



Review of Environmental Assessment

Warkworth Continuation Project

SSD-6464

Submission

Construction, Forestry, Mining & Energy Union

(Mining and Energy Division)

Northern Mining & NSW Energy District

July 2014

On 23 June 2014 Warkworth Mining Limited applied to the Minister, Department of Planning seeking approval for the continuation of Mount Thorley Mining Operations. The proponent is seeking a new Development Consent under Division 4.1 of the Environmental Planning and Assessment Act 1979 to enable mining to continue beyond 2015 at a maximum production rate.

The Director General made the Environmental Assessment publicly available on the 25 June 2014 at the DP & I Information Centre Sydney, Singleton Shire Council and Nature Conservation Council.

The CFMEU is pleased to take the opportunity to comment on the Warkworth Continuation 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 of the CFMEU Mining and Energy Division, being the branch that on behalf of the organisation which is making the submissions, is the principal Union representing coal miners in the Northern District coalfields of New South Wales. The Warkworth Mine operation is located approximately 8 kilometres south-west of the township of Singleton and is wholly within the State's Northern District coalfields.

The CFMEU is familiar with the Warkworth coal facility site and has engaged the services of an Environmental Consultant with extensive experience in local government and environmental assessments on coal mining related projects. The CFMEU is also a land owner affected by the proposal as the CFMEU owns the adjoining United Colliery Mining Lease.

After reviewing all the material and taking advice, the CFMEU supports the Warkworth Continuation Project as proposed.

Overview

Warkworth Mine and the adjacent Mount Thorley Operations (MTO) although being owned by different entities, have both been managed by Coal & Allied since 2004 to realise cost saving through synergies of sharing equipment, personnel, water, rejects and coal preparation across both operations. The separate ownership is reflected in each mine having its own standalone mining leases and development consent. The integrated operation; namely, Mount Thorley Warkworth (MTW) has a workforce of approximately 1 300 on average, which includes full-time contractors.

A separate development application under Part 4 Division 4.1 of the EP&A Act, by Mount Thorley Operations has been lodged at the same time as the DA for the proposal. The Mount Thorley Operations Continuation Project 2014 application relates to a continuation of the development consent beyond its current 2017 expiry to enable more time for the completion of existing approved mining, while aligning the consent life with the timeframe contemplated under the proposal to enable the continued integration of the two operations. The current operational integration at MTW is critical to Warkworth Mine's future operation.

The existing Warkworth Mine contains three pits, North Pit, West Pit and South Pit with the South Pit nearing completion. Extending the spatial limits of the development consent is required for the following reasons:

- Between 2015 and the end of the DA consent period (2021), mining activity at Warkworth Mine will be severely restricted by approved spatial limits being reached. In addition, MTO's development consent is due to expire in 2017. Securing timely new long-term approvals for the integrated operations is critical to the viability of MTW. The existing mining approvals do not provide adequate longevity to support further capital investment into the MTW business and the extraction of the remaining resource already approved for mining. Without these approvals, MTW would be required to commence closure planning in the near future.

- MTW is a high strip ratio operation. Given the associated high cost of the operations, the choice of mining method is critical to ensuring the ongoing viability of the operation through changing economic environments. For the MTW operation, draglines are the most efficient mining method used to offset a proportion of the overall higher cost of mining. Draglines move waste material for approximately one third the cost of load and haul mining systems.
- The Warkworth Mine and MTO have fixed costs and require production to be approximately 18 Mtpa of ROM coal to remain profitable in the current economic environment.
- MTW currently operates three draglines with a total available strike length of 6.65 km. The closure of South Pit in approximately 2016 and Loaders Pit at MTO in approximately 2020 (subject to approval for the Mount Thorley Operations 2014 application) further reduces dragline strike length to 3.8km. This represents a 43% reduction from the current strike length and a 61 % reduction since 2004. At this point, MTW's only two operating pits would be North Pit and West Pit. To remain a viable operation, Warkworth and MTO require the dragline strike length to be maximised. This would enable operating costs to be kept lower given draglines move waste material at a much lower cost compared with load and haul mining systems, as well as maintaining a production profile of approximately 18 Mtpa of ROM coal across the two mines. This level of extraction is the critical threshold to ensuring that the coal preparation plants at the respective mines have sufficient coal supply available for processing as well as generating sufficient revenue to offset the high costs of mining the MTW resource.

The proposal seeks to extend the West Pit to the south and west into Saddleback Ridge and then both North Pit and West Pit would advance down dip, across Wallaby Scrub Road. North Pit would advance through an area of Warkworth Sands Woodland west of Wallaby Scrub.

