



# Review of Environmental Assessment

## **Submission**

Duralie Coal Extension Project

Changed Pit Layout

08-0203 Mod 2

Construction, Forestry, Mining & Energy Union

(Mining and Energy Division)

Northern Mining & NSW Energy District

July 2014

In July 2014 Duralie Coal Pty Ltd applied to the Minister, Department of Planning seeking approval to modify approval 08-0203 to enable the efficient extraction of coal, continuation of waste emplacement at the Duralie Coal Mine (DCM), and to improve the geotechnical stability of the open pit low walls. This Project is sought under Section 75W of the EP & A Act, 1979.

The Director General made the Environmental Assessment publicly available on the 16 July 2014 and the opportunity for public submissions is available.

The CFMEU is pleased to take the opportunity to comment on the Duralie Coal Mine Modification Project and related activities Environmental Assessment.

The Mining and Energy Division is a Division of the CFMEU under the Federal Workplace Relations Act 1996, with over 120,000 members, one of the largest in Australia. The Division covers several industries including the coal industry, coal ports, metalliferous mining industries, electrical power generation, oil and gas and the Nation's small coking industry.

The Northern Mining & NSW Energy District Branch of the CFMEU Mining and Energy Division, being the branch that on behalf of the organisation which is making the submission is the principal Union representing coal miners in the Northern District coalfields of New South Wales. The DCM facility is located approximately 10km north of Stroud and is wholly within the State's Northern District coalfields.

The CFMEU is familiar with these facilities and has engaged the services of an Environmental Consultant with extensive experience in local government and environmental assessments on coal mining related projects.

After reviewing all the material and taking advice, the CFMEU supports this application to modify Project Approval 08-0203 as proposed.

## **Overview**

To reflect the results of ongoing mine exploration and mine planning, the following changes to the currently approved Duralie Coal Mine (DCM) are proposed for the Modification:

- Increase in the maximum depth of the Clareval open pit;
- A minor increase in the extent of surface development of the DCM of approximately 2.5 hectares resulting from:
  - A reduction in low wall angles of the Clareval open pit and the removal of a pillar between the Clareval and Weismantel open pits to improve geotechnical stability; and
  - Associated relocation of the up-catchment diversion to the west of the Clareval open pit.
- Revised mining sequence (i.e. progression of mining in the Clareval and Weismantel open pits).

- Increased height of the waste rock emplacement from the currently approved elevation of approximately 110 metres AHD to approximately 135m AHD.

The Modification would result in no change to the following key elements of the currently approved DCM:

- Maximum annual ROM coal production;
- Maximum annual waste rock extraction;
- Mine life;
- Mining tenements (ML 1427 and 1646);
- Mining method;
- Coal seams mined;
- Duralie shuttle train rail movements or hours;
- Waste rock geochemical management measures;
- Extent and use of irrigation areas for the disposal of excess water;
- Rehabilitation of surface disturbance areas;
- Operational workforce or deliveries;
- Power supply.

## **Consultation**

Consultation has been conducted with key state government agencies, local councils and local community, including Aboriginal stakeholders for the Modification.

Consultation will continue during the assessment phase of the Modification.

## **Noise**

A Noise and Blasting Assessment was prepared by SLR Consulting.

The DEP noise model was updated to account for the proposed changes to DCM mine layout (i.e increased waste rock emplacement height).

There is a reduction in the currently approved noise levels predicted for the Modification, as mobile plant are now operating approximately 60 metres deeper in the Clareval open pit in comparison to the DEP noise modelling scenario.

Within the current Project Approval there are twelve residences in the Noise Management Zone (1 to 5 dBA above the PSNL). This reduced to five privately-owned residences for the Modification.

DCPL would continue to implement the noise management measures and monitoring program detailed in the Noise Management Plan, including real-time noise monitoring and management.

## **Air Quality**

An Air Quality Impact Assessment was prepared by Pacific Environment Limited.

There is a reduction in annual dust emissions predicted for the Modification.

No exceedances of air quality criteria were predicted at any privately-owned receiver due to project-only emissions.

Existing mitigation, management and monitoring measures described in the Air Quality and Greenhouse Gas Management Plan and Pollution Reduction Programs would continue for the Modification, including real-time air quality monitoring and management.

## **Ground Water**

A Groundwater Assessment was prepared by HydroSimulations.

The DEP groundwater model was updated to account for the proposed increase in the depth of the Clareval open pit and for the revised mining sequence.

Consistent with the predictions for the DEP and observed groundwater monitoring data, the following is predicted:

- Negligible impact to the alluvium in which the Mammy Johnsons River sits, or to river leakage/baseflow contributions;
- Negligible impacts to other groundwater users; and
- Negligible impacts to groundwater dependent ecosystems.

Groundwater inflow to the open pits is predicted to remain within DCPL's existing licensed allocation, and as such, no additional licences would be required.

Existing groundwater monitoring and management measures described in the Groundwater Management Plan would continue for the Modification, including the performance measures and indicators for investigating any potentially adverse groundwater impacts to the Mammy Johnsons River or privately-owned bores and associated contingency measures.

