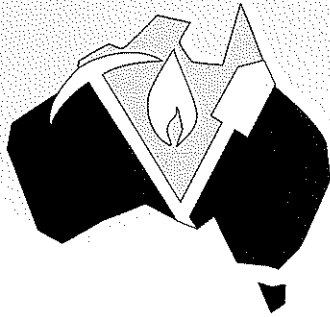




THE UNITED MINEWORKERS' FEDERATION OF AUSTRALIA

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

Northern District Branch

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17 December 2010

Ms Belinda Parker
Department of Planning
GPO Box 39
SYDNEY NSW 2001

Email: Belinda.parker@planning.nsw.gov.au

Dear Belinda

RE: BENGALLA MINE – MODIFICATION 4 (REFERENCE NO: DA 211/93 MOD 4)

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

The Union welcomes the opportunity to comment on the Bengalla Mine Modification (Reference No: DA 211/93).

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

Yours sincerely

**KEENON ENDACOTT
INDUSTRIAL RESEARCH OFFICER**



Mining and Energy Division

Review of Environmental Assessment

Bengalla Mine – Modification 4

Reference No: DA 211/93 MOD 4

Submission

Construction Forestry Mining and Energy

Union (Mining and Energy Division)

Northern District Branch

December, 2010

On 18 August 2010, the Bengalla Mining Company (BMC) managed by Coal and Allied applied to the Minister, Department of Planning seeking approval to accelerate mining operations within the Wantana Extension area to align these with the existing operations; and implement an Overburden Emplacement Strategy to resolve an overburden emplacement capacity issue at Bengalla.

This modification to Bengalla Mine is sought under section 75W of Part 3A of the EP&A Act.

The Director General made the Environmental Assessment publicly available on the 8 December 2010, at the DoP Information Centre Sydney, Muswellbrook Shire Council Offices, Nature Conservation Council Newtown, and Coal and Allied Muswellbrook Shopfront, Muswellbrook.

The Union is pleased to take the opportunity to comment on the Bengalla proposal 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 Bengalla Coal Mine, with its site located 4 kilometres North-West of Muswellbrook, is wholly within the State's Northern District coalfields.

The Union is familiar with the Bengalla site and 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 on balance the Bengalla Coal Mine Modification Application Reference No. DA 211/93 MOD 4.

Project Overview

BMC seeks to modify DA 211/93 to facilitate mine plan alterations which will alleviate overburden emplacement capacity issues at Bengalla. These issues have ultimately resulted from the delay in the relocation of the ROM Hopper and subsequent commencement of mining within the Wantana Extension area.

Bengalla has been unable to achieve its maximum production limit of 10.7 Mtpa ROM coal due to insufficient capacity for loading at the port. Such uncertainties surround rail and port allocations have resulted in the delay of capital expenditure associated with the relocation of the ROM Hopper, as described in the Bengalla EA, which ultimately resulted in the delayed entry into the Wantana Extension area.

In addition to the reduction in rail and port allocations, BMC experienced a delay in the granting of the relevant approval under Part 6 of the National Parks and Wildlife Act 1974. This approval was required for the salvage of Aboriginal material over the relocated ROM Hopper site, prior to the commencement of construction.

Both of these matters have since been resolved however the delay in the relocation of the ROM Hopper and consequent entrance into the Wantana Extension area has resulted in an overburden capacity issue now being experienced.

The changes to the development, the subject of the application for Modification, comprise:

- The acceleration of mining operations within the Wantana Extension area to align it with existing mining operations; and
- Implementation of an overburden emplacement strategy at Bengalla to resolve overburden emplacement capacity issues.