It is recognised that Saddleback Ridge and Warkworth Sands Woodlands (WSW) are features of interest to a range of stakeholders. Avoidance of these areas is not possible for the continuation of viable mining at Warkworth Mine.

Under the current development consent, a dragline would not be able to extract the lower overburden pass in West Pit as the area to the west (Saddleback Ridge) could not be incorporated into the pit. This is because the strike length would decrease to the point where draglines can no longer operate due to insufficient working room for the dragline and the spoil. Further, there would be no room for access ramps so haul trucks would not be able to access extracted coal. The reduced strike length and inadequate physical working area would not allow the required 18 Mtpa of ROM coal to be produced across the operation.

Avoidance of WSW in the North Pit would have a similar effect as that of Saddleback Ridge on West Pit. This would result in a reduced strike length of up to approximately 60% in some places. The reduced strike length and inadequate physical working area would not allow the required 18 Mtpa of ROM coal to be produced across the operation.

Consultation

The proponent has indicated a long history of consultation between Coal & Allied and key stakeholders as part of its existing mining operations and previous Warkworth Mine proposals in 2003 and 2010. During this time, Coal & Allied has built robust relationships with the communities in which it operates and has assisted in the contribution of their long term sustainability.

A comprehensive stakeholder engagement strategy is in place for MTW and is implemented by Rio Tinto Coal Australia's Community Relations team. The key goals of the stakeholder engagement strategy are to ensure the timely provisions of relevant and clear information and to create a process that provides opportunities for stakeholders to express their views and allows timely feedback on any matters raised.

An extensive consultation program specifically for the proposal has been carried out, with consideration of the Department of Planning's Guidelines for Major Project Community Consultation (2007).

Noise and Vibration

Acoustic engineers worked collaboratively with mine planners to ensure noise amelioration measures were incorporated into the mine design where feasible and reasonable. The effectiveness of these measures was continually tested in an iterative process with mine planners until adverse modelling predictions at assessment locations were minimised to the maximum extent that is feasible and reasonable.

A full assessment of noise and vibration was carried out in accordance with the INP, EPA 2000. The study was independently peer reviewed with the outcomes reflected in the final study. The findings of the study were:

- all reasonable and feasible measures have been applied to control noise from Warkworth Mine;
- the Mining SEPP's non-discretionary standard for cumulative amenity noise levels at privately-owned residential dwellings is met for Bulga Village and, therefore, noise impacts are below the acceptable noise levels and amenity of the village as a rural area would be maintained;
- the determining factor for the project specific noise levels (PSNL's) for all residences is the intrusiveness criteria. Background levels have been determined in full compliance with the required processes in the INP for setting background levels;
- four significant exceedances (>5dB(A)) of the PSNL's are predicted to occur and require the provision of acquisition rights with three at Warkworth Village (77, 103 and 264) and one to the north of Bulga village (34). Assessment location 34 is the only residence that would be subject to a significant exceedance due to the proposal, the other three already being subject to a significance exceedance of noise. Assessment location 77 is currently afforded acquisition rights from Wambo Mine. Assessment location 264 is inferred to have acquisition rights from Wambo Mine but is not currently included in its approval. Assessment location 102 is Warkworth Hall, which is a non-residence;
- Noise levels would be within 1 or 2 dB(A) of the PSNL's for the majority of the residences at Bulga village. Current government practice is not to accord

mitigation rights to residences unless noise levels are greater than 3 dB(A) above PSNL's;

- Low frequency noise levels predicted from the proposal meet current government policy requirements. Noise levels are predicted to meet relevant Broner criteria for low frequency noise and INP criteria for sleep disturbance at representative assessment locations;
- Cumulative noise levels would satisfy the INP night time criterion at all but two residential assessment locations in Warkworth village (77 and 264). However, it should be noted that the exceedance of cumulative noise criteria at these locations is predominantly caused by the nearby Wambo Mine. Furthermore, as noted previously assessment location 77 is currently afforded acquisition rights from Wambo Mine, and assessment location 264 would be afforded acquisition rights from Wambo Mine had it been previously assessed;
- Appropriate management of blasts would ensure blast noise overpressure and ground vibration limits are satisfied;
- The closure of Wallaby Scrub Rd and resulting increased traffic on detoured roads would not result in an exceedance of relevant noise criteria; and
- The removal of Saddleback Ridge is accounted for in modelled and predicted noise levels for the proposal. At this stage of mining noise generated from Warkworth Mine would be managed through different combinations of equipment attenuation and onsite operational noise controls such as plant relocation and shutdown to achieve relevant noise criteria.

