



# ASSESSMENT REPORT

## Section 75W Modification – Moolarben Coal Mine

### 1 BACKGROUND

The Moolarben Mining Complex (MMC) is located 40 kilometres northeast of Mudgee, adjacent to the Village of Ulan. (See Figure 1)

The complex is yet to be constructed and will be managed by Moolarben Coal Mines Pty Limited (Moolarben), a wholly-owned subsidiary of Felix Resources Limited.

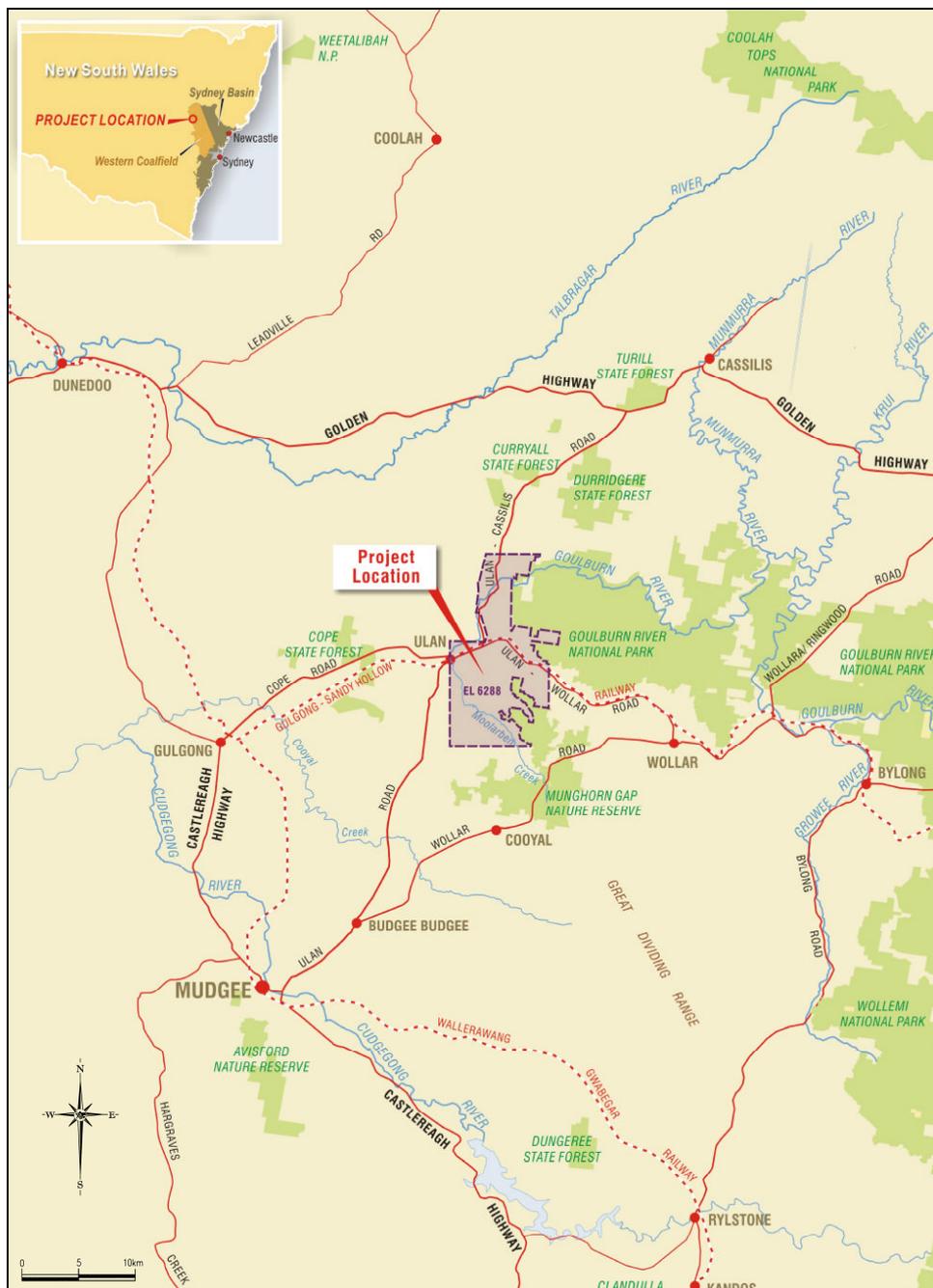


Figure 1: Regional Context

Stage 1 of the mining operation at the complex will be regulated by project approval MP 05\_0117 which was granted by the Minister for Planning on 6 September 2007.

This project approval allows Moolarben to:

- construct and operate three open cut mining pits, one underground mine, a range of associated infrastructure including a coal handling and preparation plant (CHPP), and a new rail loop and coal loader off the Sandy Hollow-Gulgong railway line;
- extract up to 8 million tonnes of run-of mine (ROM) coal per annum from the open-cut mining operations;
- extract up to 4 million tonnes of run-of mine (ROM) coal per annum from the underground mining operations; and
- process this coal on site, before loading it onto trains and dispatching it to domestic and export markets.

It is anticipated that construction of Stage 1 will commence shortly and mining operations will commence approximately 12 to 18 months later. Moolarben has also sought approval from the Minister under Part 3A of the EP&A Act for Stage 2 of the MMC. This application is at an early stage in the assessment process with the EA yet to be exhibited.

## **2 PROPOSED MODIFICATION**

On 26 August 2008, Moolarben submitted an application with the Department which seeks to amend the Minister's approval for Stage 1 of the Moolarben Coal Project (MCP) under Section 75W of the *Environmental Planning and Assessment Act 1979* (EP&A Act).

There are two main aspects to the modification of this project approval.

Firstly, the application seeks to modify three approval conditions, namely Condition 12 of Schedule 2, and Condition 42(b) and Condition 56 of Schedule 3.

Secondly, approval is sought to amend the layout and configuration of the surface infrastructure.

