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NSW GOVERNMENT  
Department of Planning

# ASSESSMENT REPORT

## Moolarben Coal Mine Section 75W Modification

### 1 BACKGROUND

In September 2007, the Minister approved the Moolarben Coal Project (MCP), which is located between the Ulan and Wilpinjong Coal Mines, about 40 kilometres northeast of Mudgee (Figure 1).

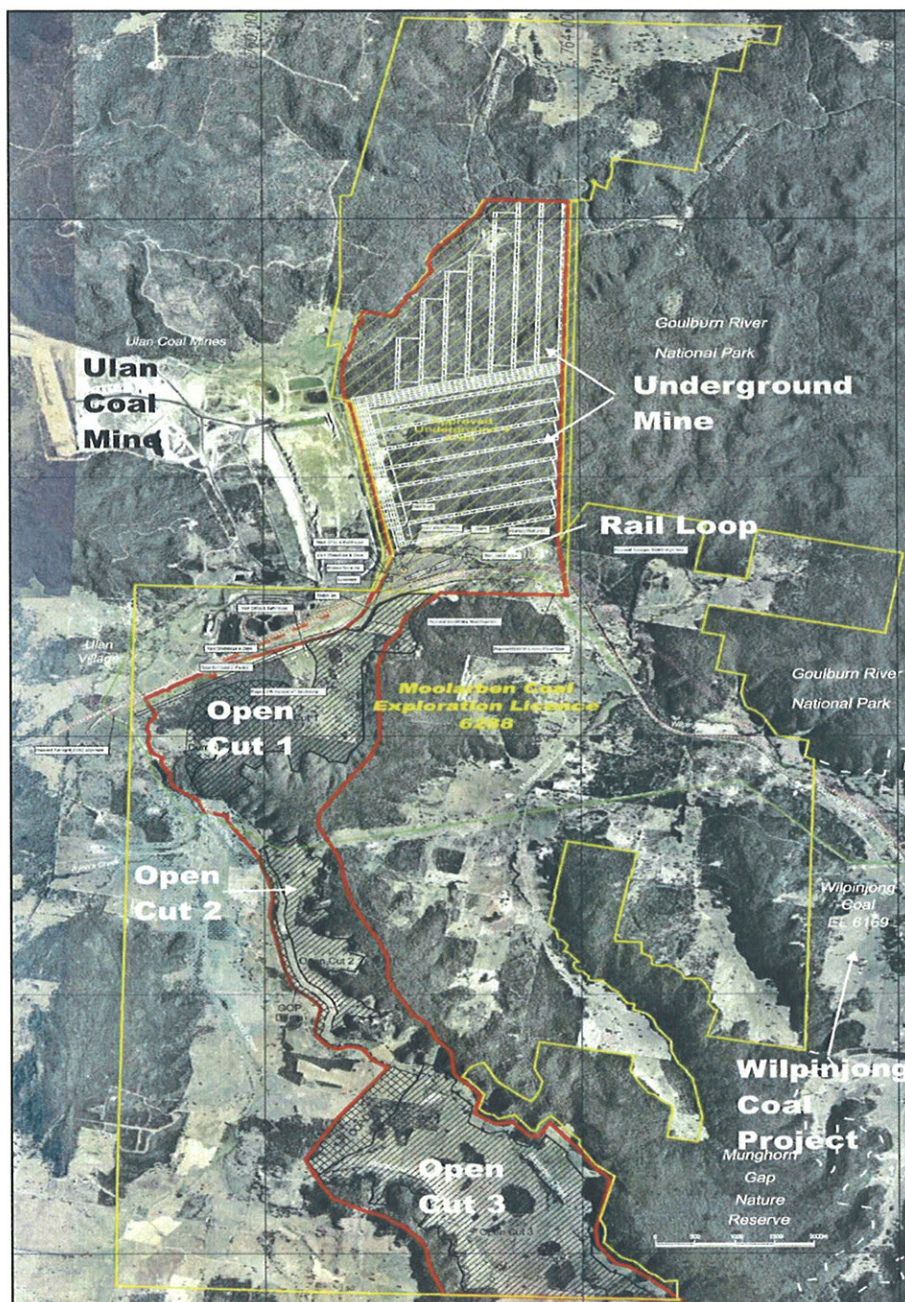


Figure 1: Moolarben Coal Project – Stage 1

Under this approval, Moolarben Coal Pty Limited (Moolarben) is allowed to:

