



Planning

ASSESSMENT REPORT

Section 75W Modification Moolarben Coal Pty Ltd

BACKGROUND

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

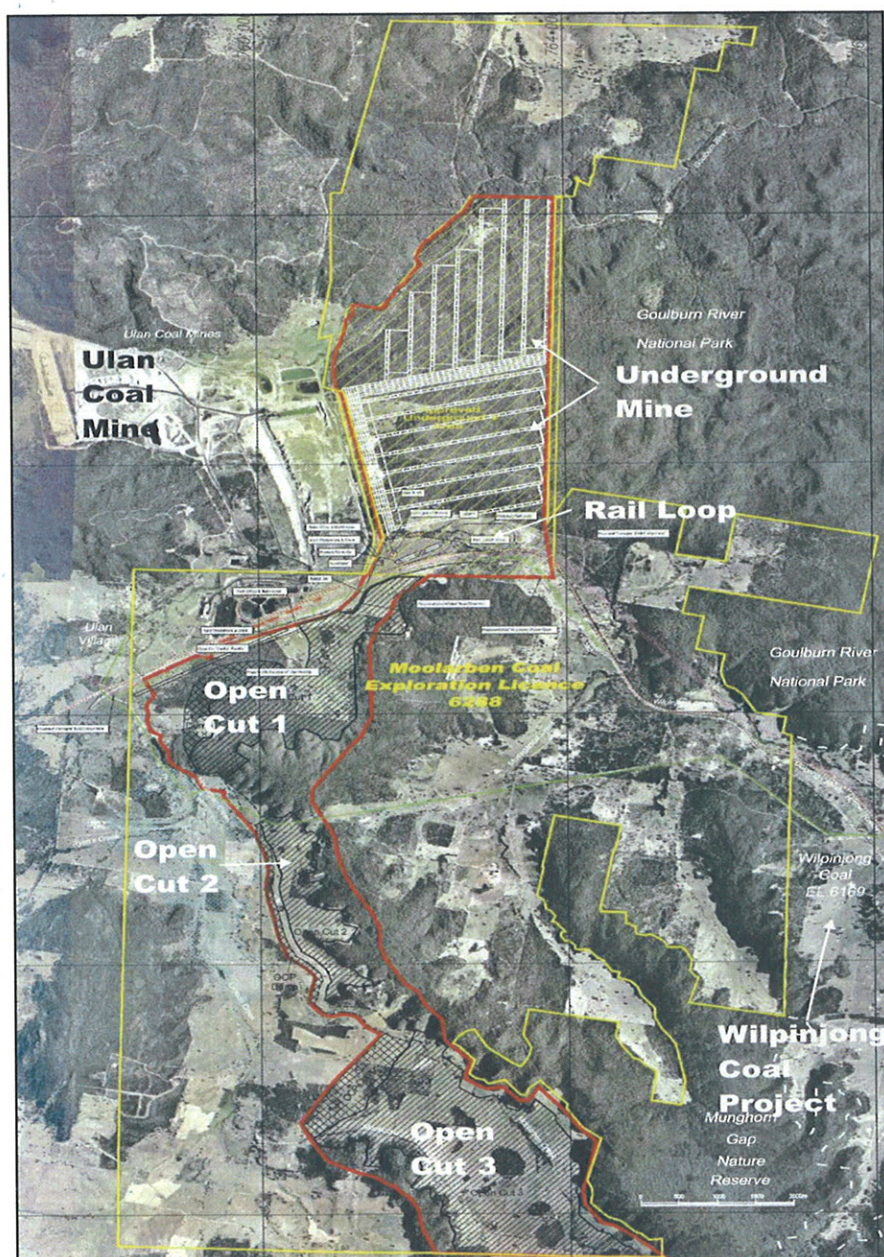


Figure 1: Moolarben Coal Project – Stage 1

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

- extract a coal resource of 127 million tonnes (Mt) over a period of 21 years from 3 open cut pits (up to 8Mt per annum) and 1 longwall mining domain (up to 4Mt per annum), at a combined rate of up to 12Mt per annum run-of-mine (ROM) coal;
- 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;
- allow preliminary construction activities to commence prior to the completion of site access intersection; and
- modify the design of the approved "figure 8" rail loop to a balloon loop.

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.

It is also seeking approval for some further amendments to the Stage 1 approval to accommodate several changes to the proposed layout of the mine that have emerged during the detailed design.