The modification has no capital investment value and would not affect the planned workforce numbers or size of the approved project.

### **2.1 Approval Conditions**

The conditions that require modification are set out below:

#### ***Condition 12 of Schedule 2***

The existing condition reads as follows:

##### ***Planning Agreement***

12. *Within 12 months of this approval, the Proponent shall enter into a planning agreement with Council and the Minister in accordance with:*
- (a) Division 6 of Part 4 of the EP&A Act; and*
  - (b) the terms of the Proponent's offer to the Minister on 4 September 2007, which includes the matters set out in Appendix 4.*

The application seeks to remove reference to the Minister within this condition.

### Condition 42(b) of Schedule 3

Condition 42 is reproduced below, with (b) underlined:

#### Vegetation Offsets

42. The Proponent shall:
- (a) revegetate at least 38 hectares of disturbed land on the “Red Hills” property (see property R14 in Appendix 5 and 8) with Yellow Box White Box Blakely’s Red Gum vegetation;
  - (b) revegetate at least 143 hectares of cleared land on the “Red Hills” property (see property R14 in Appendix 5 and 8) with suitable native vegetation to improve wildlife corridor linkages;
  - (c) conserve and enhance at least 1262 hectares of existing native vegetation onsite; and
  - (d) make suitable arrangements to protect these offset areas from development in the long term, to the satisfaction of the Director-General and the DECC.

The application seeks to include recently acquired properties that adjoin the “Red Hills” property within this condition.

### Condition 56 of Schedule 3

The existing condition reads as follows:

#### Upgrade of Ulan Road (MR 208/214) and Ulan-Wollar Road

56. Within 6 months of this approval, the Proponent shall prepare a detailed program for the staged upgrade of both Ulan Road and Ulan-Wollar Road to the satisfaction of the Director-General. This program must be:
- (a) be prepared by a suitably qualified expert/s whose appointment has been approved by the Director-General;
  - (b) be prepared in consultation with the RTA, Council, and the owner of the Wilpinjong coal mine;
  - (c) identify the road works that are required to improve the safety of these roads;
  - (d) include a detailed program to progressively implement these works; and
  - (e) allocate the available funding in any relevant VPA or statement of commitments to these works.

The application seeks to amend the road nomenclature specified within this condition to clarify which roads would primarily be impacted during the construction and operation of the MCP, and which roads Moolarben are required to upgrade.

## 2.2 Surface Infrastructure

It is proposed to rearrange some surface infrastructure to provide upfront construction savings and improve operational efficiencies throughout the life of the project. These proposed changes to the surface infrastructure are summarised in Table 1 and depicted in Figures 2 and 3.

Table 1: Proposed rearrangement of approved infrastructure

Infrastructure	Proposed Change
Coal Processing Plant (CPP)	The coal processing plant to be relocated approximately 350m to the south.
Emergency Tailings Dam	The emergency tailings dam to be relocated approximately 250m to the southwest.
Transfer Stations and Conveyors	The transfer station for reject from the CPP to be relocated 700m south. Conveyors and other associated transfer stations to be relocated but to remain within original infrastructure footprint. No conveyors to be located north of or crossing Bora Creek.
Surge Bin	The surge bin feeding the CPP to be relocated 450m south.

<b>Infrastructure</b>	<b>Proposed Change</b>
Rail Loop Configuration	"Figure 8" type rail loop constructed as opposed to a "conventional" rail loop.
Rail Load Out Bin	No change
Raw Coal Stockpile	The raw coal stockpile to be moved approximately 300m to the south, effectively "swapping" locations with the approved product coal stockpile.
Product Coal Stockpile	The product coal stockpile to be moved approximately 50m to the north, effectively "swapping" locations with the approved raw coal stockpile.
Underground No. 4 Run-of-Mine (ROM) Pad	No change
Underground No. 4 Transport Portal	No change
Underground No. 4 Conveyor Portal	No change
Underground No. 4 Conveyor Arrangement	The conveyors and transfer stations associated with Underground No.4 to be relocated to address the change in location of the raw coal stockpile.
Groundwater Treatment Ponds	Groundwater treatment ponds are essentially in the same location, taking into account the rail loop changes, however the configuration of these has changed to reflect a single treatment pond with internal barriers.
20ML Water Storage Dam	The 20ML storage dam to be moved 230m to the north-west in line with the amendments to the rail loop and treatment pond configuration.
Office and Bathhouse, Employee Parking, Store, Main Substation and Hardstand Area	Minor change to layout original surface footprint to reflect change in conveyor arrangements.
Main Access Road	No change
Open Cut Access Road	No change
Overland Run-of-Mine (ROM) and Rejects Conveyor	No change
Acoustic Bund	No change
Open Cut 1 Offices, Bath House, Employee and Visitor Car Parking, Light Vehicle Parking, Heavy Vehicle Parking, Workshop and Fuel Store Area	No change
Run-of-Mine (ROM) Stockpile Pad	No change

### **3 STATUTORY CONTEXT**

#### **3.1 Approval Authority**

The Minister was the approval authority for the original project approval, and is consequently the approval authority for this application.

However, the Executive Director of the Major Project Assessment division may determine this application under the Minister's delegation of 7 June 2007.

#### **3.2 Exhibition and Notification**

Under Section 75W of the EP&A Act, the Department is not required to notify or exhibit the applications.

However, after accepting the EA for the modification, the Department:

- made it publicly available on the Department's website, and
- notified relevant public authorities and an adjacent landowner (Ulan Coal Mines Ltd), by letter.