Overall only one additional privately-owned residence, which is not within either Warkworth Mine's or a neighbouring mine's existing acquisition zone, would be afforded acquisition rights under the proposal. Also given that the cumulative noise levels have been met at the majority of assessment locations, and it is unlikely there would be additional noise sources nearby in the future, the residences at Bulga generally have a rural level of amenity as per the INP.

A noise management system is currently implemented at Warkworth Mine which consists of real-time and attended noise monitoring, administration, substitution and

elimination controls. These management practices according to the proponent would continue under the proposal.

Air Quality

Air quality engineers worked collaboratively with mine planners to ensure dust management measures were incorporated into the mine design where feasible and reasonable. The effectiveness of these measures was continually tested in an iterative process with mine planners until adverse modelling predictions and assessment locations were minimised to the maximum extent that is feasible and reasonable.

The findings of this study were:

- All reasonable and feasible measures have been applied to control dust from Warkworth Mine;
- Significant air quality impacts would be primarily experienced at Warkworth village due to mining activities moving closer as the mine plan progresses westwards;
- The Mining SEPP's non-discretionary standard for cumulative air quality is met at all but two privately-owned residential dwellings (assessment locations 77 and 264) which are in Warkworth village. These assessment locations and one non-residence (Warkworth Hall) may experience concentrations above the relevant air quality goals for 240 hour average and annual average PM₁₀. Assessment location 77 is currently afforded acquisition rights from Wambo Mine. Assessment location 264 is inferred to have acquisition rights from Wambo Mine but is not currently included in its approval;
- The Mining SEPP's non-discretionary standard for cumulative air quality at privately-owned residential dwellings is met for Bulga village, and therefore air quality impacts are below the acceptable air quality concentrations and amenity of the village should not be reduced;
- Dust from mining is generally coarse in fraction, whereas the fine fraction dust of concern to human health typically originates from combustion sources;
- Cumulative PM_{2.5} concentrations would be below the National Environment Protection Measure advisory reporting standards at all of the assessment

locations where the concentration of other pollutants are below the relevant air quality goals;

- No air quality impacts are predicted to result from diesel emissions (NO₂ and CO) and blast fume emissions; and
- Annual average greenhouse emissions over the 21 year life of the proposal are conservatively estimated at 1.038 Mt CO₂-e (Scope 1 and 2) which represents approximately 0.18% and 0.65% of Australia's and NSW emissions, respectively.

Air quality and greenhouse gas impacts are currently managed at Warkworth Mine through an existing integrated management system which involves the implementation of a monitoring network, best practice mitigation measures and operational control strategies.

Ecology

The biodiversity assessment and offsetting approach for the proposal follows the principles and guidelines outlined in the Draft NW Biodiversity Offsets Policy for Major Projects (OEH 2014a).

The resultant proposal would require the progressive clearing of 611 ha of native vegetation, including approximately 72ha of WSW endangered ecological community, 372ha of Central Hunter Grey Box – Ironbark Woodland EEC and 15ha of Central Hunter Ironbark – Spotted Gum – Grey Box Forest EEC.

Residual impacts on biodiversity would be compensated for by provision of offsets in the Southern Biodiversity Area and the Northern Biodiversity Area. The clearing of WSW EEC for the proposal would be offset by the provision of 75.5ha of WSW in the SBA and NBA, as well as the re-establishment of approximately 159 ha of this community. In addition a range of supplementary measures would be implemented for this community including the conservation of previously unprotected Warkworth Sands Grassland to be re-established under the 2003 consent, preparation of an Integrated Management Plan for WSW and the development of completion criteria for rehabilitation.

In the future, the SBA and rehabilitated mine area would combine to create a large area of treed vegetation in the landscape subject to long-term conservation and would join other conservation initiatives from adjoining mines. The NBA would also be regenerated to form a large patch of woodland and forest of over 300 ha. Such vegetation is intended to provide and maintain substantial habitats for native flora and fauna in the long term.

The proposed mitigation and offset measures presented for the proposal would minimise the impacts on threatened species populations and ecological communities and compensate for the loss of biodiversity as they would:

- Meet the offset requirements of the Draft NSW Biodiversity Offsets Policy for Major Projects;
- Adequately reallocate the offsets for non-WSW vegetation, providing a 'maintain or improve' outcome in accordance with the Biodiversity Certification Assessment Methodology;
- Provide suitable offsets for the WSW through both land based and supplementary offsets to maximise the long term viability of the community;
- Adequately compensate for the impacts of the proposal on non-WSW vegetation in accordance with the Upper Hunter Strategic Assessment;
- Provide a net increase in the area of EECs to compensate for the predicted loss as a result of the proposal;
- Provide a net increase in habitat available for threatened fauna species such as the threatened woodland birds, micro chiropteran bats and the Squirrel Glider; and
- Provide connecting corridor of woodland vegetation and fauna habitat across the Site, linking to other rehabilitation areas and remnant vegetation, thus providing large continuous patches of habitat into the future.