- extract a coal resource of 127 million tonnes over a period of 21 years from 3 open cut pits and 1 longwall mining domain, at a combined rate of up to 12 million tonnes of run-of-mine (ROM) coal a year;
- construct a range of associated infrastructure, including a coal handling and preparation plant (CHPP), which has the capacity to process all ROM coal extracted from stages 1 and 2 (see below) of the MCP; and
- develop a coal loader and rail loop to allow all coal produced from the MCP to be railed to export and domestic markets.

This approval has subsequently been modified to:

- amend approval conditions relating to offsets and road works, and relocate and rearrange some items of infrastructure (including the approved "figure 8" rail loop); and
- allow preliminary construction activities to commence before the site access intersection was fully constructed.

Moolarben commenced construction of the mine in December 2008, and expects to start mining in March 2010.

Moolarben is now seeking approval for a major expansion of the mine under Part 3A of the *Environmental Planning & Assessment Act, 1979* (EP&A Act), and some modifications to its current approval to integrate the two mining operations. An Environmental Assessment (EA) for this proposal has been exhibited and Moolarben is currently preparing a response to the submissions received.

While this large proposal is being assessed, Moolarben is also seeking to modify the approval to allow the approved rail loop to be reconfigured (see Figures 2 and 3).

## **2 PROPOSED MODIFICATION**

The modified rail loop design has been enabled by Moolarben's recent acquisition of several properties to the west of the rail loop.

It has several advantages over the original design, in that it:

- reduces the footprint disturbance area by approximately 1.3 hectares (ha);
- provides better rail loading conditions because it is on a more level gradient;
- reduces capital and operating costs for Moolarben (estimated cost savings of approximately \$0.75 million due a 500m shorter track distance).

The proposed rail loop design is consistent with coal industry rail standards and would continue to allow two-directional entry and exit paths to transport coal to the Port of Newcastle via Muswellbrook or Ulan to Mt Piper/Wallerawang. The proposed design would not result in any change to the number of train movements or the train configuration.

The design of the modified rail loop would also require some minor changes to the shape and location of an approved 50 Megalitre (ML) groundwater storage dam and an approved 75ML groundwater treatment pond, both situated within the balloon loop. The function and capacity of both water facilities would remain unchanged.

The modification would not affect the planned construction or operational workforce numbers or the amount of traffic on adjoining public roads.

## **3 STATUTORY CONTEXT**

### **3.1 Modification**

The proposed modification represents a minor change to the approved rail loop, and does not involve changes to any of the mine's operating functions. Consequently, the Department is satisfied that the proposed modification would not involve a "radical transformation" of the project and that it can be determined under Section 75W of the EP&A Act.

