

# THE UNITED MINEWORKERS' FEDERATION OF AUSTRALIA

(Division of the Construction, Forestry, Mining and Energy Union) (Incorporating the Federal & State Registered Unions)

Northern District Branch

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Secretary: Grahame Kelly

Mr David Mooney, Planner Department of Planning GPO Box 39 SYDNEY NSW 2001

Email: plan comment@planning.nsw.gov.au

Dear David

RE: REVIEW OF ENVIRONMENT ASSESSMENT – NORTH WAMBO UNDERGROUND MINE MODIFICATION (DA 305-7-2003 (MOD 13)

Please find attached the CFMEU Northern District Branch's Submission in relation to the abovementioned matter.

The Union welcomes the opportunity to commence on the abovementioned Project.

Should you have any questions concerning the same, please do not hesitate to contact the Union Office.

Yours sincerely

**KEENON ENDACOTT** 

**INDUSTRIAL RESEARCH OFFICER** 

Date: 18 February 2013



### Review of Environmental Assessment

# North Wambo Underground Mine Modification DA 305-7-2003 (Mod 13)

## **Submission**

Construction Forestry Mining and Energy
Union (Mining and Energy Division)
Northern District Branch

January 2013

On 4 December 2012 Wambo Coal Pty Ltd (WCPL) applied to the Minister, Department of Planning seeking approval for the development of two additional longwall panels contiguous with the existing North Wambo Underground Mine.

The Director General made the Environmental Assessment publicly available on the 1 February 2013 at the DP & I Information Centre Sydney, Singleton Shire Council, and Nature Conservation Council.

The Union is pleased to take the opportunity to comment on the North Wambo Underground 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 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 Wambo facility is located approximately 15 kilometres west of Singleton near the village of Warkworth and is wholly within the State's Northern District coalfields.

The Union is familiar with the Wambo site facility with a range of open cut and underground mine operations 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 Union supports the Modification of the additional longwall panels at the North Wambo Underground operations as proposed.

#### **Project Overview**

Following a review of mine planning and recent exploration results, WCPL has identified additional coal reserves adjoining the existing North Wambo Underground Mine than can be economically mined with underground mining methods.

The Modification would include the development of two additional longwall panels in the Wambo Seam contiguous with the existing North Wambo Underground Mine. Proposed Longwalls 9 and 10 would be located to the south-east of the existing longwall panels and would be approximately 2km long and approximately 250m wide. Access to the modified longwall panels would be via the existing North Wambo Underground Mine. The Modification would use the existing surface infrastructure of the North Wambo Underground Mine.

To minimise the potential for subsidence impacts on North Wambo Creek, the Modification longwall panels would be set back from this feature by a distance equivalent to a 26.5 degree angle of draw from the Wambo Seam.

The Modification would produce approximately 3.7Mtpa of additional ROM coal and would be mined within the approved Wambo mine life.

#### Consultation

Consultation has been conducted with the local community, Aboriginal stakeholders, United Collieries, key state government agencies and Singleton Shire Council during the preparation of the modification EA.

It is envisaged consultation between the local community, United Collieries and regulatory agencies will continue during the public exhibition of the EA and the assessment of the proposal by the NSW Government.

A CCC for Wambo is in place providing a mechanism for ongoing communication between WCPL and the local community.

Consultation with United Collieries was conducted during 2011 and 2012. During this consultation the Modification and the location and potential impacts on existing and future United Collieries infrastructure was discussed.

WCPL will continue to consult with relevant State Government agencies on a regular basis in relation to the current mining operations at Wambo.

#### **Subsidence**

A revised cumulative Subsidence Assessment including the Modification has been prepared by Mine Subsidence Engineering Consultants (MSEC).

Previous bord and pillar workings and extracted longwall panels associated with the Homestead Mine and the Wollemi Mine in the Whybrow Seam are located approximately 55 to 95 m above the Modification longwall panels. The extraction of the Modification longwall panels would result in some reactivation of these workings.

The type and magnitude of predicted subsidence effects for the modified mine layout are similar to the approved mine layout. It is expected that the potential subsidence impacts above the Modification longwall panels would be similar to those observed above the previously extracted long walls at the North Wambo Underground Mine.

The Subsidence Assessment prepared by G.E Holt & Associates (2003) concluded that approved longwall mining would have no subsidence impact on Wollombi Brook as:

- Mining of longwall panels will be constrained by the subsidence exclusion zone limited to an angle of 26.5 degrees from the vertical to a 40m lateral buffer from the Wollombi Brook high bank; and
- The main development drivages beneath the Wollombi Brook for the future approved mining of the Arrowfield and Bowfield Seams will be designed to be permanently stable.