If this Modification is approved, Bengalla as modified will have the following features as compared to the currently approved development:

- 21 Year Mine Disturbance Area of approximately 717 ha being an increase of 26 ha to that previously approved;
- Maximum ROM coal production of 10.7 Mtpa being no change to what is currently approved by the Development Consent as modified;
- Maximum recovered coal reserve of 154.5 Mt of ROM;
- Mining approval to 2017, remaining unchanged from that currently approved;
- The same open-cut strip mining method as currently approved;
- The same maximum height of the OEA (RL 270 m) as currently approved;
- No increase in the 400 full-time permanent employees as currently approved;
- No change to existing infrastructure to that currently approved; and
- Some minor changes in the potential environmental impacts of the operations arising from the alterations to the approved development as proposed by this Modification.

Wantana Extension

Mining operations within the main mining area at Bengalla have progressed further to the west of that originally scheduled, restricting overburden emplacement activities within the southern portion of the existing OEA, thus resulting in a loss of overburden emplacement capacity remaining, leaving existing operations in a critical situation.

This Modification application is seeking the acceleration of mining within the Wantana Extension area at a rate of up to 2.5 Mtpa. This will align with the main mining area and ultimately assist in liberating approved emplacement areas.

Although mining within the Wantana Extension area will be conducted at higher rates, ROM coal production from Bengalla will remain within the maximum approved 10.7 Mtpa.

The proposed acceleration of mining within the Wantana Extension area will commence immediately upon the approval of this Modification.

Overburden Emplacement Strategy

Since the initial identification of the overburden emplacement capacity issues BMC's mine planners have conducted a detailed modelling to accurately quantify the shortage and to develop possible options to resolve the issue.

BMC will exhaust its options to emplace overburden with the existing OEA during early 2011. This is compounded by the fact that BMC relies upon a strip dragline mining operation as its primary method of overburden removal which constrains overburden emplacement within the existing OEA on a strip by strip basis. As such, BMC has no alternative but to seek approval to modify the footprint of the existing OEA.

Following the review conducted by the proponent and consideration of the alternative available to resolve the issue, BMC's mine planners have developed what they consider to be the ideal overburden emplacement strategy that will afford additional capacity required at Bengalla. This is whilst considering the impacts upon the natural environment and community.

The overburden emplacement strategy includes:

- Extending the footprint and associated landform of the existing OEA to the south-east (Southern OEA Extension);
- Relocation of the already approved but not yet constructed temporary OEA to the west of the current operations (Western OEA); and
- Delaying the finalisation of rehabilitation of the northern face of the existing OEA.

Southern OEA Extension

The Southern OEA Extension involves the development of the existing OEA further towards the south-east and will generate approximately 10 Mbcm of additional overburden emplacement capacity at Bengalla. The Southern OEA Extension covers approximately 11 ha outside the currently approved 21 Year Disturbance Limit within the current Mining Lease. The new landform will extend from the old conveyor belt

road at around 10 degrees towards the north-west to the maximum approved OEA height of RL 270m.

The Southern OEA Extension is proposed over a portion of land partly inside the 1955 Hunter River flood level. However, this area has previously been separated from the Hunter River Floodplain by the Muswellbrook to Ulan Rail Line and the Old Conveyor Belt road.

The Southern OEA Extension will allow the final landform to be developed at RL 270m further to the south than currently approved. The Southern OEA Extension has been designed to blend in with the currently approved mine plan, with some minor adjustments to create a free draining final landform.

The commencement of activities associated with the Southern OEA Extension is scheduled in early 2011 to ensure that BMC can proceed with currently approved mining operations. By this time, the eastern face of the existing OEA will be developed in readiness for rehabilitation activities.

Rehabilitation of the eastern and southern faces of the Southern OEA Extension is expected to be undertaken mid 2013. From this point in time, continuing improved environmental outcomes will be experienced by receivers to the east and south of Bengalla.

Western OEA

Mine planning has determined that should overburden material be emplaced within the areas as approved, it would need to be removed shortly after as mining progresses and at the time when emplacement capacity has been exhausted. This would not resolve the capacity issue and would result in an inefficient use of resources.

BMC's mine planners have identified an alternative location for this emplacement area to the west of currently approved mining activities.