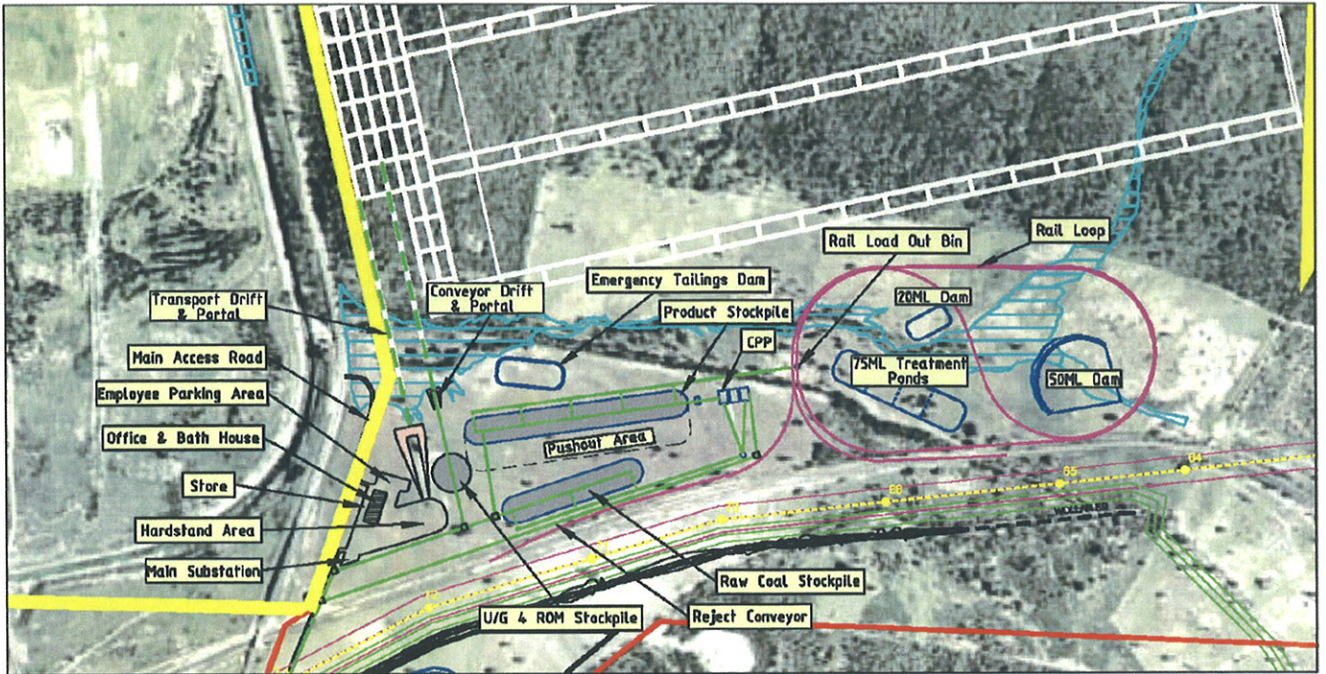


Figure 2: Moolarben Coal Project – Stage 1

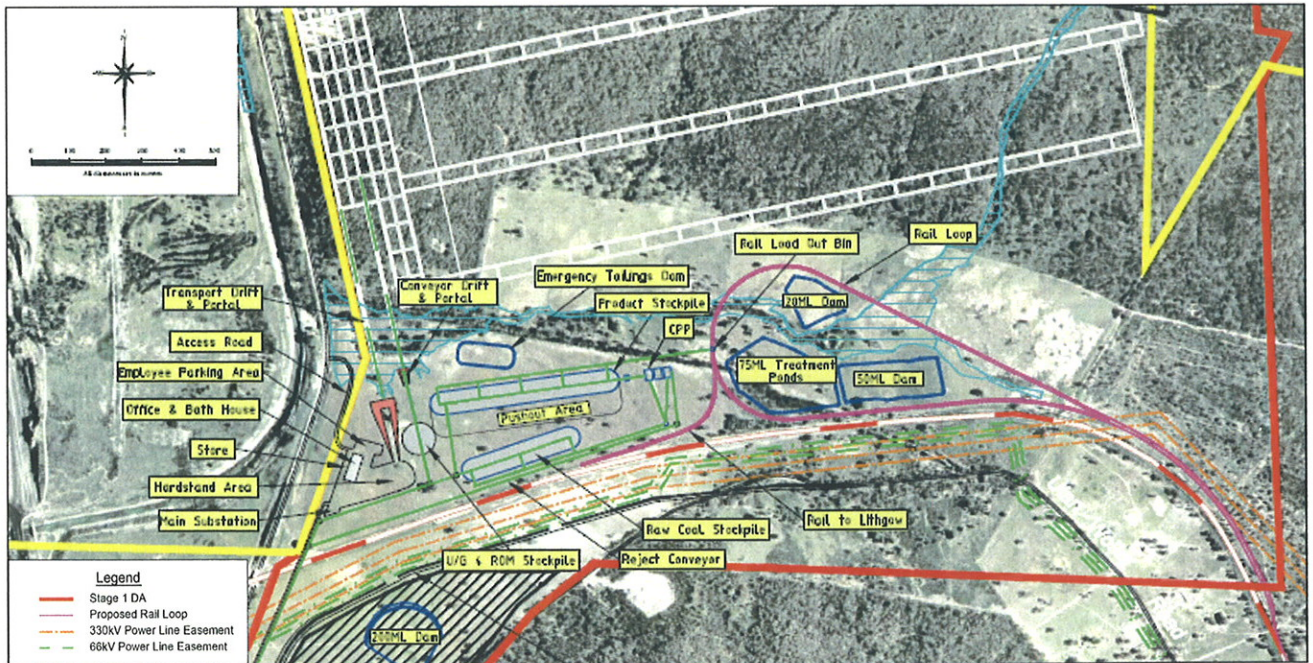


Figure 3: Proposed Rail Loop Design

### **3.2 Approval Authority**

The Minister was the approval authority for the original project application, and is consequently the approval authority for this modification application. However, as the proposed modification involves development with a capital investment of less than \$50 million and attracted less than 25 submissions, the Deputy Director-General of Development Assessment and Systems Performance may determine the application under the Minister's delegation of 4 March 2009.

## **4 CONSULTATION**

Under Section 75W of the EP&A Act, the Department is not required to notify or exhibit the application. However, after accepting the supporting documentation for the modification (Appendix A), the Department consulted with the Department of Environment and Climate Change (DECC) and the Department of Water and Energy (DWE) on the proposal. A full copy of the submissions is attached in Appendix B and a summary of the issues raised is provided below.

DECC was satisfied that the proposed changes would not result in additional impacts on air or water quality and would not generate any additional noise impacts. DECC indicated that the revised Statement of Commitments adequately addressed the potential impact of the proposal on Aboriginal sites and endangered ecological communities (EECs).

DWE was satisfied that the rail loop modification posed no additional threats to Bora Creek, but recommended conditions to protect flows and ensure the stability of the creek.

The Department has considered these issues in its assessment of the proposal.

## **5 ASSESSMENT**

The Department has assessed the merits of the proposal.

### ***Flora and Fauna***

The modified rail loop would require clearing of additional native vegetation and fauna habitat.