PROPOSED MODIFICATIONS

A description of Moolarben's proposed modifications to the Stage 1 approval is provided below.

Surface Infrastructure and Layout Changes

The approved and proposed surface infrastructure layouts are shown on Figures 2 and 3 respectively. Proposed infrastructure layout changes involve:

- **Relocation of ROM Coal Facilities** – Relocation of the open cut ROM coal facilities (ie. dump hopper, primary crusher, rejects bin and associated coal conveying facilities) from the approved location on the western edge of Open Cut 1 (OC1) to the south of the main infrastructure area. This will require the use of an additional 2 kilometres (km) of haul roads. The relocation would allow the integration of the Stage 1 and Stage 2 infrastructure and would provide Moolarben with improved coal handling efficiencies and reduced capital expenditure and operating costs.

If the construction of the open cut ROM coal facilities in the proposed location is not completed prior to commissioning of the mine¹, Moolarben proposes to use temporary ROM coal facilities for up to 12 months. The temporary facilities would be located within the OC1 footprint and would be capable of handling up to 5.5 Mtpa of ROM coal (ie. 70% of approved capacity).

- **Relocation of Open Cut 1 Support Infrastructure** – Relocation of OC1 support infrastructure (ie. office, workshop and associated facilities) from the approved location on the western edge of OC1 to an area approximately 500m to the northeast. Access will remain via the approved access road, off the Ulan-Wollar Road.
- **Ulan-Moolarben Water Sharing Pipeline** – Construction and operation of a water sharing pipeline from Ulan Coal Mine's (Ulan's) east pit to Moolarben's Stage 1 infrastructure area. Ulan has a net water surplus of approximately 2,720 mega litres per year (ML/year) and Moolarben is predicted to have a water deficit ranging from 310-960ML/year in years 6 to 16 (Stage 1 and 2

¹ The temporary facility would only be required if granting of the mining lease over the area in which the open cut ROM coal facilities are proposed to be developed is delayed due to third party objections.

combined). Moolarben has an agreement with Ulan allowing it to access 1,000 ML/year of this surplus water. This would reduce the requirement for Moolarben to extract groundwater to supplement its water supply and would assist Ulan in managing its on-site surplus water.

- **Mine Lease Boundary Fence** – In order to construct a fence around part of the western boundary of the MCP Mining Lease 1606, Moolarben cleared a swath of about 3.9 hectares (ha) of intact native vegetation. The impact of this clearing was not described or assessed in the Stage 1 EA or subsequent modifications. Moolarben is proposing to update the Stage 1 project approval to specifically include these clearing operations.
- **Additional Water Storage** – Construction of an additional 200 mega litre water storage dam within the footprint of OC1. The dam would be part of the initial water management infrastructure for OC1 and would be mined through in subsequent years.

Extended Construction Hours

In order to meet contractual coal supply obligations, Moolarben proposes to extend construction hours from daylight hours (ie. 7am – 6pm), 7 days a week, to 24 hours, 7 days a week until March 2010. Night-time construction works would be restricted to limited construction works within the main infrastructure area. Construction noise would be required to comply with the night-time noise impact assessment criteria approved for Stage 1 operations.

Stage 1 Project Boundary Amendments

Moolarben seeks to modify the approved Stage 1 project boundary to accommodate the proposed relocated open cut ROM coal facilities and the water sharing pipeline (Figure 3). It also proposes to adjust the Stage 1 boundary to the east of Underground 4 (UG4) to align it with an adjustment that was made to the adjoining Goulbourn River National Park boundary (Figure 3).

Amendment to Condition of Approval

Moolarben seeks to amend Condition 7 of Schedule 3 of the Stage 1 approval so that increased construction noise criteria applies to construction of the noise bund and not to the first six months of construction.

The modifications described above have several advantages over the original proposal, in that they:

- rationalise the infrastructure designs to allow capital savings during construction;
- minimise environmental impacts by:
 - relocating certain noise and dust generating activities further away from sensitive receivers.
 - reducing the need to extract groundwater for on-site use;
- allow construction and commission of the Stage 1 mine by March 2010, so that Moolarben can meet its contractual obligations for the supply of coal; and
- allow Moolarben to lawfully construct the Stage 1 project in accordance with the Stage 1 approval.

The proposed modifications would not alter the size of the mine, the methods of mining, the rate of coal extraction or production, the method and frequency of off-site coal transport, or the workforce numbers to that approved for Stage 1.