The proposed Western OEA will provide BMC with the flexibility of an additional 6.6 Mbcm of overburden emplacement capacity to assist in alleviating the shortage.

The Western OEA will be constructed to a maximum height of RL 210 m which will complement the natural topography within this area. The Western OEA will cover an area of approximately 24.6 ha with an additional footprint of approximately 15 ha outside of the approved 21 Year Disturbance Limit.

BMC plans to utilise the Western OEA as a last resort for emplacing overburden material in order to reduce the amount of land disturbance and the impacts associated with the rehandling of this material at a later date. The temporary rehabilitation of the Western OEA will be undertaken as each stage is developed to ensure the area of open spoilt is limited.

Northern OEA

The northern face of the existing OEA has been steepened to accommodate additional overburden capacity and to maximise coal recovery. The Bengalla SEE described the reshaping of this area at 10 degree slope in approximately 2012. Due to the overburden emplacement capacity issues currently experienced at Bengalla, BMC seeks approval to delay the final shaping and rehabilitation of the northern face of the existing OEA until 2016.

Analysis and Outcome

Extending the footprint of the existing OEA to the south-east into a lower lying area was the preferred option. This option was found to most effectively promote the orderly and economic development of Bengalla whilst protecting the environment. This option has been designed to integrate with the currently approved landform, whilst also minimising potential environmental and social impacts.

The Southern OEA Extension is proposed to impact upon some small areas of Class II agricultural land.

The Western OEA, as sought in this Modification, has been designed around one of the alternatives considered. Other alternatives considered were deemed to result in impacts on either Aboriginal heritage items or on sensitive ecological areas.

Extending the Southern OEA as part of the Overburden Emplacement Strategy sought by this Modification provides the proponent with the most practical and approvable options in resolving the overburden emplacement capacity issues at Bengalla, while achieving the objectives of the EP & A Act.

This Modification is required to permit the strategic timing of mining and placement of overburden materials within the approved DA Boundary. This Modification will result in a 3.6% increase to the currently approved 21 Year Mine Disturbance Limit.

Stakeholder Consultation

The issue scoping phase of the proponent's consultation program was to provide stakeholders with information on the Modification and to identify community concerns and issues.

Consultation generally was in the form of the distribution of the CNA Community Newsletter Muswellbrook Edition to near neighbours and relevant regulators.

Briefings have also been made to the Bengalla Mine CCC in relation to this Modification over the course of the preparation of the Environmental Assessment.

The proponent has established a stakeholder consultation program, which will continue to be implemented throughout the operation of Bengalla. Any issues identified during the consultation program will be addressed by providing more information or incorporate further refinements to the Modification. All issues raised were addressed in the proponents EA.

Air Quality

An air quality impact assessment was undertaken by consultants PAE Holmes in order to assess the effects of this Modification on the regional air quality.

The cumulative impact assessment takes into account the predicted impacts from Bengalla (including this Modification), the neighbouring mines in the area and the contribution from other local sources of dust.

Dispersion modelling of Depositional Dust, TSP and PM₁₀ was undertaken for the Modification. These figures show the predicted annual average TSP concentrations, predicted annual average PM₁₀ concentrations, and the predicted annual average (insoluble solids) dust deposition rate in relation to private receivers for Bengalla (including this Modification) considered in isolation and cumulatively where relevant.

The results from the dispersion modelling indicate that air quality emissions from Bengalla alone are not predicted to contribute to exceedances of the relevant depositional dust, TSP or PM₁₀ annual average air quality criteria at any non-mine owned receivers.

The dispersion modelling shows that when other sources are considered, the PM₁₀ annual average air quality criteria is predicted to be exceeded at seven non-mine owned receivers, mainly to the south-west and east of Bengalla. However, these non-mine owned receivers have previously been identified to be affected as a result of the approved operations at Bengalla, a neighbouring mining operations zone of affectation or recently predicted to be impacted within the Mount Pleasant Modification Project Coal EA. The depositional dust air quality criteria is predicted to be exceeded at one non-mine owned receiver located to the east of Bengalla, which has previously been identified to be affected by mining operations.