Wollombi Brook is located 450m east of Longwall 10, at its closest point to the Modification longwall panel. At this distance, Wollombi Brook is not expected to experience any measureable tilts, curvatures or strains.

North Wambo Creek and Wambo Creek are located outside the extent of the Modification longwall panels. These creeks are not expected to experience any measurable tilts, curvatures or strains resulting from the extraction of the Modification longwall panels.

Stony Creek is also located outside the extents of the Modification longwall panels, but is situated immediately adjacent to the southern corner of the proposed Longwall 10. Stony Creek could experience small additional subsidence in the vicinity of the proposed longwalls, however,

this is where the creek is located directly above the longwalls in the Wambo, Arrowfield and Bowfield Seams further upstream.

The predicted incremental 20mm subsidence contour due to the extraction of the Modification longwall panels is located well outside the estimated limit of alluvium for Wollombi Brook. Therefore it is unlikely that the Wollombi Brook alluvium would be adversely impacted as a result of the extraction of the Modification longwall panels.

The Wollemi National Park Escarpment is greater than 1 km west of the Modification longwall panels at its closest point and is not expected to experience any measurable tilts, curvatures or strains.

A number of Aboriginal cultural heritage items, including artefact scatters, isolated finds and a possible scar tree have been identified in the vicinity of the Modification long wall panels. Potential impacts on these items will be discussed under Aboriginal Cultural Heritage.

There is predicted to be no measurable subsidence from the Modification longwall panels in the curtilage of the Wambo Homestead Complex, however the main headings for the Modification longwall panels are within the curtilage area.

#### **Land Resources**

Potential land resource impacts as a result of the Modification would be limited to potential impacts associated with mine subsidence and minor and temporary disturbance associated with dewatering bores.

Potential impacts on soils and agricultural productivity would be associated with the following subsidence impacts:

- Surface cracking; and
- Ponding and changes in stream alignment.

Consultant Frasier et al (2010) found no significant effect of longwall mining subsidence on agricultural production, including cattle grazing, in the Hunter Valley region.

Given the above, and with the implementation of management measures, it is considered that there would be no significant change to the long-term agricultural productivity of the Modification area.

#### Groundwater

The main potential impacts on the groundwater regime due to the Modification are as a result of:

- Subsurface fracturing and shearing of sedimentary strata above the Modification longwall panels resulting in changes in bulk rock mass permeability and storage capacity;
   and
- Dewatering of groundwater that enters the underground mining area as a result of the above.

The Modification would add about 0.2 mega litres per day to peak inflow rates predicted for the currently approved mine plan, resulting in a peak inflow rate of approximately 1.7 ML per day at the completion of the North Wambo Underground Mine.

The Permian coal measures within the approved North Wambo Underground Mine footprint are predicted to be essentially dewatered during mining of the target Wambo Seam.

The Modification would result in additional dewatering of the Permian coal measures; however the impact on water levels due to the Modification is negligible regionally.

The impacts of the Modification on the North Wambo Creek alluvium are predicted to be limited to the area where alluvium is present overlying the Modification longwall panels. Consultants Heritage Computing predicts a maximum additional localised drawdown of less than 0.5 m in the alluvium.

The Groundwater Assessment concluded that the Modification would have no discernible impact on stream baseflow or natural river leakage beyond the effects of approved mining for Wollombi Brook, North Wambo Creek, Wambo Creek and Stony Creek.

These consultants also predicted that no privately owned registered bores in alluvium or regolith would incur more than 0.1 m incremental drawdown due to the Modification.

#### **Surface Water**

The Modification would not include any material changes to the approved water management system, water supply or water demand. The water demand for Wambo would not materially change as a result of the Modification, as maximum ROM coal production would remain unchanged.

The Groundwater Assessment predicted that the Modification would add approximately 0.2 ML per day to peak inflow rates predicted for the currently approved mine plan.

The Groundwater Assessment also concluded that the Modification would have no discernible impact on stream baseflow or natural river leakage beyond the effects of approved mining for Wollombi Brook, North Wambo Creek, Wambo Creek and Stony Creek.

The Modification would not result in any material additional catchment excision. Therefore, the Modification would result in negligible impact on stream flows in the Wollombi Brook, North Wambo Creek, Wambo Creek and Stony Creek.

#### **Aboriginal Cultural Heritage**

The Modification would not result in any material additional land disturbance. Therefore, disturbance to the Aboriginal cultural heritage sites would be limited to impacts associated with vehicular movements, minor subsidence remediation works and the construction of dewatering bores.