STATUTORY CONTEXT

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 modifications involve development with a capital investment of less than \$50 million and generated less than 25 submissions, the Executive Director, Major DA Assessments, may determine the application under the Minister's delegation of 4 March 2009.

Modification

The proposed modifications do not involve changes to any of the mine's operating functions. Consequently, the Department is satisfied that the proposed modifications would not involve "radical transformation" of the project and that they can be determined under Section 75W of the EP&A Act.

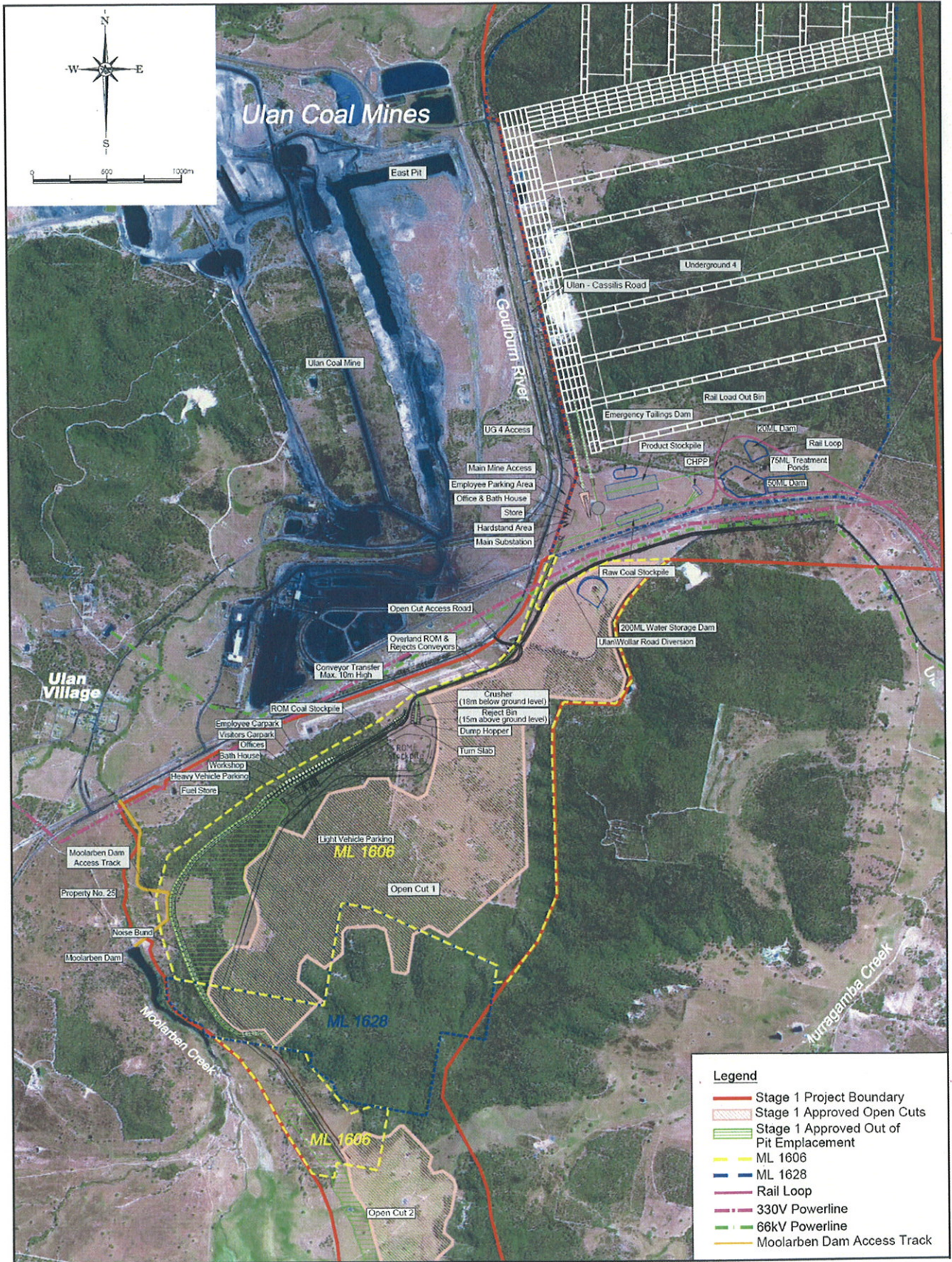


Figure 2: Moolarben Coal Project – Approved Stage 1 Infrastructure Layout

