



Moolarben Coal Complex OC4 South-West Modification

Environmental Assessment

EXECUTIVE SUMMARY

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ES1 BACKGROUND

The Moolarben Coal Complex is located approximately 40 kilometres north of Mudgee in the Western Coalfields of New South Wales (NSW) (Figure ES1).

Moolarben Coal Operations Pty Ltd (MCO) is the operator of the Moolarben Coal Complex on behalf of the Moolarben Joint Venture (Moolarben Coal Mines Pty Ltd, Sojitz Moolarben Resources Pty Ltd and a consortium of Korean power companies). MCO and Moolarben Coal Mines Pty Ltd are wholly owned subsidiaries of Yancoal Australia Limited.

The Moolarben Coal Complex comprises four approved open cut mining areas (OC1 to OC4), three approved underground mining areas (UG1, UG2 and UG4) and other mining related infrastructure (including coal processing and transport facilities).

Mining operations at the Moolarben Coal Complex are currently approved until 31 December 2038 in accordance with Project Approval (05_0117) (Moolarben Coal Project Stage 1) as modified and Project Approval (08_0135) (Moolarben Coal Project Stage 2).

Environmental management and monitoring at the Moolarben Coal Complex is conducted in accordance with a range of management plans required in accordance with Project Approvals (05_0117) and (08_0135).

ES2 MODIFICATION OVERVIEW

This Environmental Assessment has been prepared by MCO to support a request to modify Project Approvals (05_0117) and (08_0135) under section 75W of the NSW *Environmental Planning and Assessment Act, 1979* (the OC4 South-West Modification).

Following a review of the mining sequence and associated infrastructure layout requirements, MCO has identified opportunities to enable more efficient access to the OC4 resource and management of waste rock in OC1.

As such, the OC4 South-West Modification proposes the following:

- construction of the OC4 south-west haul road between OC4 and OC1 (and therefore the approved Stage 2 Haul Road would not need to be constructed) (Figure ES2);
- adjustments to the site water management system to contain surface water runoff from the OC4 south-west haul road and diversion of upslope water;
- refinements to the early stages of mining and associated infrastructure layout at OC4 (wholly located within the approved surface disturbance footprint) (Figure ES2); and
- backfilling of the northern OC1 final void to approximate pre-mining elevations (Figure ES2).

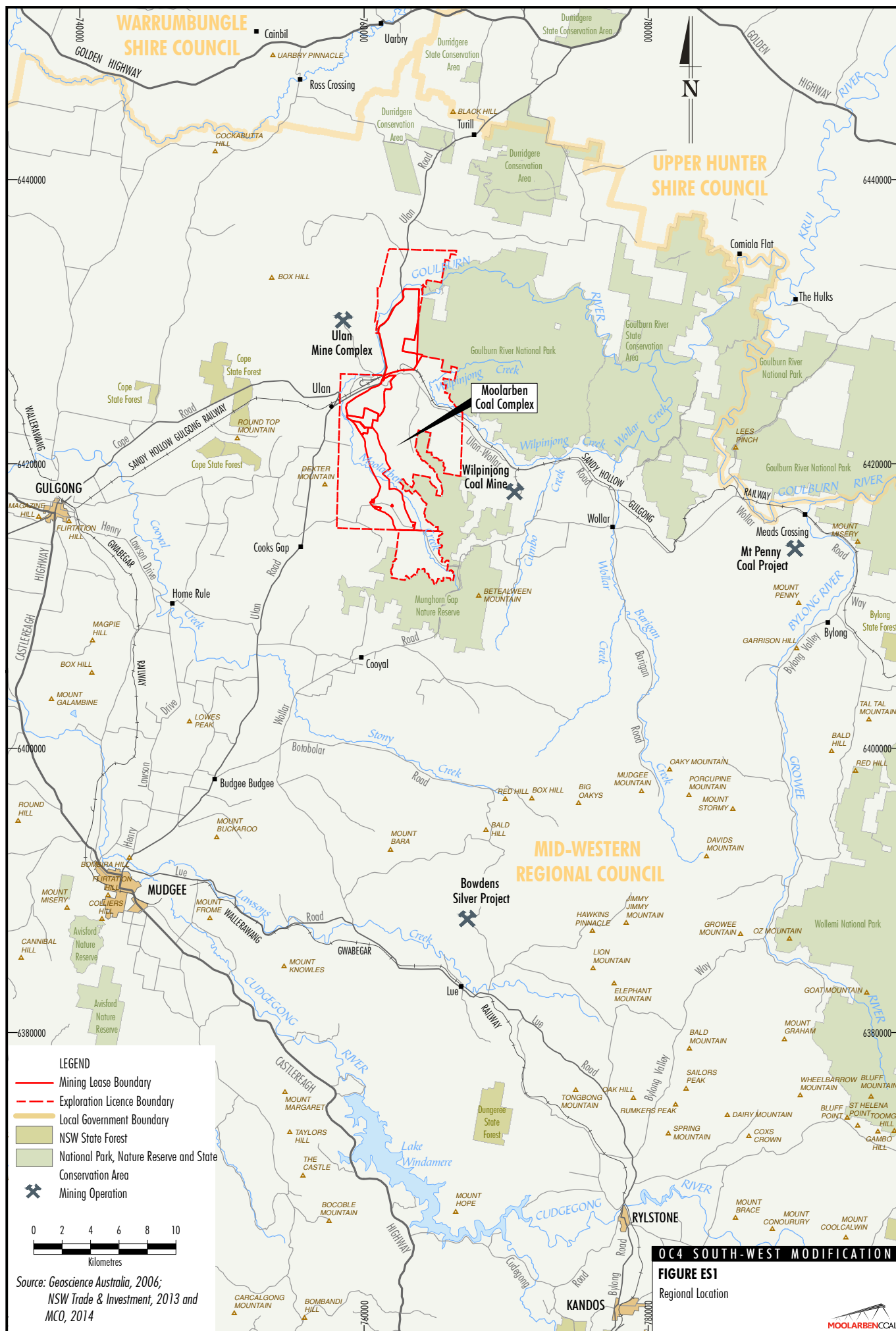
Other components of the approved Moolarben Coal Complex would **not change** as a result of the OC4 South-West Modification, including:

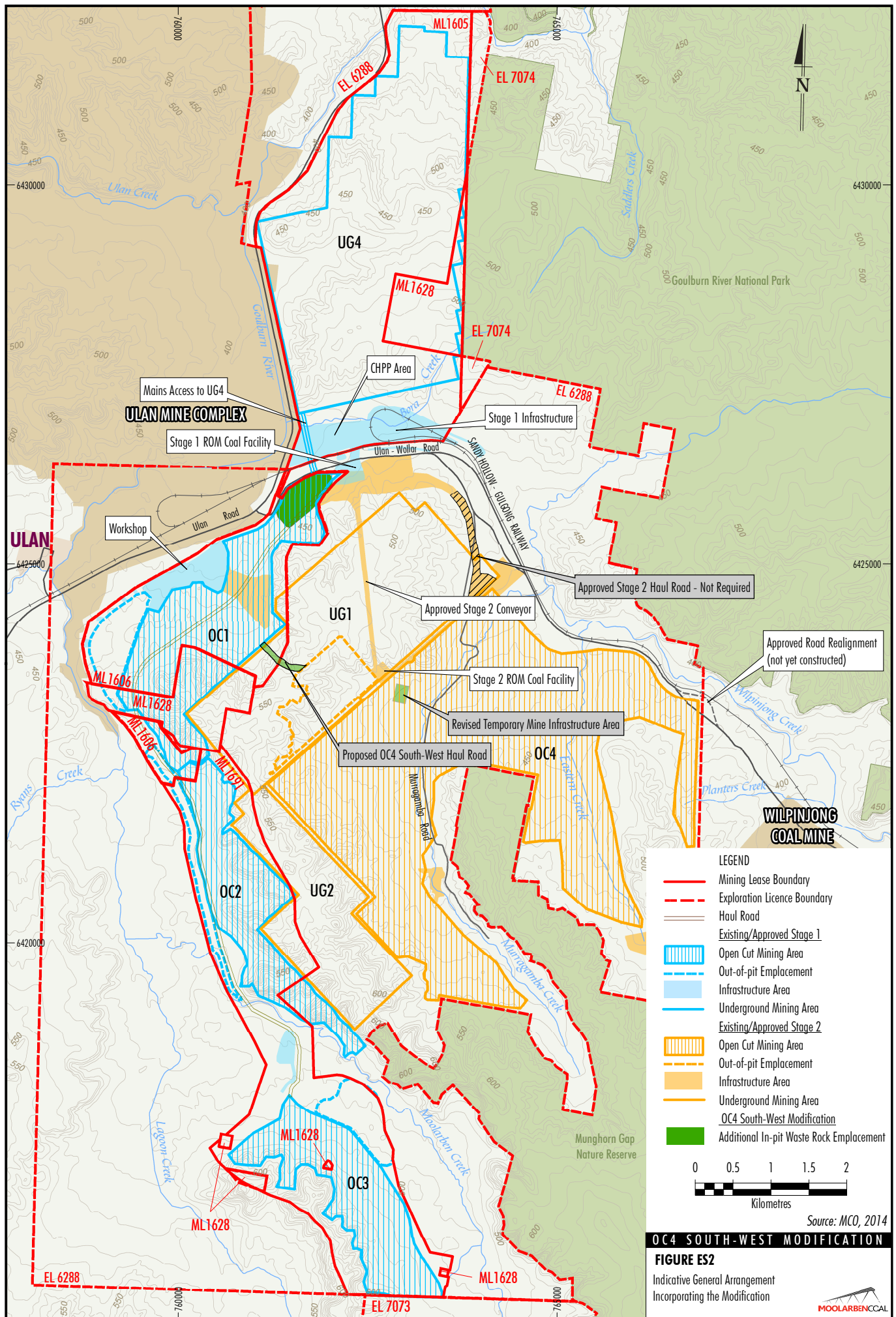
- operational mine life;
- hours of operation;
- blasting limits;
- coal extraction limits;
- coal processing, production and transport limits;
- number of full-time employees; or
- Ulan-Wollar Road site access.