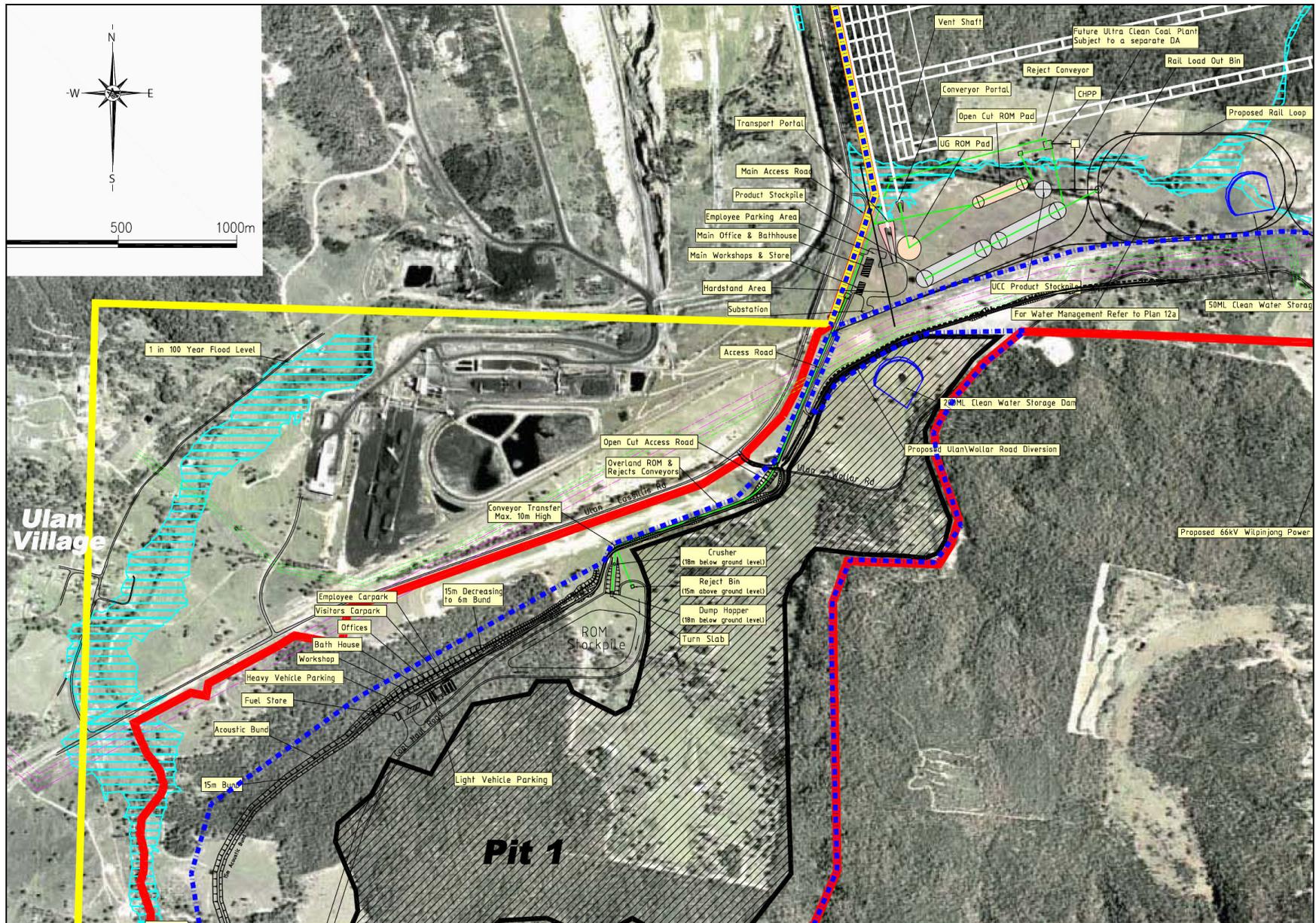


Figure 2: Approved Layout of Surface Infrastructure

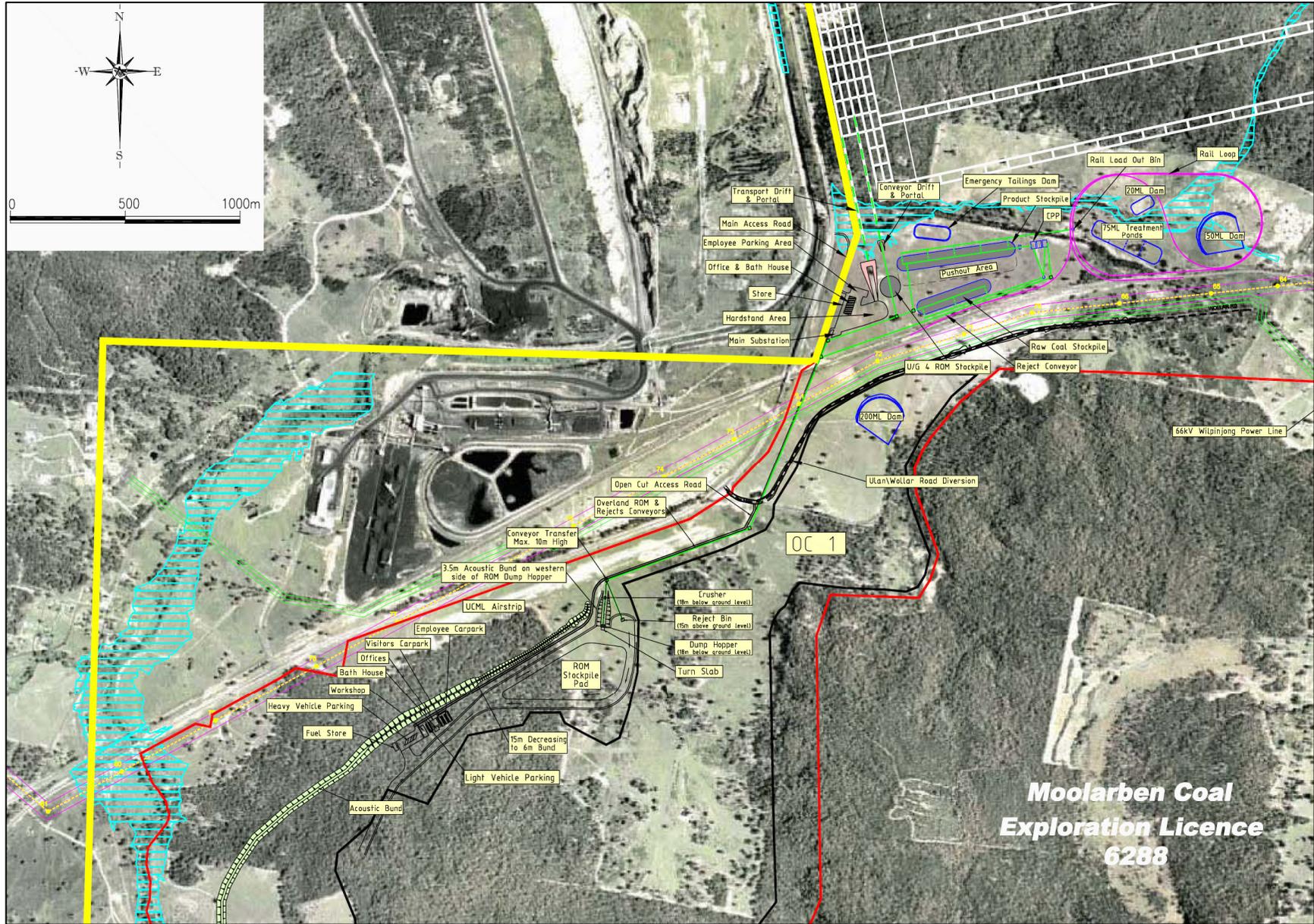


Figure 3: Proposed Layout of Surface Infrastructure

## 4 ISSUES RAISED IN SUBMISSIONS

During the exhibition period, the Department received 6 submissions on the modification, including:

- 5 from public authorities; and
- 1 from an affected landowner.

A summary of the issues raised in submissions is provided below. A full copy of the submissions is attached in Appendix C.

### 4.1 Public Authorities

The **Department of Primary Industries** (DPI) does not anticipate any significant environmental impacts associated with the proposed modification.

The **Department of Environment and Climate Change** (DECC) agrees that properties R12, R13, R15, R16, R17, R18 and R19 may contain areas suitable for revegetation to meet the requirements of Condition 42(b) of Schedule 3.

DECC is also satisfied that the proposed changes to infrastructure would not increase the environmental impact of the project above and beyond those approved.

The **Department of Water and Energy** (DWE) does not object to the proposal as it does not affect its interests.

The **NSW Roads and Traffic Authority** (RTA) does not object to the modification to Condition 56 of Schedule 3 put forward by Moolarben.

The **Mid-Western Regional Council** (MWRC) supports the modification to Condition 12 of Schedule 2 and Condition 56 of Schedule 3 and recommended that the Department engage in community consultation for the modification.

### 4.2 Adjacent Landowner (Ulan Coal Mines Ltd)

Ulan Coal Mines Ltd (managed by Xstrata Coal) objected to the proposed amendment to Condition 56 of Schedule 3, in particular the proposed deletion of part of the Ulan Road (MR 214). In its response to submissions, Moolarben clarified that it was not their intent to delete the reference to this section of Ulan Road, despite the original application proposing this.

### 4.3 Response to Submissions

Moolarben has provided a response to the issues raised in submissions (see Appendix B). The Department has considered the issues raised in submissions and Moolarben's response to these issues, in its assessment of the proposed modification.

## 5 ASSESSMENT

The Department's assessment of the three proposed amendments to the conditions of project approval and the relocation of infrastructure is provided below:

### Condition 12 of Schedule 2

Condition 12 of Schedule 2 of the project approval requires Moolarben to enter into a planning agreement with Council and the Minister in accordance with the terms of Moolarben's offer to the Minister on 4 September 2007. This covers the matters set out in Appendix 4 of the project approval.

Following consultation with Moolarben in early 2008, it was determined that there was no need for the Minister to be party to the planning agreement and that the agreement could be entered into by Moolarben and MWRC only. It was noted at the time that Moolarben would need to

retrospectively apply to modify the project approval to allow the Minister to be removed from his requirement to be a co-signatory of the planning agreement.

A planning agreement was subsequently entered into by Moolarben and MWRC on the 23 April 2008 under Section 93(F) of the EP&A Act. The Department has reviewed this planning agreement and is satisfied it has been prepared in accordance with Moolarben's letter of offer to the Minister dated 4 September 2007 (replicated by Appendix 4 of the project approval) within the requisite timeframe.

Accordingly, the Department is satisfied that the planning agreement captures the intention of the condition in that each of the funding areas, contributions and timeframes are to be met (see also discussion regarding Condition 56 below), albeit without the Minister being a party to the agreement.

Therefore, the Department recommends Condition 12 of Schedule 2 be modified to exclude the Minister as a signatory authority to the planning agreement.

### **Condition 42 (b) of Schedule 3**

The vegetation and endangered ecological community (EEC) offsets required for Stage 1 of the MMC are set out in Conditions 41 and 42 of Schedule 3 of the project approval.

*Table 2: Offset requirements of Conditions 41(a), 42(a) and 42(b) of the Moolarben Project Approval*

<b>Requirement of Project Approval</b>	<b>Referenced</b>	<b>Moolarben Action</b>
Transfer at least 130ha of Yellow Box White Box Blakely's Red Gum EEC to DECC Estate	c41 (a), s3	To be met through the "Red Hills" property
Revegetate at least 38ha of disturbed land on the "Red Hills" property with Yellow Box White Box Blakely's Red Gum vegetation.	c42 (a), s3	To be met through the "Red Hills" property
Revegetate at least 143ha of cleared land on "Red Hills" property with suitable native vegetation to improve wildlife corridor linkages.	c42 (b), s3	Unable to be met through "Red Hills" property due to allocation of available land to satisfy conditions 41(a) and 42(a).