Results for Bengalla (including the Modification) alone indicate that no non-mine owned residences will exceed the PM₁₀ 24 hour criteria of 50 µg/m³ on more than five occasions per year as a result of Bengalla's operations. The assessment completed for cumulative PM₁₀ 24 hour average air quality concentrations concluded that there is limited potential for the Modification to result in any additional exceedances of the relevant criteria.

The proponent is seeking approval for additional overburden emplacement capacity. It is important to note that this Modification is not seeking the movement and storage of any additional overburden material on an annual basis or an increase in annual ROM coal production rates that are currently approved.

There are some minor changes to the “centre of gravity” of the dust sources at Bengalla during the construction of the Southern OEA Extension, however, these have been considered in the modelling which has confirmed no significant changes to the impacts to sensitive non-mine owned receivers.

As detailed, the Modification is not predicted to impact on any additional non-mine owned receiver to that previously predicted to be impacted.

Greenhouse Gas Emissions

The only change to existing mining operations proposed in this Modification that is likely to affect greenhouse gas emissions is a minor change due to the altered routes of haul trucks.

Total distances travelled by haul trucks under currently approved mining operations at Bengalla were compared with those required for this Modification in years 2011 and 2017.

The emissions for 2011 are not considered a significant increase in the total emissions produced compared to existing approved operations at Bengalla.

The mitigation and management measures included within the approved EMP are considered appropriate and relevant to the Modification.

Noise

An acoustics impact assessment for this Modification was undertaken by consultants Bridges Acoustics.

The acoustics impact assessment included a review of existing noise conditions, establishing Modification specific noise assessment criteria, modelling the mining noise levels resulting from this Modification, and an assessment of the predicted mining noise levels against the assessment criteria.

Regular attended and unattended noise monitoring was conducted at five residential locations surround Bengalla.

These locations were representative of most receivers that may be affected by noise from Bengalla.

The predicted noise levels were based on operational activities that include proposed mitigation measures. The predicted noise levels represent a worst case scenario with all equipment operation and modelled under prevailing weather conditions in accordance with the INP.

Noise levels are predicted to be generally lower than the predicted noise levels on most occasions when not all equipment is operating or noise enhancing weather conditions do not occur.

All other non-mine owned receivers have been predicted to receive less than the intrusive or consent criteria.

Results indicate that noise levels during day and evening periods remain within intrusive criteria at all non-mine owned receivers with the exception of three properties and four receivers with predicted noise levels 1 or 2 dBA above the day and evening intrusive criteria.

Three properties and three receivers have predicted noise levels 3 or 4 dBA above the night intrusive noise criteria.

Seven residences are predicted to receive minor noise impacts of 1 or 2 dBA above the night time intrusive noise criteria.

Modelling indicates that mining noise impacts from Bengalla would be less than those predicted in previous assessment at a majority of properties. This is attributed to the western advancement of operations within the main mining area, away from the sensitive areas to the east, and additional acoustic shielding created by the Southern OEA Extension to the mining operations within the main mining area.

As the Modification does not affect but enhances existing noise management strategies currently being implemented at Bengalla, this Modification is therefore unlikely to affect existing maximum noise levels from Bengalla, and a detailed sleep disturbance assessment therefore is not required.

The Modification will produce no increase in impacts as a result of blasting as it will have no effect on mining methods, overburden removal, coal extraction areas or blast locations or parameters. Similarly, this Modification will not increase traffic noise levels as it will have no effect on production rates or staff levels.

Soil

Suitable topsoil from each of the soil types within the Southern OEA Extension and the Western OEA will be stripped prior to overburden emplacement. This will be completed to ensure the better quality topsoil is not mixed with the inferior subsoil.

The proponent will continue to comply with the land mitigation and management measures provided for in accordance with their EMPs approved by DoP.