ES3 ENVIRONMENTAL REVIEW AND MODIFICATION JUSTIFICATION

To assess the potential environmental impacts of the OC4 South-West Modification, a number of environmental reviews were completed, along with the following supporting specialist reports:

- Noise Assessment (prepared by SLR Consulting);
- Air Quality Assessment (prepared by Todoroski Air Sciences);
- Flora and Fauna Impact Assessment (prepared by EcoLogical Australia);
- Surface Water Assessment Review (prepared by WRM Water & Environment); and
- Aboriginal Cultural Heritage Assessment (prepared by Niche Environment & Heritage).





The environmental reviews indicate that, with the continued implementation of management and monitoring measures, potential environmental impacts could be managed within the currently approved environmental performance limits specified in Project Approvals (05_0117) and (08_0135).

In addition, there would be potential environmental benefits resulting from the OC4 South-West Modification associated with:

- Replacement of the approved haul road with the shorter proposed OC4 south-west haul road, resulting in:
 - reduction in total surface disturbance of approximately 13.4 ha;
 - reduction in catchment excision; and
 - avoidance of impacts to an Aboriginal artefact.

- Backfill of the OC1 final void, resulting in:
 - one less void in the final landform;
 - reduction in catchment excision (following rehabilitation); and
 - improved compatibility with surrounding land-uses in the long-term.

A summary of the key findings of the environmental reviews is provided in Table ES-1.

Table ES-1
Key Outcomes of the OC4 South-West Modification Environmental Reviews

| Environmental Aspect | Summary of Environmental Assessment | Key Management, Mitigation or Monitoring Measures |
|-----------------------------|--|--|
| Noise | Compliance with existing Project Approval noise limits. | Continued implementation of: <ul style="list-style-type: none"> • At source noise controls. • Predictive meteorological forecasting. • Real-time noise monitoring and performance indicators. • Attended noise monitoring. |
| Air Quality | Compliance with existing Project Approval air quality limits. | Continued implementation of: <ul style="list-style-type: none"> • At source dust controls. • Predictive meteorological forecasting. • Real-time monitoring and performance. |
| Ecology | Reduction in total surface disturbance. No significant impacts to threatened species, populations or communities. | Existing Stage 2 Biodiversity Offset Strategy adequately compensates potential impacts, with surplus area. Continued implementation of vegetation clearance protocols. |
| Surface Water Resources | No significant change to site water balance expected. Reduction in catchment excision following rehabilitation. | Continued implementation of water management system and water monitoring network. |
| Groundwater Resources | No change to potential groundwater impacts. No change to groundwater licensing requirements. | Continued implementation of groundwater monitoring and management would continue to be conducted in accordance with the Water Management Plan. Holding of adequate groundwater licenses. |
| Visual | Negligible change in potential visual impacts from sensitive viewpoints. | Rehabilitation of the OC4 south-west haul road and backfilled OC1 final void. |
| Aboriginal Heritage | Avoidance of impacts to one Aboriginal artefact. No impact to known Aboriginal artefacts or cultural heritage values. | Continued implementation of monitoring and management measures. |