

“Reclaiming our Valley”

Hunter Communities Network

Planning Assessment Commission
Submission of Objection
Thursday 15 February 2018

United Wambo Open Cut Coal Mine Project – RO42/17

Introduction

The Hunter Communities Network is an alliance of community based groups and individuals impacted by the current coal industry and concerned about the ongoing rapid expansion of coal and coal seam gas exploration and mining in the region.

We particularly object to this proposed new superpit in the Upper Hunter – the United Wambo Open Cut Coal Mine Project. (United Wambo project)

We did not present our key concerns to the Planning Assessment Commission (PAC) public hearing held in Singleton on Thursday 8 February for the following reasons:

- A public hearing extinguishes our right to lodge a third party merits appeal against an approval of the project in the NSW Land & Environment Court
- The public hearing was held two days after the PAC public meeting on the neighbouring Hunter Valley Operations South Modification 5 proposal
- There has been no consideration of community capacity to respond to two very large and complex mine proposals within a two day period.
- Fifteen minutes is not enough time to address the concerns of this community group
- We consider that the conduct of PAC public hearings is not a genuine form of community consultation and does not replace the technical assessment rigour of a court case

There appears to be no consistency in the assessment and approvals process to consider cumulative impact across a range of environmental issues in this heavily mined area of the Hunter Valley.

We consider it essential for the PAC to give close consideration to long-term cumulative impacts on the community and the environment from this proposal taking into account current on-ground cumulative impacts and nearby proposed mine expansions (ie HVO Sth Mod 5 and recently approved expansions of Wambo Mine operations)

We assert that the Department of Planning and Environment (DPE) and other NSW Government agencies have not given adequate consideration to the impacts of currently approved mining operations in this area and have not properly addressed the issue of cumulative impacts.

The proposed United Wambo project aims to convert a 4 seam open cut mine and a 4 seam underground mine into an 8 seam open cut mine. This is a significant change to past mining operations in the region that has serious implications for cumulative environmental and social impacts.

The proposal occurs in an area of existing high intensity mining impacts. We consider that this area has already reached a threshold of impact that should not be increased. The proposed scale of the United Wambo project is unmanageable in the context of cumulative impacts and should be rejected.

Planning Context:

The Hunter Regional Plan 2036 has key goals that include a biodiversity-rich natural environment and thriving communities. The cumulative impact of mining in the Hunter Region has caused ongoing loss of critically endangered ecosystems and threatened species habitat and ongoing loss of rural communities and social fabric.

We consider that the United Wambo project will further impact significantly on these matters causing failure to meet planning objectives.

We do not support the DPE position that this major large scale mine expansion will meet the objects of the Environment Planning and Assessment Act, particularly the principles of ecologically sustainable development (ESD).

Key Issues

The DPE Preliminary Assessment Report (PAR) identifies four key aspects of the United Wambo project and predicted impacts that need specific attention:

- potential amenity and health impacts on nearby residential receivers, particularly in relation to air quality, noise and blasting impacts associated with open cut mining and overburden handling;
- impacts on biodiversity, including the clearing of 147 hectares (ha) of previously cleared land and non-native vegetation and around 531 ha of additional native vegetation;
- establishment of final landforms that are sympathetic to the surrounding natural environment and suitably rehabilitated with appropriate vegetation types and deliver acceptable land use outcomes; and
- potential impacts on water resources.¹

¹ DPE Preliminary Assessment Report Executive Summary pii

We concur with this precis of key issues and consider that the PAR does not adequately address any of them in the context of cumulative impact.

Hunter Community Network does not support the DPE conclusion that this very large scale mine expansion is in the public interest. The delivery of a net public benefit has not been demonstrated because the long term legacy issues are not factored into the costs benefits analysis.

We wish to submit the following key issues for PAC consideration. We would appreciate an explanation in the Review Report of how this consideration was undertaken.

1. Social and health impacts

1.1 Air Quality

1.1.1 Dust

The DPE PAR acknowledges that background levels of dust pollution in the locality of the proposed United Wambo project already approach and exceed the 24-hour PM10 assessment criterion of 50 µg/m³.

It is stated that mine-owned properties provide a degree of separation between the current impacts of mining and nearby communities and therefore, act as a type of environmental buffer.