## **Surface Water**

The DEP site water balance model was updated by Gilbert & Associates to account for the proposed changes (increased height of waste rock emplacement and increased depth of the Clareval open pit) to the mine layout and revised mining sequence.

Consistent with the predictions for the DEP, the following is predicted:

- The water management system could continue to operate such that there would be no overflow from the mine water dam or open pits to downstream watercourses;
- Negligible impacts to flows in the Mammy Johnsons River;
- No change to potential water quality impacts;
- No overflow from the final voids to downstream watercourses; and
- Water in the final voids would not overflow or post-mining.

## **Biodiversity**

A Flora Assessment was prepared by FloraSearch, and a Fauna Assessment was prepared by Australian Museum Consulting.

Extensive flora and fauna surveys have been conducted for the DCM and surrounds, including within the 2.5 ha Modification disturbance area. Additional flora and surveys were conducted by FloraSearch and Australian Museum Consulting, respectively, in April and May 2014.

The Modification disturbance area and immediate surround contains:

- Approximately 1.8ha of derived grassland and 0.7 ha of open forest;
- No threatened/endangered ecological communities;
- No threatened flora species;
- No critical habitat; and
- Records of six threatened fauna species, all of which have been previously recorded in the ML 1646 or ML 1427 or are known to have widespread distribution in the area.

The additional 2.5 ha of surface disturbance is required to improve geotechnical stability of the open pits. Therefore, additional disturbance associated with the changes to the open pit limits cannot be avoided without potentially impacting the long-term stability of the open pit low walls.

The relocation of existing water diversion infrastructure adjacent to the Clareval open pit has been designed to occur within derived grassland and to avoid additional disturbance of native vegetation wherever possible.

To address potential residual impacts, DCPL proposed to extend the existing biodiversity offset area (approx 680 ha) to include an additional 12.5 ha of land.

Established vegetation clearance protocols would continue for the Modification to manage potential impacts to flora and fauna.

## **Aboriginal Heritage**

An Aboriginal Cultural Heritage Assessment was undertaken for the DEP following comprehensive surveys across ML 1646, ML 1427 and surrounds.

As such, the survey conducted for the DEP included the Modification disturbance areas which are located within ML 1646.

There are no known Aboriginal heritage sites located within the Modification disturbance areas.

The consultation process undertaken for the Modification builds on the consultation undertaken for the DEP. A Draft Aboriginal Cultural Heritage Assessment for the Modification was provided to registered stakeholders plus other interested groups.

Aboriginal heritage sites would continue to be managed in accordance with the DCM Heritage Management Plan.

## **Visual Amenity**

Views of the existing DCM from public and private viewpoints are largely screened by topography and vegetation, and by DCPL ownership of the majority of land surrounding the DCM.

Privately-owned residences identified for the DEP as having the greatest potential of visual impacts for the DEP are now either owned by DCPL, or DCPL has a private compensation agreement with the landholder.

Views of the DCM are available from some sections of public roads (The Bucketts Way and Johnsons Creek Road) to the north and east of the DCM. To minimise potential views, DCPL has constructed a visual screen adjacent to the section of The Bucketts Way identified in the DEP to have the greatest potential for unmitigated views of the approved DCM.

A revised visual assessment has been conducted to account for the proposed changes to the mine layout (increased waste rock elevation height).

Consistent with the outcomes of the DEP, the potential visual impact of the modified DCM landforms was considered to be 'very low' or 'low' at relevant sensitive receivers with the implementation of mitigation measures.

## **Other Environmental Aspects**

It is predicted blasting could continue in accordance with existing Project Approval blast limits for ground vibration and overpressure.

No increase in annual greenhouse gas emissions is expected.

No impacts to aquatic ecology are expected as no overflow of water from the main water dam or open pits is predicted, and as there would be no change to the irrigation first flush protocol.

The Modification would not change the existing annual traffic movements to/from the DCM, and therefore, no additional impacts to surrounding road network are expected.

No registered non-Aboriginal heritage items would be impacted.

The Modification would not change potential impact mechanisms to the public or to public property, to the extent that previously identified hazard or risk levels for the DCM would increase.

## **Justification and Conclusion**

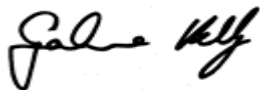
The Modification is required to enable the efficient extraction of coal, continuation of waste emplacement at the DCM, and to improve geotechnical stability of the open pit low walls.

Without the Modification, waste emplacement at the DCM would be constrained and a portion of the coal reserve approved to be extracted from the Weismantel and Clareval open pits until 2019 would be foregone, resulting in a truncation of the mine life.

As such, the Modification would enable the continuation of the direct and indirect socio-economic benefits associated with the operation of the DCM, via the continuation of employment, expenditure in the local and state economies and payment of royalties and taxes.

## **In Summation**

The Union considers that this Modification is consistent with current approved Development Consent objectives of the EP&A Act, and therefore supports the proponent's application and asks for the modification to the consent be granted in the form sought.



**Grahame Kelly**

**DISTRICT SECRETARY**