Since the project was approved, agreement between Moolarben and DECC has been reached to allow for the transfer of the "Red Hills" property to the DECC estate.

An assessment of EEC on the "Red Hills" property was undertaken by DECC on 20 August 2008. The assessment found that the "Red Hills" property contains approximately 135ha of EEC and 68ha of non EEC (a total of 203ha of vegetation).

The requirements of Condition 41(a) of Schedule 3 have been met, given that Moolarben has transferred all of the 135 hectares of EEC available on the "Red Hills" property to DECC. 38 hectares of the 68 hectares available (non-EEC) will be revegetated with EEC vegetation under the terms of Condition 42(a). This will leave a residual area of land comprising only 30 hectares towards meeting the requirements of Condition 42(b), which requires the revegetation of at least 143 hectares of cleared land with suitable native vegetation to improve wildlife corridor linkages.

As a result, Moolarben has requested that Condition 42(b) be modified to include properties adjoining "Red Hills" (R12, R13, R15, R16, R17, R18 and R19) that have been acquired since the grant of the project approval for Stage 1 of the MMC (see Figure 4).

In principle, the Department supports this approach, as it would provide enhanced environmental outcomes and improve wildlife corridor and biodiversity linkages between the MCP and surrounding parks and reserves (i.e. Goulburn River and Munghorn Gap National Parks). This was identified as a longer-term aim of the Stage 1 MMC (see Figure 5). The Department concurs that the proposed modification to Condition 42(b) of the project approval is aligned with, and would further support, the intention of this condition.

Notwithstanding this, the Department noted that these areas have been excluded from the area proposed for future coal extraction and, in consultation with DECC, questioned whether Moolarben intends to rely on some or all of these areas for revegetation and/or offsetting strategies associated with Stage 2 of the MCP.

In its response to submissions, Moolarben advised that revegetation areas for Stage 1 would not conflict with any possible revegetation or offset dedication associated with Stage 2. Moolarben confirmed that there is approximately 273 hectares of cleared lands available within the identified properties adjoining “Red Hills” (see Figure 6). This satisfies the 143 hectares required under Condition 42(b). Furthermore, the company confirmed that the revegetated lands would not be cleared in the future and when established would be further protected under the Native Vegetation Act 2003.

The Department has considered the issues raised in DECC’s submission, and is satisfied the need for the change to the condition of approval is warranted. Moolarben would be required to consult with DECC on the precise location of areas to be revegetated to meet the requirements of Condition 42(b).

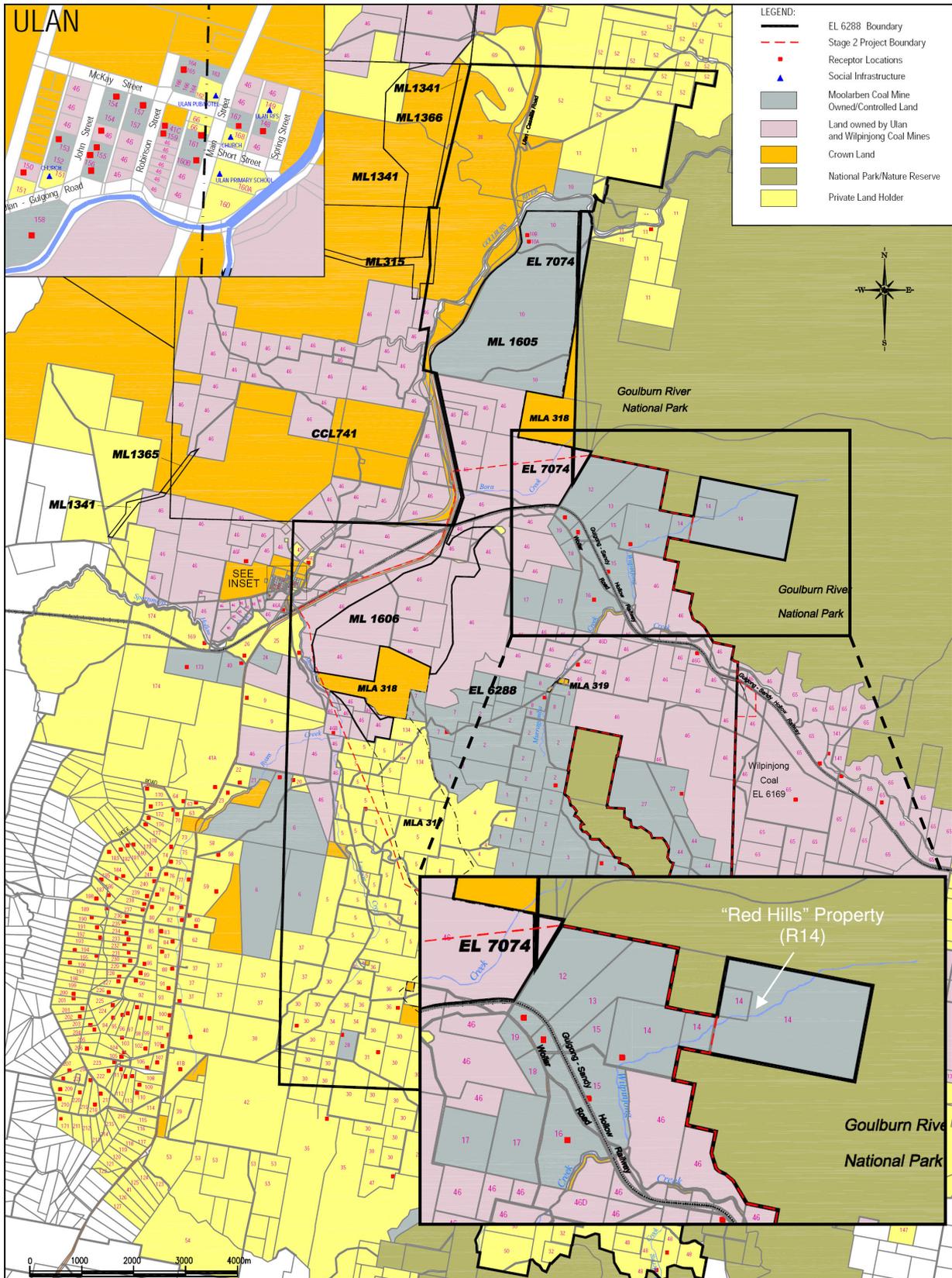


Figure 4: Current Land Ownership of "Red Hills" property and adjoining lands shown in detail