However, this rationale does not acknowledge that most of the mine-owned properties have been acquired because relevant criteria will be exceeded on them. Once owned by mining companies properties are no longer subject to the criteria for air quality consent conditions. Therefore the level of air pollution on these properties can be very high without breaching approval.

The assertion that these properties provide some sort of buffer to adjacent private property, where air quality criteria do apply, is highly unlikely and not substantiated in any way.

The Upper Hunter Air Quality Monitoring Network measures regular exceedances of the 24-hour PM10 assessment criterion of 50 µg/m³. Particularly at the Warkworth monitoring site. The Jerry's Plains monitor has recorded 5 exceedances in the month of January this year.

The PAR recognises that 'the Project would generate elevated PM₁₀ and PM_{2.5} levels in the immediate vicinity of the site and increase the number of 24-hour periods where elevated cumulative air quality impacts'²

The ongoing loss of private property in the locality of this proposal due to acquisition because of untenable air pollution is a key social impact that has not been addressed. The fact that only one private property remains in the Warkworth Village is a key issue. While this property already has

² Ibid pp 34-35

acquisition rights due to pollution from currently approved mines, it is no reason to allow additional cumulative pollution impacts to be approved.

The cumulative social and health impacts of the United Wambo project have not been assessed.

Hunter Communities Network strongly objects to DPE advice that this very large scale mine expansion, in a highly intensive mining area, should not be subject to the EPA Approved Methods 2016 for air quality modelling and assessment criteria.

Because the United Wambo project is still under consideration, this review should require an updated assessment using the current methodology. The national standards for air pollution have been strengthened because of the health impacts from constant exposure to fine dust particles.

It is critical that this proposal is assessed under the new standards.

1.1.2 Blasting

The PAR acknowledges that maximum blast fumes are also predicted to exceed the 1-hour average NO₂ level of 246 µg/m³. There is no assessment of the cumulative impact of blasting from the large adjacent open cut mining operations in this locality.

The daily volumes of NO₂ levels emitted across this area of the Hunter have not been identified or assessed. The daily volume of explosives used by all open cut mining operations in the Hunter Valley and their emissions is a major cumulative health impact that has not been considered.

The daily number of blasts approved for current adjacent mining operations has not been considered. The cumulative impact of multiple sources of blasting associated air pressure and ground vibrations has also not been considered or assessed.

1.1.3 Diesel emissions

There has been no assessment or consideration of the cumulative volume of diesel emissions from non-road diesel equipment operating at adjacent mine sites.

The annual consumption of diesel by the mining industry in the Hunter Region is a significant volume releasing a significant volume of cancer causing emissions. This major health impact has not been assessed in the context of further expansion of open cut mining operations.

1.1.4 Conclusion

Hunter Communities Network strongly objects to the DPE conclusion that air quality and amenity impacts will be minimised during adverse meteorological conditions. This is impossible in the context of existing high background levels.

The proposed conditions to manage air pollution generated by the combined impacts of dust, blast and diesel emissions are no more robust than current conditions set for the Wambo Mine operations.

The cumulative impact of air pollution from the proposed United Wambo project is too great, cannot be adequately managed and should not be approved.

1.2 Noise

1.2.1 Cumulative Noise

Industrial noise from 24 hour mining operations in the Hunter, especially at night, is a significant impact on rural communities and has been raised many times in submissions from Hunter Communities Network.

In the assessment of the adjacent Hunter Valley Operations South Modification 5 (HVO Sth Mod 5) DPE acknowledges that *‘receivers to the west in Jerrys Plains would experience higher noise levels’* and *‘considers these impacts are practicably unavoidable.’*³

The PAR for United Wambo project identifies that cumulative impact of noise from other industrial sources, including HVO South, Warkworth, Mt Thorley and Rix’s Creek mining operations and road traffic noise from the Golden Highway was considered in modelling.

However, there is no indication that the proposed HVO Sth Mod 5 was included in this assessment, particularly the proposal to have dump trucks operating at a height of 240m AHD and the implications on increased noise pollution.