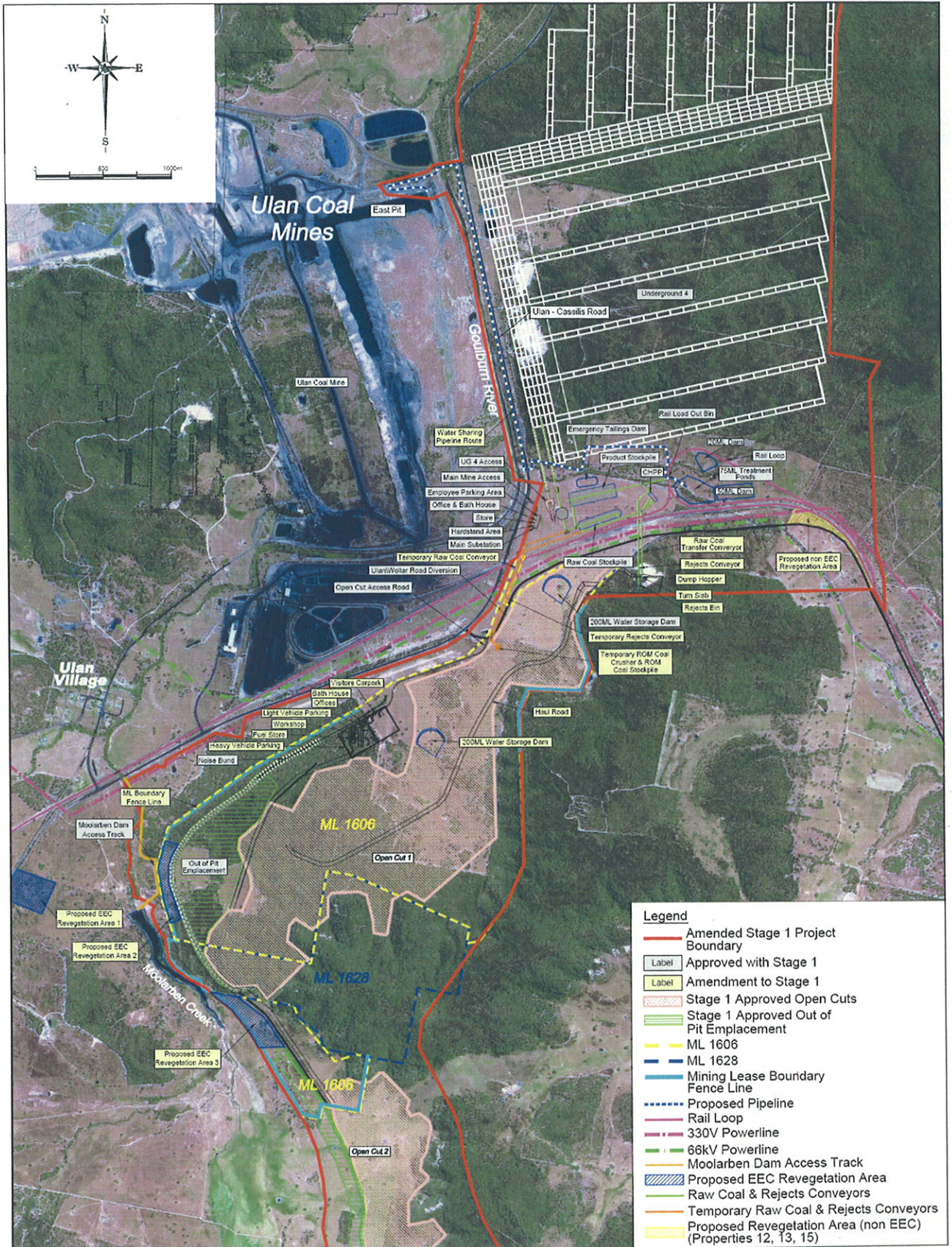


Figure 3: Moolarben Coal Project – Amended Stage 1 Infrastructure Layout

CONSULTATION

The Department is not required to notify or exhibit applications under section 75W of the EP&A Act. However, after accepting the modification application and EA, the Department:

- placed the EA on exhibition from 3 to 17 August 2009 at:
 - the Department's Information Centre and on its website;
 - Mid-Western Regional Council's offices;
 - Nature Conservation Council's offices;
- notified relevant State government authorities, Mid-Western Regional Council and Xstrata Coal Pty Ltd (owner of Ulan Coal Mine) by letter; and
- advertised the exhibition in the Mudgee Guardian on 3 and 7 August 2009.