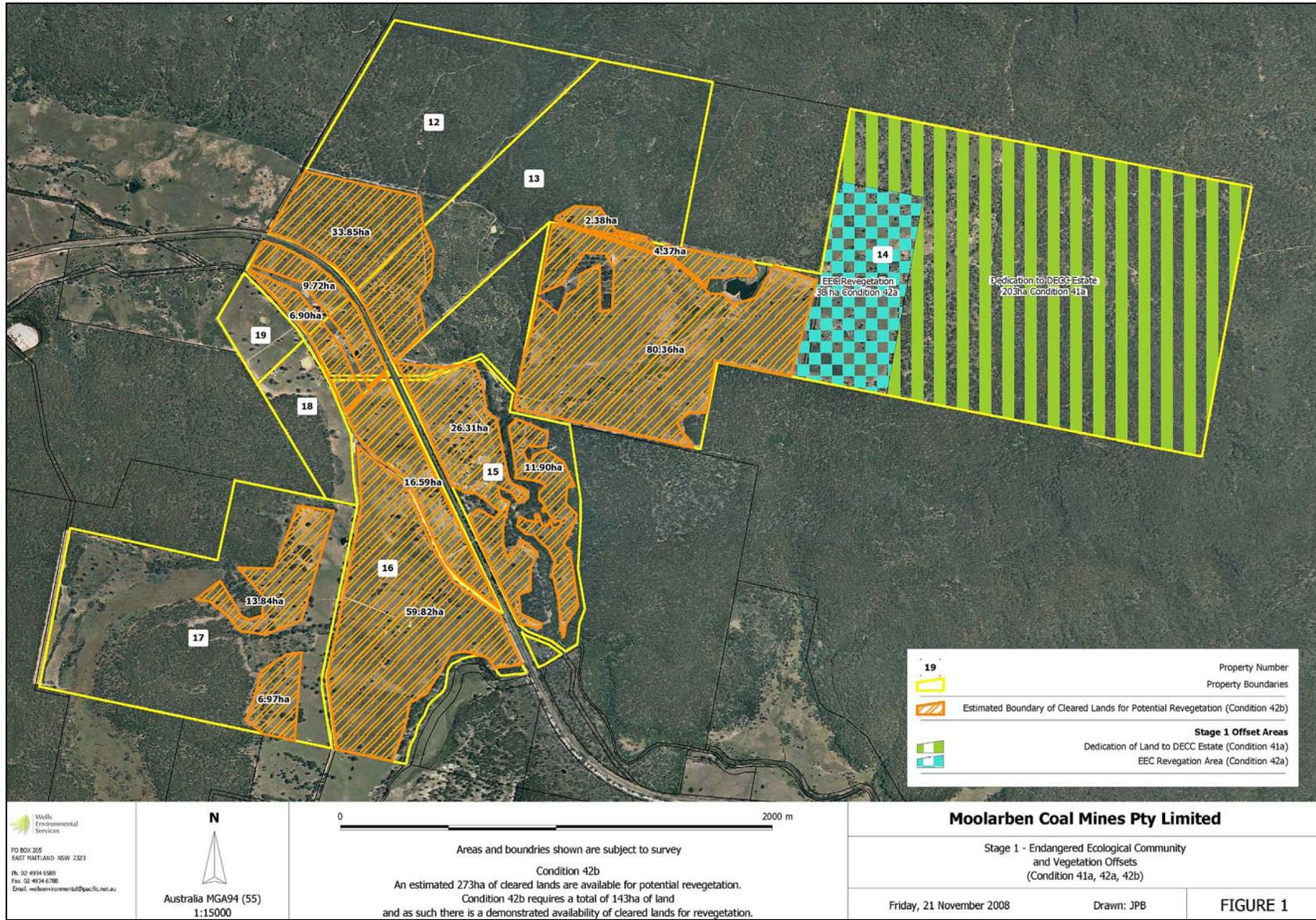


Figure 6: Estimated Boundary of Cleared Lands for Potential Revegetation under Condition 42(b)

### **Condition 56 of Schedule 3**

In addition to the MMC, there are two other mines operating in the vicinity of Ulan Village, namely Ulan and Wilpinjong.

The Department has always been of the view that Ulan Road should be upgraded from Mudgee to Ulan, and as the primary road users, the costs of this should be equally borne by the three mines. The cost of upgrading Cope Road and Ulan-Wollar Road should be proportionally funded by Moolarben and Wilpinjong mines.

With this in mind, under the terms of the project approval, Moolarben is required to carry out the following road works to the satisfaction of the relevant transport authority to:

- construct a new intersection between Ulan-Cassilis Road (MR 214) and the proposed mine access road for the coal handling preparation plant and coal stockpile infrastructure areas (Condition 51, Schedule 3);
- upgrade the existing intersection between the Ulan-Cassilis Road (MR 214) and Ulan-Wollar Road in conjunction with the owner of the Wilpinjong coal mine (Condition 51, Schedule 3);
- construct a new intersection between the Ulan-Wollar Road and the proposed mine access road for the open cut operations (Condition 52, Schedule 3);
- divert Ulan-Wollar Road (Condition 53, Schedule 3);
- divert Carrs Gap Road and Moolarben Road (Conditions 54 and 55, Schedule 3); and
- prepare and implement a detailed program for the staged upgrade of both Ulan Road and Ulan-Wollar Road to the satisfaction of the Director-General (Conditions 56 and 57, Schedule 3).