Groundwater

A groundwater impact assessment was conducted by consultants Australasian Groundwater and Environmental Consultants Pty Ltd.

The Hunter River Alluvial Aquifer is considered to be an important groundwater resource being widely used by the agricultural industry for stock watering and irrigation in the area.

The Southern OEA Extension will have increased infiltration through exposed overburden, due to water pooling against the alluvial bed without the influence of

evaporation. Increased recharge to the Hunter River Alluvial Aquifer has the potential to alter the piezometric gradient of this aquifer in close proximity to the Southern OEA Extension. However, this is expected to be a minor effect.

Electrical conductivity (EC) in the area of the Southern OEA Extension bores SMB1 and SMB2 indicate levels between 1950 – 2190 $\mu\text{S}/\text{cm}$. Based on this existing alluvial water quality data, the leachate testing and the groundwater seepage model, it is predicted that the Southern OEA Extension will locally improve the EC in the Hunter River Alluvial Aquifer in the vicinity of the recharge point.

The proponent will continue to comply with the mitigation and management strategies provided for in accordance with the approved EMPs.

Surface Water and Flooding

A surface water impact assessment was undertaken by consultants WRM Water and Environment Pty Ltd.

The Modification lies entirely within the original study area of the Bengalla EIS and the DA Boundary. No coal extraction on the Hunter River alluvial floodplain is proposed as part of this Modification.

The Modification requires the development of a new sedimentation dam and extensions to an existing dam to capture the surface runoff from the Southern OEA Extension.

Evaporation from these dams is expected to slightly increase water loss across Bengalla. However changes to Bengalla's water demands resulting from this Modification are negligible.

The Southern OEA Extension will extend onto the fringe of the 1955 flood extent. The assessment confirmed that there will be no significant effect on the flow of floodwaters along the Hunter River Floodplain as floodwater can only enter the area

proposed to be occupied by the Southern OEA Extension via culverts under the rail and road embankments.

The loss of floodplain storage resulting from the Southern OEA Extension, Modification represents a loss of only 0.3% across the adjacent 1.2 km reach of the Hunter River. This is a very small loss of storage and will have no measurable effect on Hunter River flood levels or flood behaviour.

Visual and Lighting

A visual impact assessment was undertaken by consultants Integral Landscape Architecture and Visual Planning.

The assessment of visual impacts of the Southern OEA Extension found that impacts will be low due to the limited scale of changes and similar visual characteristics to the currently approved existing OEA.

Assessment of the visual impacts of the Western OEA found that impacts will also be low due to the lack of external visibility, existing topography in the area and the similar visual character to the backdrop of the current existing OEA.

The lighting associated with this Modification was assessed to be at a similar level to that currently approved and experienced at Bengalla. Some direct lighting impact will occur when operational areas located on the Southern OEA Extension are not screened by overburden or topography.

The expeditious completion and rehabilitation of the Southern OEA Extension with priority given to the outer faces will occur. This will reduce the visual impact of this Modification to potentially sensitive receivers to the east of Bengalla.

Ecology

An ecological impact assessment was undertaken by consultants Cumberland Ecology.

Flora

The proposed Modification involves the disturbance of approximately 9 ha of grassland containing predominantly exotic pasture and no native plant communities for the Southern OEA Extension.

The Western OEA will disturb approximately 22 ha of heavily modified native grassland that has derived from the historic clearing of woodland.

In both cases, degraded low diversity derived native grassland and exotic pasture is of a modified form and not conforming to a community listing in the TSC Act or EPBC Act.

Fauna

The habitats provided within the Survey Areas are of low conservation significance for local fauna due to the absence of food resources and poor structural diversity for shelter.

A State and Federal database search indicated that a number of fauna species listed under the TSC Act and EPBC Act have the potential to occur within the Survey Area. However, these species were not identified during the fauna surveys and it is not likely that the Survey Area offers habitat for these species.

Non Indigenous Heritage

A non-indigenous heritage impact assessment was undertaken by consultants Archaeology Australia.