During the exhibition period, the Department received a total of 22 submissions on the project, including:

- 6 from public authorities;
- 2 from special interest groups; and
- 14 from the general public.

A summary of the issues raised in submissions is provided below.

Government Agencies

All of the government authorities were generally supportive of the proposal, however most expressed some residual concerns with certain aspects of the proposed modifications and provided recommendations to minimise potential environmental impacts. The key issues raised by each authority are considered below.

The Department of Environment and Climate Change – now part of the **Department of Environment, Climate Change and Water** (DECCW) - supports the Statement of Commitments contained within the EA with respect to mitigating the potential impacts on air quality, noise, biodiversity, cultural heritage, and soil and water. However, DECCW requested changes to the commitments in relation to biodiversity and cultural heritage.

The Department of Water and Energy – now the **NSW Office of Water** (NOW) within DECCW - indicated its support for the on-supply transfer of water and the water sharing agreement. It provided recommendations in relation to the metering and accounting of transfer water and annual reporting.

The Department of Primary Industries – now part of the **Department of Industry and Investment** (DII) – was satisfied that the proposed modification could be adequately managed by the Mining Rehabilitation Environmental Management Process, and therefore indicated its support of the proposal.

The **Hunter-Central Rivers Catchment Management Authority** (CMA) did not object to the proposal because it is excluded from assessment under the *Native Vegetation Act 2003*.

The Roads and Traffic Authority – now part of the **Department of Transport and Infrastructure** (DTI) - did not object to the proposed modification, but indicated that the proposed water pipeline crossing Ulan Road could compromise the capacity of the existing road culvert.

The **Mid-Western Regional Council** (MWRC) raised concerns about the potential for the proposed water pipelines under Ulan Road (MR 214) to compromise the capacity of the existing culverts. MWRC requested a hydraulic report be prepared prior to construction, and that Moolarben commit to repairing any damage to the culverts as a result of pipeline installation. In a second submission, MWRC indicated concerns about the extended construction hours and potential impacts on the neighbourhood in terms of noise, the use of flood lights and the increase in night time traffic. MWRC requested that the commitments in the EA to reduce these impacts be formalised in conditions of approval. The Department has done this in the recommended conditions of approval.

Special Interest Groups and General Public

There were 14 submissions from the general public and 2 from special interest groups. All but one of these submissions objected to the modifications. The main grounds for objection were:

- perceived illegal clearing of native vegetation containing a critically endangered ecological community (CEEC);

- impacts of the proposal on local natural features such as "the Drip" and the "Corner Gorge";
- noise as a result of 24 hours/day 7 days/week construction times;
- impacts of the proposal on the Goulburn River;
- greenhouse gas emissions; and
- inadequate vegetation offsets.

One submission generally supported the modification on the grounds of employment opportunities.

Moolarben has provided a response to the issues raised in submissions (see attached). The Department has considered the issues raised and Moolarben's response to these issues in its assessment below.

CONSIDERATION

The Department has assessed the application, EA, submissions, Moolarben's response to submissions and additional information on the proposed modifications. The following provides a summary of the key issues.

Flora and Fauna

Surface infrastructure and layout changes require clearing of additional native vegetation and fauna habitat to that approved in Stage 1. Some of this clearing has already been undertaken.

An Ecological Assessment was conducted by Ecovision Consulting Pty Ltd and included as an appendix to the EA. An updated Ecological Assessment was subsequently submitted to assess additional clearing associated with the ROM coal facilities. The updated assessment found that the proposal would result in the clearing of 10.33 ha of native vegetation, comprising about 1.3 ha White Box Yellow Box Blakely's Redgum Woodland (WBYBBRW) and Derived Grasslands EEC/CEEC.

The modification areas, particularly along the mining lease boundary fence, also contain habitat of moderate to high value for various threatened flora and fauna species. Site surveys indicated that the area supports at least four threatened fauna species listed in the *Threatened Species Conservation Act, 1995* (TSC Act).

Moolarben has already cleared approximately 3.9 ha of land, including the 1.3 ha of EEC/CEEC, to construct the mining lease boundary fence. After considering the merits of this matter the Department considers that it is appropriate for the fence to remain and approval be given for the prospective use of the fence. However, the Department cannot approve the retrospective construction of the fence.