Vehicular movements in the Modification area would be limited to those required for monitoring and general site maintenance activities. If required, any minor subsidence remediation works would be located to minimise impacts on Aboriginal cultural heritage sites wherever possible. Dewatering bores would be located such that they would not disturb known Aboriginal heritage sites.

Based on the subsidence predictions, consultants RPS concluded that the whole of surface movement and potential soil cracking has the propensity for minor to moderate impacts to Aboriginal cultural heritage to occur in some parts of the Modification area.

The overall risk from all historic and approved subsidence is therefore assessed as low to moderate. However, when the historic and approved subsidence impacts are considered, RPS concluded that the incremental subsidence from the Modification would result in a negligible to low additional risk.

The registered Aboriginal parties who participated in the field surveys inspected a number of trees with a similar girth and of similar type to the possible scar tree in an adjacent area which had been previously undermined by longwall mining and found that the previously undermined trees had not been adversely affected. The Aboriginal stakeholders present concluded that if the predicted subsidence is similar to that experienced in the other underground mining area then the trees should be left in situ and that regular monitoring of the site should be undertaken to monitor the health of the tree.

RPS concluded that the Modification would not substantially increase the cumulative impacts to Aboriginal heritage in the region.

#### Non-Aboriginal Cultural Heritage

An assessment identified the Wambo Homestead Complex as the only item of non-Aboriginal heritage significance within the vicinity of the approved North Wambo Underground Mine.

The main headings for the Modification longwall panels are located within the curtilage of the WHC. These main headings would be designed to be stable and non-subsiding and are far removed from the WHC buildings.

The Modification would not include secondary extraction within the curtilage of the WHC. There is predicted to be no measurable subsidence from the Modification longwall panels in the curtilage of the WHC and there is expected to be no impact on heritage values as a result of the Modification.

#### Flora

Dewatering bores would be located within already cleared farmland and would not impact remnant native vegetation.

Therefore, potential flora impacts of the Modification would primarily be associated with subsidence impacts from the extraction of the Modification longwall panels.

Consultants Flora Search concluded that it is unlikely vegetation within the extent of subsidence from the Modification would be adversely affected by mine subsidence. This conclusion is supported by inspection of previously undermined areas to the west of the Modification area, which showed that despite evidence of surface cracking of the soil, the condition of the vegetation on the undermined area was not noticeably different from that on adjacent similar unmined areas and showed no signs of dieback.

In addition, consultants concluded that the Modification would have no significant impact on threatened flora species, populations, ecological communities or critical habitat.

#### **Fauna**

As detailed in the flora assessment, dewatering bores would be located within already cleared farmland. Therefore, there is expected to be little impact on fauna species or their habitats.

Consultants Niche concluded that subsidence impacts from the Modification are not expected to have adverse impacts on available fauna habitats. Furthermore, the Modification would not have any adverse impact on movement of vertebrate fauna species throughout the landscape or cause fragmentation of vegetation within the study. No threatened fauna or their habitats are likely to be significantly impacted by the Modification.

#### **Greenhouse Gas Emissions**

It is considered that the Modification would not change the existing potential risk areas identified in the preliminary hazard analysis (PHA) conducted for Wambo as the proposed activities associated with the Modification are consistent with the activities assessed in the PHA.

#### **Economic Benefits and Project Justification**

The Modification would allow the recovery of approximately an additional 3.7 Mt of ROM coal.

This coal would be mined within the approved Wambo mine life, would use the existing surface infrastructure of the North Wambo Underground Mine and would require minimal surface

disturbance. Therefore, the Modification is a natural extension to the existing approved North

Wambo Underground Mine.

The Modification is consistent with the subsidence impact performance measures in the existing

Development Consent. The EA has demonstrated that the Modification can be conducted within

minimal additional environmental impacts above those already approved for Wambo.

The Wambo workforce currently consists of approximately 842 employees and contractors.

The key benefits of the proposed modification include:

• Payment of royalties to the State of NSW;

• Export earnings for Australia;

• Continued employment of the existing workforce;

• Maximising the coal resource recovery from an area already approved for mining

operations; and

• Maintaining efficient use of existing infrastructure for mining, processing and

transportation of coal.

In Summation

Based on the assessment of potential environmental impacts which has been multi-disciplinary

and involved consultation with the DP&I and other relevant stakeholders, the North Wambo

Underground Mine Modification is anticipated to pose negligible additional environmental

impacts beyond those already approved under DA 305-7-2003.

The Union considers that on balance, this Project is consistent with currently approved

Development Consent objectives of the EP&A Act, and therefore supports the proponent's

application.

**Grahame Kelly** 

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DISTRICT SECRETARY

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