The company is seeking to modify Condition 56, Schedule 3 on the basis that Cope Road (MR 598) be included as one of the roads to be upgraded under the terms of Conditions 56 and 57 of Schedule 3. The Stage 1 MCP always envisaged that this road would be upgraded given that some workers (approximately 25%) would travel to and from the mine from Gulgong via Cope Road (see Figure 7). Accordingly, this road formed part of the planning agreement for the project.

In relation to Ulan Road, the original intent of the condition was for Moolarben to commit to the staged upgrade of this road, in consultation with WMC, from Mudgee to Ulan Village (see Figure 7). In relation to Ulan-Wollar Road, the original intent of the condition was for Moolarben to upgrade this road from the proposed mine access road for the open cut mining area, to its point of intersection with Ulan-Cassilis Road (see Figure 8).

The Department has no objection to the inclusion of Cope Road (MR 598) within Condition 56 of Schedule 3, and has also taken the opportunity to clarify the extent of responsibility for Moolarben to upgrade the Ulan-Wollar Road.

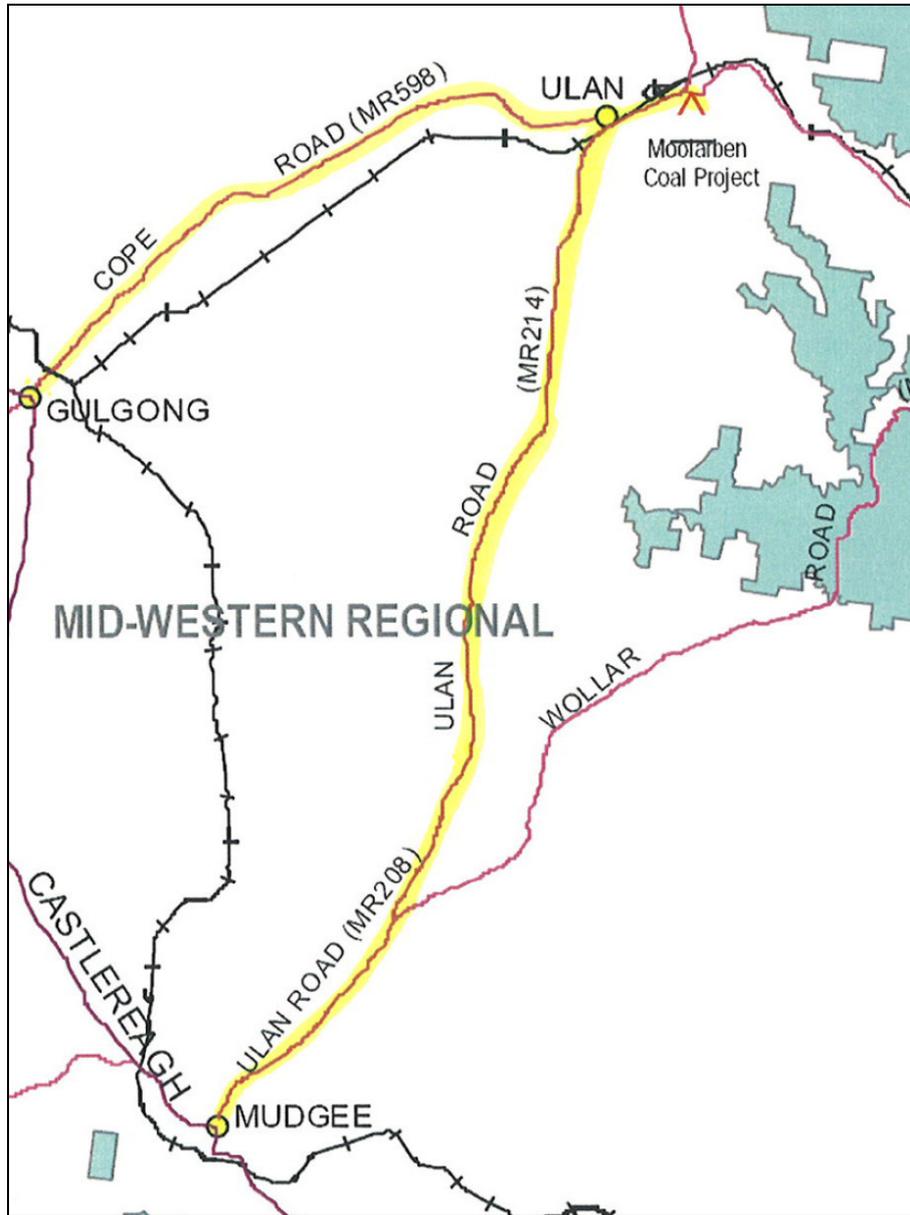


Figure 7: Roads Specified under Condition 56 as modified

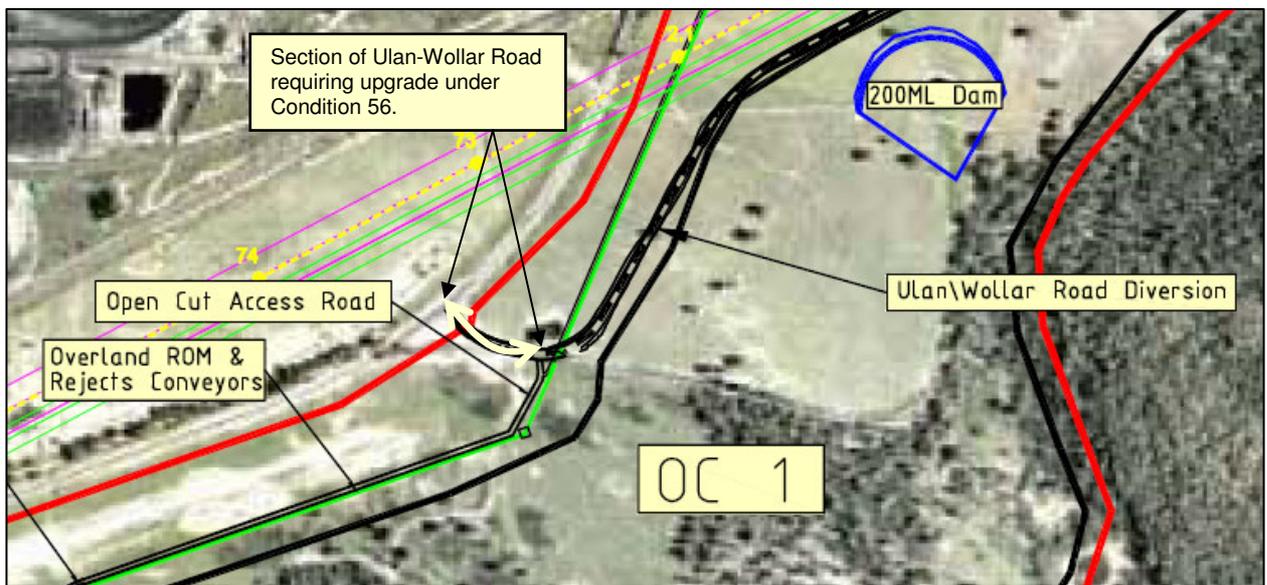


Figure 8: Section of Ulan-Wollar Road required to be upgraded under Condition 56

## 5.1 Relocation of Infrastructure

The Department's assessment of the key issues is summarised in Table 3 below:

Table 3: Assessment of Key Issues

<b>Issue</b>	<b>Features/Impacts</b>	<b>Conclusion/Mitigating Factors</b>
Noise	Potential impacts from noise due to changed acoustics.	<ul style="list-style-type: none"> <li>▪ A review of noise impacts from the modification was undertaken by Spectrum Acoustics.</li> <li>▪ The review found the proposed rearrangement of infrastructure would not result in a measureable change to the noise levels predicted for Stage 1 of the MCP.</li> </ul>
Air Quality	Potential impacts from dust	<ul style="list-style-type: none"> <li>▪ A review of air quality impacts was conducted by Holmes Air Sciences.</li> <li>▪ The review found the proposed rearrangement of infrastructure would not alter the findings of the air quality assessment approved for Stage 1.</li> </ul>
Flora, Fauna and Aquatic Ecology	Potential impacts to flora, fauna and aquatic ecology	<ul style="list-style-type: none"> <li>▪ Bora Creek riparian vegetation is of high ecological value being made up of White Box, Yellow Box and Blakely's Redgum Woodland endangered ecological community (EEC).</li> <li>▪ Relocation of Infrastructure to the south of Bora Creek would reduce impacts to the EEC and reduce the disturbance to Bora Creek.</li> </ul>
Heritage	Potential impacts to items of Aboriginal and European heritage items.	<ul style="list-style-type: none"> <li>▪ An Aboriginal heritage impact assessment was undertaken by Archaeological Risk Assessment Services.</li> <li>▪ The relocation of infrastructure would reduce impacts to aboriginal cultural heritage along, and adjacent to, Bora Creek.</li> </ul>