The Department has conducted an assessment of the fence-line clearing and concludes that the area cleared was in excess of the area that would ordinarily be necessary for the construction and maintenance of a fence. A corridor of vegetation between 7.1 and 16.3 metres wide was cleared. The Department believes that a 4 metre wide corridor would have been more than adequate to construct and maintain the fence.

Moolarben has acknowledged that it did not have approval to undertake the 3.9 ha of clearing along the boundary fence and has subsequently offered a biodiversity offset to compensate for the loss of this vegetation, as well as the other 6.39 ha of clearing required for the construction of the ROM coal facilities. The location of these offsets is shown in Figure 3 and includes:

- protection of 4 ha of existing good quality WBYBBRW on Property 24 (Area 1);
- enhancement of 2.6 ha of regenerating WBYBBRW on Property 24 (Area 1);
- rehabilitating and revegetating two existing cleared areas (totalling 10 ha) on Property 46 with EEC species; and
- revegetating a further 4 ha of land (ie. 153 ha in total) on Properties R12, R13, R14, R15, R16, R17 and R19 (condition 42(b) of schedule 3 of the Stage 1 Approval) with suitable native vegetation.

The Department is satisfied that the implementation of the proposed offset strategy would result in a net improvement in biodiversity in the medium-long term. Consequently, the Department has recommended conditions requiring Moolarben to include these areas in the existing offset package required under the Stage 1 conditions of approval. The Department recommends that the

Rehabilitation & Offset Management Plan required under the existing conditions of approval be revised to include specific measures to provide adequate long-term management of these areas.

Noise

The EA includes a noise impact assessment undertaken by Spectrum Acoustics, specifically assessing impacts of night-time construction noise and operational noise levels associated with the proposed modifications.

The night-time noise assessment indicated that the limited construction activities proposed within the main infrastructure area would result in noise levels that are below the night-time operational noise criterion specified in the Stage 1 approval.

The operational noise assessment indicated that the relocation of the open cut ROM facilities - approximately 2 kilometres further away from the sensitive receivers (i.e. Ulan Public School and Property 25) - and the use of the proposed haul route would reduce the operational noise levels of the mine when compared to the levels approved for Stage 1.

Both the Department and DECCW agree with the conclusions of this assessment.

The Department notes that the only reason why Moolarben is currently restricted to carrying out construction during daylight hours is because it made a commitment to do this in its statement of commitments for the Stage 1 project. While this commitment was given effect by the conditions of approval, it is important to note that the Department seldom restricts the construction hours of mining projects. It tends to treat all noise as operational noise - unless there is a specific need for higher noise criteria to enable the construction of certain noise reduction measures, such as a noise bund; and it also tends to allow construction activities to be carried out whenever operational activities are allowed to be carried out. In Moolarben's case – the Stage 1 approval allows Moolarben to operate 24 hours a day, 7 days a week – which is consistent with what is approved at the neighbouring Ulan and Wilpinjong Coal Mines – and the Department consequently has no objection to construction being carried out 24 hours a day, 7 days a week.

The Department notes that construction of the noise bund has been delayed. Consequently, it has recommended that Condition 7 of Schedule 3 be amended to explicitly relate the six month period of approved increased construction noise goals to the construction of the noise bund.

Overall, the Department is satisfied that the noise impacts associated with the modifications would comply with the relevant noise criteria. The Department has recommended that the existing Stage 1 Construction Noise Management Plan be revised to include the noise-related commitments contained in the EA.

Other Issues

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

Table 1: – Assessment of other issues

<i>Issue</i>	<i>Consideration</i>
<i>Air Quality</i>	<ul style="list-style-type: none"> • An Air Quality Assessment was undertaken by PAEHolmes which indicated that air quality impacts associated with the proposed modifications would be minor. • Despite this, Moolarben has committed to a range of more stringent dust control measures than were proposed in Stage 1. These measures would result in a reduction in the dust levels originally predicted and would ensure that no residences would be impacted in the short or long term. • The Department supports the commitment to more stringent dust control measures and is satisfied that air quality impacts associated with the modifications would be minimal. • The Department recommends that the existing Construction Air Quality Monitoring Program for the mine be revised to include the more stringent air quality controls. • The proposal would not alter the amount of coal produced or exported from Stage 1. The Department is satisfied that the proposal would result in a negligible increase in greenhouse gas emissions beyond those approved in Stage 1.