Groundwater

A groundwater study was undertaken to assess the potential impacts of the proposal and address the requirements of the NSW Office of Water's Aquifer Interference Policy and the Mining SEPP.

The findings of the study were:

- The groundwater model has predicted a water take from the Permian and alluvial sources less than the currently approved water take;
- No privately-owned water supply bores would be impacted above the minimal harm criteria described in the Aquifer Interference Policy;
- The proposal is not predicted to significantly change the water table in alluvium that supports groundwater dependent ecosystems. The water table at the base of the Warkworth Sands is perched and not directly connected with the underlying Permian. Therefore, the proposal is not expected to impact on the Warkworth Sands groundwater system or the associated vegetation community. Nevertheless, monitoring bores would be installed in the western extent of the shallow sand west of the approved mining activities;
- The reduction in saline Permian groundwater discharge to the Wollombi Brook alluvium is predicted to reduce the salinity in the alluvium during the life of the proposal; and
- The final void would be a local 'sin' with groundwater, surface runoff and rainfall inflows slowly filling the void before the water surface reaches an equilibrium level and the ground water levels in the aquifers begin to recover.

Groundwater and surface water at MTW are currently managed through an overarching water management plan. No additional mitigation measures, to those already implemented are required for the proposal.

Surface Water

Water requirements would be predominantly sourced from water collected onsite with some water sourced offsite through water sharing agreements with nearby mines and from the Hunter River in accordance with MTW's current licence entitlements. Water would continue to be discharged from MTW's licenced discharge points. All saline discharges would be controlled to meet the requirements of the Hunter River Salinity Trading Scheme so that offsite water quality impacts are managed.

The results of the surface water study indicate that the impacts of the proposal on surface water resources are unlikely to be significantly different to the existing approved operations and would not have a significant impact on surface water quality of the adjacent water features. Surface water would continue to be managed under the MTW WMP and the existing MTW surface water monitoring program. No additional mitigation measures, to those already implemented are required for the proposal.

Aboriginal Cultural Heritage

Previous Aboriginal cultural heritage baseline studies have identified a number of heritage items or places within and around the Site. Within the proposed 2014 disturbance area there are 110 extant items or places primarily consisting of stone artefacts in disturbed contexts.

The Wollombi Brook Aboriginal Cultural Heritage Conservation Area is proposed to compensate for the proposal's impacts on Aboriginal cultural heritage. The WBACHCA is west of the proposed 2014 disturbance area adjacent to the Hunter River. A total of 265 items/places have been identified within this area including the Bulga Bora Ground, a place of very high cultural significance to the Upper Hunter Valley Aboriginal community as well as scientific significance. The Aboriginal community will continue to be involved in the development and implementation of a customised management plan for the WBACHCA as well as overall Aboriginal heritage management at MTW.

Historic Heritage

The historic heritage study identified 50 historic features within the surrounding area of the proposal, including seven registered and 43 non registered items or places. Within the proposed 2014 disturbance area there are four non registered historic features, two with local and State significance (the former RAAF Base Bulga Complex and Great North Road Complex) and two with local significance (P1 huts at 297 and 377 Wallaby Scrub Rd).

The study found that while small portions of the former RAAF Base Bulga Complex and Great North Road Complex would be impacted by the proposal, heritage

impacts are likely to be minor. Impacts on the P1 Huts are likely to be moderate as these style huts are becoming rare. Other historic features within and in close proximity to the proposed 2014 disturbance area may experience indirect impacts associated with activities such as exploration and blasting. Impacts on these features are mostly negligible.

Where impacts on historic heritage sites or places are unavoidable, mitigation measures would be undertaken in accordance with their heritage value. Conservation management plans have been, or would be prepared for the Great North Road Complex, former RAAF Base Bulga Complex, the Brick Farm House and Springwood Homestead.