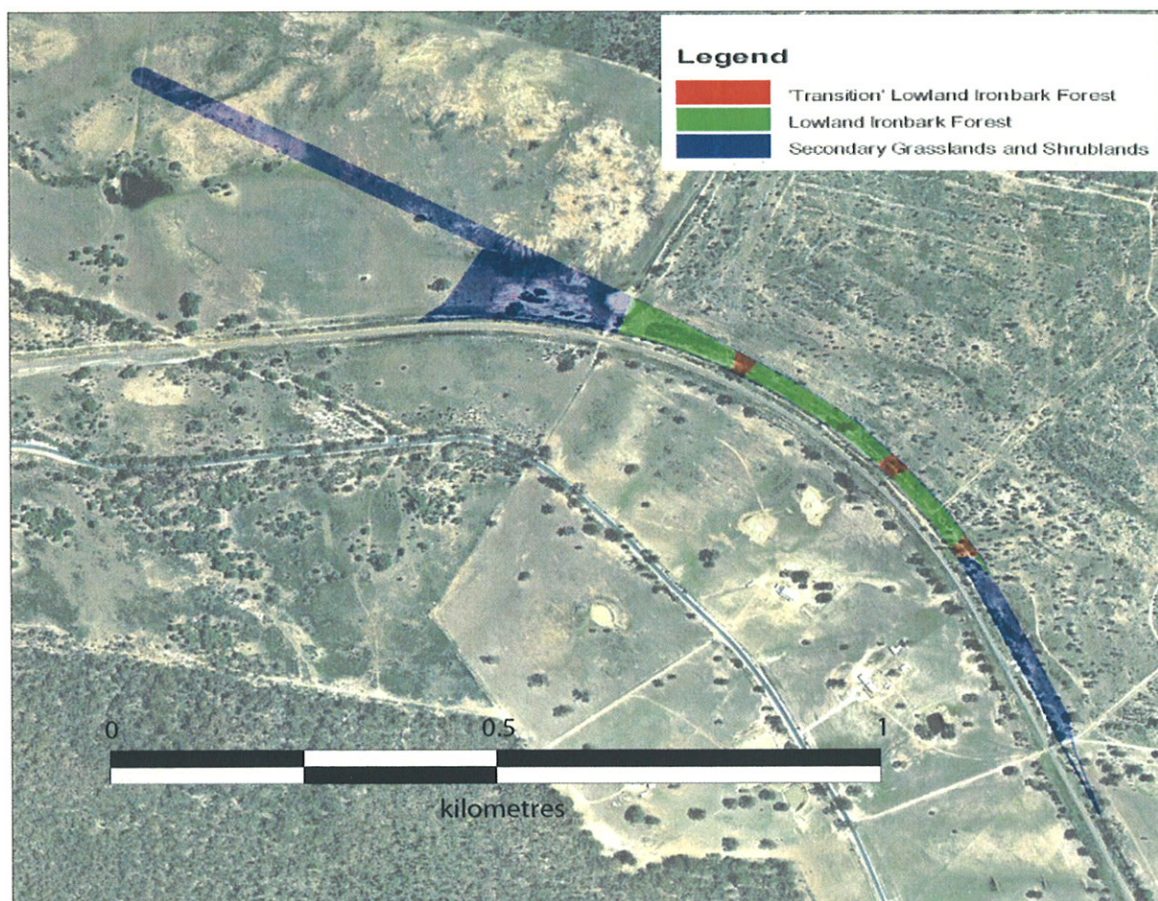
An Ecological Assessment was conducted by Ecovision Consulting Pty Ltd. The assessment found that the proposal would result in the clearing of 6 ha of native vegetation, comprising 1.7 ha of intact Lowland Ironbark Forest and 4.3 ha of Secondary Grasslands and Shrublands (see Figure 4). The Lowland Ironbark Forest contains approximately 0.2 ha of vegetation which is considered to be White Box Yellow Box Blackely's Redgum Woodland (WBYBBRW) and Derived Grasslands EEC/Critically Endangered Ecological Community (CEEC).

Whilst the area proposed for the rail loop has been disturbed by past agricultural practices, site surveys indicated that the area supports a range of native flora and fauna species. However, only 1 threatened fauna species (Diamond Firetail) and no threatened flora species were recorded during field surveys.

Moolarben has made a series of commitments to avoid, manage and mitigate these impacts. Most notably, the company proposes to compensate for the loss of additional EEC/CEEC by increasing the approved offset area from 130 ha to 135 ha and to revegetate an additional 6 ha of cleared land on the Red Hills property and adjoining lands.

DECC and the Department believe that the implementation of the offset strategies, when coupled with the proposed avoidance and management practices, would result in a net improvement in biodiversity in the medium to long term. The Department acknowledges that the additional offset area is in excess of the requirement stipulated within the approval.

Consequently, the Department has recommended modification of Condition 41(a) to add 5 ha to the required 130 hectares of WBYBBRW and modification of Condition 42(b) to add 6 ha to the required 143 ha of land to be revegetated. The Department is satisfied that the Rehabilitation & Offset Management Plan required under the existing conditions of approval would provide adequate long-term management of these areas.



**Figure 4: Site Vegetation**

**Other Issues**

Other residual environmental issues associated with the proposal are examined in the table below.