Visual Impacts	Potential for increased visual impacts	<ul style="list-style-type: none"> <li>▪ A review of visual and lighting impacts was conducted by Quinn O'Hanlon Design.</li> <li>▪ The review found that the proposal would marginally increase visual impacts along the Ulan-Wollar Road and slightly reduce a viewer's duration of exposure on the Ulan-Cassilis Road.</li> <li>▪ The combined effect of the proposed relocation is considered negligible in the context of the MCP as a whole.</li> </ul>
Traffic	Potential impacts on road safety	<ul style="list-style-type: none"> <li>▪ The proposed rearrangement of infrastructure would not result in any change to traffic on the adjoining public road system.</li> </ul>
Surface Water	Potential impacts to surface water resources	<ul style="list-style-type: none"> <li>▪ The proposed rearrangement of infrastructure is not expected to impact on existing surface water resources.</li> </ul>
Groundwater	Potential impacts to groundwater resources	<ul style="list-style-type: none"> <li>▪ The proposed rearrangement of infrastructure is not expected to result in any additional groundwater impacts.</li> </ul>
Soils	Potential impacts to soil resources	<ul style="list-style-type: none"> <li>▪ Soil resources are not expected to be adversely impacted, with the relocation of infrastructure reducing the area of soil disturbance.</li> </ul>
Socio-Economic	Potential socio-economic impacts	<ul style="list-style-type: none"> <li>▪ The proposed rearrangement of infrastructure is not expected to have an adverse impact on construction or operation employment levels.</li> </ul>

## 6 CONCLUSION

The Department has assessed the project application, EA, submissions on the project, and Moolarben's response to submissions in accordance with the requirements of the EP&A Act, including the objects of the Act and the principles of ecologically sustainable development.

This assessment has found that the proposed relocation of infrastructure would not generate any adverse environmental impacts above and beyond those associated with the approved Stage 1 operation and in some cases would improve the outcome.

The Department is satisfied that the proposed changes to Condition 12 of Schedule 2, and Conditions 42(b) and 56 of Schedule 3 are acceptable.

As part of the assessment process, the Department has also taken the opportunity to clarify some of the detailed aspects of the conditions relating to roadwork and road upgrades.

In summary, the Department believes that the modification represents a logical change to Moolarben's approved operation, and is satisfied that its benefits sufficiently outweigh its costs.

Consequently, it believes the modification is in the public interest, and should be approved subject to conditions.

## 7 RECOMMENDATION

It is RECOMMENDED that the Executive Director:

- consider the findings and recommendations of this report;
- approve the proposed modification under Section 75W of the EP&A Act; and
- sign the attached notice of modification.

*DKitto 21/11/08*

David Kitto  
Director  
Industry and Mining

*[Signature]* 26.11.08

Chris Wilson  
Executive Director  
Major Project Assessment