONMENTAL PLANNING INSTRUMENTS

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

The proposal is affected by the provisions of SEPP 11, as an ‘extractive industry or mining’ (Schedule 1(m)). As such, the application was referred to the RTA, who subsequently confirmed that it had no objection to the proposal, subject to the imposition of certain conditions. These conditions have been incorporated into the recommended conditions of consent.

B.2 SEPP No.44 – Koala Habitat Protection

The SEE 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.

B.3 SEPP No.55 – Remediation of Land

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

B.4 Great Lakes Local Environment Plan 1996

The land subject to the development application is zoned 1(a) General Rural under the Great Lakes Local Environment Plan (LEP) 2000.

Under clause 8 of the Great Lakes LEP “mines” are permissible with development consent on lands zoned Zone 1 (a) General Rural.