A review of Bengalla's EIS identified two heritage buildings in the vicinity of Bengalla, including the Bengalla Homestead and Overdene Homestead.

The assessment concluded that no significant impact on Overdene Homestead would occur as a result of this Modification.

The fence line of the Bengalla Homestead is approximately 50 m from the Southern OEA Extension and has been identified as being potentially impacted upon by the Modification.

The Assessment determined that there will be no significant impacts on any heritage items resulting from the proposed Southern EOA Extension.

In addition, no significant impacts on any non-indigenous heritage items are predicted as a result of the Western OEA.

Indigenous Heritage

An Aboriginal heritage impact assessment was conducted by consultants at Bengalla in 1992. This assessment identified Aboriginal sites and artefact scatters across the site.

The Western OEA as sought in this Modification has been designed to avoid any impacts on Aboriginal heritage items and sensitive ecology.

No Aboriginal heritage sites as part of the Bengalla EIS were found to exist within the areas proposed to be disturbed by this Modification. Aboriginal sites remaining at Bengalla located in the vicinity of the Southern OEA Extension and the Western OEA that were not salvaged as part of the 1998 salvage have been provided. No Aboriginal heritage sites exist within the Survey Area 1 or Survey Area 2.

Rehabilitation and Final Landform

BMC currently conduct rehabilitation in accordance with the Rehabilitation and Landscape Management Plan 2007.

Two options are currently available at Bengalla in regard to existing mine planning and ultimately, mine closure. The first option is as currently approved including this Modification, resulting in mine closure in 2017 with a conceptual final void located to the west.

The second option relates to large areas of identified coal reserves to the west of currently approved mining operations at Bengalla.

It is anticipated that BMC will seek the relevant approval necessary prior to 2017, to allow continuation of mining operations at Bengalla into the future. The mine closure would be rescheduled and the location of the final void and associated landform would be altered.

The rehabilitation of land disturbance associated with this Modification will continue to occur progressively as an integral component of the mining operations at Bengalla.

It is expected that in order to minimise air quality impacts associated with the proposed Western OEA, surface disturbance will be limited to a maximum of 50% of the total footprint with progressive temporary rehabilitation being conducted on any additional disturbance.

Should approval of this Modification be granted a revised Mining Operation Plan will be required to be submitted to Industry and Investment NSW.

Justification

The proponent indicates the Modification will ensure the maximisation of resource recovery and orderly continuation of open cut coal mining with the creation of additional overburden storage capacity within Bengalla's current mining tenements. It will also ensure the progressive rehabilitation of the operation to a predetermined conceptual 2017 landform consistent with DA 211/93 and the Bengalla SEE.

The EA presented by BMC has not identified significant impacts associated with the acceleration of mining within the Wantana Extension area or the implementation of the overburden emplacement strategy in the manner proposed by the Modification. Therefore the Modification has been designed to result in an improved environmental outcome for ongoing operations at Bengalla.

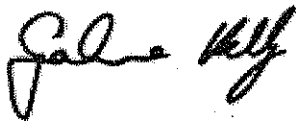
In Summation

The relocation of the approved Western OEA will result in a visually less sensitive landform to that currently approved and will result in a reduced amount of future overburden material re-handling which will ultimately lead to improved air quality impacts from Bengalla.

The creation of the Southern OEA Extension once fully commissioned, will screen these existing and future operations both within the Wantana Extension area and the main operation from sensitive receivers located to the east of Bengalla and reduce the visual and acoustic impact of the operation.

Based on comparative analysis of the key elements detailed in the Bengalla Coal Mine Statement of Environmental Effects, it is considered the Modification Activities to build on the attributes of existing project approval.

The Union on balance supports the Bengalla Coal Mine Modification 4, Reference No: DA 211/93 MOD 4.

A handwritten signature in black ink, appearing to read 'Grahame Kelly', with a stylized, cursive script.

Grahame Kelly

DISTRICT SECRETARY