Traffic and Transport

There are no changes proposed to the existing average MTW workforce, truck traffic or annual train movements, the proposals potential traffic impacts are the proposed closure of Wallaby Scrub Road as mining progresses westward. The closure would result in significant current traffic being detoured via Putty Road and the Golden Highway. If the Wallaby Scrub Road was not required to be moved as a part of the consent mining lease, this would result in the detoured traffic required to travel greater distances with longer journey times. The road is commonly used by mine workers pre and post working extended shifts and any increase in travel times would have a detrimental affect on safety and would provide for greater inconvenience to any regular uses of the Wallaby Scrub Road. The proponent asserts in the Environmental Assessment that the closure would result in safer travel and travelling conditions and would not significantly impact the capacity of the detoured roads. This assessment of the proponent is inaccurate for the reasons set out earlier in the paragraph. The proponent does not assert a final position with respect to the Wallaby Scrub Road or its movements westwards. The CFMEU asserts for the reasons set out in this paragraph that it should be a requirement of the consent that the Wallaby Scrub Road be maintained but moved westward.

Visual Amenity

Existing topography and vegetation would continue to provide screening to Warkworth Mine as mining activities progress westwards. Some residences west of

the Site, such as elevated residences around Bulga village, may experience high visual amenity impacts. Progressive rehabilitation of disturbed areas and implementation of visual impact mitigation measures would be undertaken to minimise impacts to visual amenity. In addition, residents of potentially sensitive properties would be able to request site specific visual assessments which may identify the need for site specific mitigation measures.

Justification and Socio Economic

Warkworth Mine and the adjoining Mount Thorley Operations are long standing members of the community having commenced operations in 1981. An average workforce of approximately 1 300 people, including what the proponent has described as full time contractors, are employed at MTW.

Overall while the proposal has some residence, socio and environmental impacts some of which would be experienced by near neighbours, it should be approved as:

- The resource within the footprint of the proposal is significant (enabling what the proponents describe as the long term employment of approximately 1 817 persons, \$5.8 billion in expenditure and \$567 million in royalties);
- The majority of the Mining SEPP's non-discretionary standards are met;
- Impacts on near neighbours have been minimised to the greatest extent possible using all reasonable and feasible measures while maintaining an economically viable mine plan;
- It meets all government policies;
- Warkworth Mine has a long history of minimal non-compliance with government approvals;
- It ensures maximum return on the substantial capital invested in the mine since it commenced in 1981 and has access to existing infrastructure such as road, rail and port; and
- It provides a significant economic benefit to the local, regional, state and national economies.

There's no doubt the consent, if approved, would provide ongoing socio economic benefits and the CFMEU strongly supports the approval of the consent on this basis.

The CFMEU submits there should be some consent requirements to guarantee the full purported scope of the justification on socio economic basis can be met by the proponent.

The CFMEU reviews all coal related development consent applications and makes submissions. Of interest in these submissions are employment numbers. The CFMEU also has the opportunity to review, because of the extensive union membership in the coal mining industry, how these employment numbers are maintained. What is clear is that in the vast majority of Environmental Assessments the socio economic benefits, specifically in employment and full time employment numbers are misrepresented, sometimes by many hundreds of employees. The proponent asserts 1 300 employees, including full time contractors, will be maintained. The proponent in an Application to approve an Enterprise Agreement for Production and Engineering employees, the employees who do the vast majority of work, provided a Statutory Declaration indicating there were 755 Production and Engineering employees. On 4 June 2014 Ms Phoebe Burgess, a Senior Human Resource Manager for the Proponent, in documented material indicated in response to the number of permanent, casual and part time employees that there were 1 082. Any additional roles that may be from supplementary labour or contractors are not full time positions but are casual positions, many of them are only employed per engagement. This makes the assertion of the proposal providing long term employment of approximately 1 817 persons exaggerated. The mine recently had retrenched a number of employees.

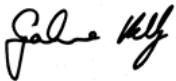
The development consent should contain a term that guarantees full time employment of 1 300 people directly by the mine in full time capacities, or contracted full time capacities. If there is a reduction in labour required then full time employee positions are to be protected and retained over casual transient positions or contractor positions.

There should be a further guarantee to ensure maximum socio economic benefits, being that labour not directly employed by the proponent through contractors should receive coal mining industry conditions and not to permit the proponent to bring in

external labour doing work that can be done by direct employees of the mine on lesser wages and conditions.

In Summation

The CFMEU considers the Warkworth Mine Continuation Project 2014 is consistent with the objectives of the EP&A Act, and therefore strongly supports the proponent's application and we ask the consent be granted with the modifications that we have referred to in the transport, justification and socio economic components of our submission

A handwritten signature in black ink, appearing to read 'Grahame Kelly'.

Grahame Kelly

DISTRICT SECRETARY