<i>Aboriginal Cultural Heritage</i>	<ul style="list-style-type: none"> • An Aboriginal Cultural Heritage Assessment was undertaken by Archaeological Risk Assessment Services which indicated that the study area has low potential for Aboriginal heritage. • The site survey identified three isolated artefact sites along the proposed water sharing pipeline route. All three sites were assessed as being of low significance. All three sites would be impacted during the construction of the pipeline. • Moolarben has committed to a range of measures to minimise impacts on Aboriginal cultural heritage, the most notable of which involves salvaging the isolated artefact sites and storing them in the Keeping Place provided to the local aboriginal stakeholder groups as part of the Stage 1 approval. • DECCW recommended Moolarben strengthen the commitments made in the EA to protect items of Aboriginal cultural heritage and provided a recommended commitment to give this effect. In its response to submissions, Moolarben indicated that it will adopt this commitment. • The Department believes that the commitments contained in the EA, together with the measures contained in the existing approved Stage 1 Aboriginal Heritage Plan (HMP), are satisfactory to ensure protection of Aboriginal cultural heritage. • The Department recommends that the Stage 1 HMP be revised to include the three sites and the additional commitments made in the EA and submissions report.
<i>Water Resources</i>	<ul style="list-style-type: none"> • Construction of the proposed water pipeline between Ulan Coal Mine and the MCP would allow water resources to be shared between the mines and would reduce the requirement for Moolarben to extract groundwater from its approved borefield for water supply purposes. • The Department and NOW support the proposed water sharing arrangement and are satisfied that the proposed modification would result in beneficial use of regional water resources. • DTI and MWRC expressed concerns that the pipeline crossing Ulan-Cassilis Road could compromise the capacity of the existing road culvert. In its response to submissions, Moolarben committed to preparing a hydraulic report on the performance of the culvert prior to construction. The Department is satisfied that implementation of this commitment will ensure efficient operation of the culvert. • Numerous submissions from the general public expressed concerns that the proposal would adversely impact on the Goulburn River and significant local natural features such as the "Drip" and the "Corner Gorges". The modification does not propose any changes to mining activities that could result in loss of baseflow to the Goulburn River. Modifications are located over 5 kilometers from the local natural features. The Department and DECCW are therefore satisfied that the proposed modifications would not adversely affect Goulburn River or the local features. • DECCW 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. • The Department recommends that the Stage 1 construction Erosion and Sediment Control Plan be revised to include measures to protect creeks in the vicinity of the proposed construction areas.
<i>Lighting and Visual</i>	<ul style="list-style-type: none"> • The proposal would require 10 lighting towers in order to illuminate night time construction activities. The EA indicated that the closest residence is located more than 4 km away from the night-time construction activities and is therefore unlikely to be adversely affected. • Despite this, several submissions from the general public raised concerns about visual impacts as a result of night time lighting. • In its response, Moolarben stated that lighting for night time construction activities would be focussed on the working area and would be shielded to reduce potential direct offsite lighting impacts where possible. • The Department is satisfied that the proposal would not significantly impact on the existing visual amenity and that any potential visual impacts can be adequately managed in accordance with the existing lighting control conditions for the mine.
<i>Traffic</i>	<ul style="list-style-type: none"> • The proposed night-time construction activities would result in 20 additional one-way vehicle movements at about 6:00pm and 5:00am daily. • To minimise traffic impacts, Moolarben has committed to ensuring night time construction workers car pool. • The Department is satisfied that the increase in traffic movements is small and would not result in significant traffic impacts to the local road network.

RECOMMENDED CONDITIONS

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

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 modifications would generate negligible environmental impacts above and beyond those associated with the Stage 1 approval, and that they can be undertaken irrespective of whether the Stage 2 proposal is approved.

The Department is of the view that the proposed offset and revegetation areas, coupled with the implementation of management and mitigation strategies by the company, are acceptable. In a regional context, the Department believes that the implementation of the water sharing agreement between Ulan and Moolarben coal mines represents beneficial use of the groundwater resource.

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

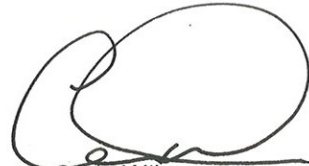
RECOMMENDATION

It is RECOMMENDED that the Executive Director, 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.

DKitto 11/10/09

David Kitto
Director
Mining & Industry

 5.10.09
Chris Wilson
Executive Director
Major DA Assessments