**Table 1: – Assessment of other issues**

<b>Issue</b>	<b>Consideration</b>
<i>Aboriginal Heritage</i>	<ul style="list-style-type: none"> <li>• An Aboriginal Cultural Heritage Assessment was undertaken by Archaeological Risk Assessment Services which indicated that the study area has low potential for Aboriginal heritage.</li> <li>• The site survey identified four sites, consisting of three Isolated Finds and one Artefact Scatter and Potential Archaeological Deposit (PAD). The Isolated Finds are of low significance and the Artefact Scatter and PAD is of medium significance.</li> <li>• MCM has committed to undertaking sub-surface testing and surface collection in accordance with methodology currently being applied under the approved MCP Stage 1 Aboriginal Heritage Plan (HMP).</li> <li>• DECC and the Department are satisfied that the sites can be effectively managed through the approved HMP, provided that it is updated to include these sites.</li> </ul>
<i>Water Resources</i>	<ul style="list-style-type: none"> <li>• The modified rail loop configuration would necessitate minor changes to the shape and location of the 50ML groundwater dam and the 75ML treatment ponds within the loop. However, the design, capacity and function of both water facilities would not change.</li> <li>• DECC and the Department are satisfied that the proposal would not result in any additional surface water or groundwater impacts than currently approved through the Environment Protection Licence (EPL) and project approval.</li> <li>• In its submission, DWE recommended that specific response measures should be developed and put in place to manage erosion or other destabilisation to Bora Creek as a result of flow constriction. The Department agrees with this recommendation, and believes that the water management plans required in the existing approval conditions adequately addresses this issue. The Department also notes that DWE will be consulted during the preparation of these plans.</li> </ul>

<i>Noise</i>	<ul style="list-style-type: none"> <li>The proposal would not move any component of the coal processing facilities, including the rail loading point, and would not change the number of train movements or the train configuration.</li> <li>Consequently, the noise impact assessment indicated that there would be no measurable change in noise levels already predicted in the Stage 1 noise assessment.</li> <li>DECC and the Department are satisfied that the noise impacts associated with the modification would be negligible, and that project related noise impacts can be effectively managed through the Stage 1 Noise Management Plan(s) required in the existing approval conditions.</li> </ul>
<i>Air Quality</i>	<ul style="list-style-type: none"> <li>The area of disturbance required for the revised rail loop is approximately 1.3 hectares less than that required for the approved loop. This would require less earthworks and potentially result in less dust generation during construction.</li> <li>DECC and the Department note that the proposal would result in less dust-related impacts than currently approved, and that air quality can continue to be managed through the Stage 1 Air Quality Monitoring Program(s) required in the existing approval conditions.</li> </ul>
<i>Visual</i>	<ul style="list-style-type: none"> <li>There would be no material change to the visual impact assessment undertaken for Stage 1 of the MCP.</li> <li>The Department is satisfied that the proposal would not result in adverse visual impacts.</li> </ul>
<i>Social &amp; Economic</i>	<ul style="list-style-type: none"> <li>The assessment indicated that the proposal would not change the construction or operational workforce numbers.</li> <li>The revised rail loop design would save up to \$0.75 million dollars in construction costs and would provide better rail loading conditions.</li> <li>The assessment indicated that since the length of the rail loop has been reduced by 500 metres, less energy and fewer materials would be required to construct and operate the loop and this would result in reduced green house gas emissions.</li> <li>The Department is satisfied that the proposed rail modification would result in positive social and economic impacts.</li> </ul>

## 6 RECOMMENDED CONDITIONS

The Department has drafted recommended conditions for the modification. Moolarben has reviewed and accepted these conditions.

## 7 CONCLUSION

The Department has assessed the modification application, supporting documentation and submissions on the proposal in accordance with the relevant requirements of the EP&A Act, including the objects of the EP&A Act and the principles of ecologically sustainable development.

The assessment has found that the proposed modification of the rail loop would generate negligible environmental impacts above and beyond those associated with Stage 1. The Department is of the view that the incorporation of additional offset and revegetation areas into the Stage 1 approval, coupled with the implementation of management and mitigation strategies by the company, are acceptable.

The Department notes that there are clear operational and financial advantages associated with the modified rail loop, and is satisfied that these benefits sufficiently outweigh its costs.

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

## 8 RECOMMENDATION

It is RECOMMENDED that the Deputy Director-General, as delegate of the Minister:

- consider the findings and recommendations of this report;
- determine that the proposed modification would not "radically transform" the approved project;
- approve the application, subject to conditions; and
- sign the attached notice of modification (Appendix C).

*Kitto* 29/6/09

David Kitto  
Director, MDA

*[Signature]* 30/6/09  
Richard Pearson  
Deputy Director-General, DASP