The PAR identifies that the local communities of Moses Crossing, Redmanvale, South Wambo, Warkworth Village, North Bulga, Maison Dieu and Jerrys Plains will all experience varying degrees of increased mine noise, **‘As would be expected for a Project of this scale’**.⁴

It is precisely the scale of the United Wambo project that deeply concerns the neighbouring and wider community. The listed adjacent communities have already been significantly impacted by the cumulative impacts of large scale mining operations.

The additional noise impacts and inherent social impacts caused through proposed additional mine acquisitions are too great an imposition on the health and well-being of these remnant rural communities. None of these impacts have been adequately considered or included in the costs benefits analysis for this proposal.

³ DPE Assessment Report HVO Sth Mod 5 p 20

⁴ DPE PAR p 42

DPE has identified that mining companies own 34 properties within a 3km radius of the United Wambo project. Again there is the assertion that these properties will act as a mine noise buffer for adjacent private property.

Again DPE fails to identify that many of these properties were acquired because they would be impacted by noise emissions higher than the relevant criteria. There are no restrictions on mine noise generated at mine-owned properties.

The assertion that these properties provide some sort of buffer to adjacent private property, where noise criteria do apply, is highly unlikely and not substantiated in any way.

The increase in traffic noise from the increased construction and operational workforce and increase in heavy vehicle deliveries also needs to be factored into the cumulative noise impacts.

1.2.2 Low Frequency Noise (LFN)

Unlike the advice that the air quality and most noise assessment should be considered under previous methodology or policy, LFN is required to be considered under the new Noise Policy for Industry (NPI) introduced in October 2017.

The community in general strongly objected to the proposed changes to assessing and measuring LFN emissions from mining operations. These objections and scientific advice were ignored by the EPA and government decision-makers. It is of interest that the Noise Impact Assessment used these changed methods prior to the new noise policy being adopted.

There appears to be no consistency in the assessment of this proposal across a number of environmental impacts in regard to the use of current, previous and draft policies

DPE states that ‘the Project would not cause excessive levels of tonality or low frequency noise at any nearby private residence.’⁵

However, there appears to be no assessment of cumulative LFN and the definition of ‘excessive’ is not provided.

LFN causes significant health impacts in different people at varying levels. This issue is not addressed.

1.2.3 Operational Noise Monitoring

There are significant problems identified in regard to the monitoring and measurement of project specific noise levels for the United Wambo project.

⁵ Ibid p 45

We maintain that cumulative mine noise levels in the area are already too great and have a significant impact on rural people living in the vicinity of the current large mining operations.

The ability to adequately regulate conditions of approval for individual operations is impossible.

DPE acknowledges the challenge of differentiating noise sources, that the proposed open cut operations would be the primary source of increased noise and there is potential for exceedances to occur in each monitoring scenario established in the noise assessment.

We do not support that the proposed noise monitoring protocol will be sufficient to adequately report on noise emissions from this proposal for the purpose of compliance reporting.

The additional impacts of mine noise will not be reasonably mitigated from the community's viewpoint and should not be approved

1.2.4 Blasting

As referred to earlier in this submission, the cumulative impacts of regular daily blasting at a large number of adjacent open cut mine operations in the Hunter has not been assessed.

The PAR identifies that 'Blasting at the Wambo open cut could also exceed 115 dB airblast overpressure at some other residences'⁶ and that 'To avoid any combined impacts on adjacent communities, blasting would not occur simultaneously in both pits.'⁷

Wambo Mine currently has approval for 15 blasts per week with a maximum of 3 per day with allowances for low vibration blasts and misfires.

There is no discussion of the number of approved blasts per week or daily at the other adjacent mines such as HVO Sth & Nth, Warkworth, Mt Thorley or Rixes Creek, to name a few.

The cumulative impact of open cut mine blasting on the rural community and their businesses in the surrounding landscape is a major land use conflict that has not been considered or addressed.

1.3 Social Impacts

The PAR identifies substantial existing social impacts from current mining operations in this area of the Hunter.

The mitigation of identified noise impacts from the United Wambo project is to provide a further 9 private properties with acquisition rights and 22 private properties with mitigation measures that cause residents to live in a permanently closed environment.

⁶ Ibid p 50

⁷ Ibid p 49

There has been no assessment of the social impacts of the United Wambo project or of the cumulative loss of community and social fabric through previous mine approvals.

The identification that mining companies now own 34 properties within a 3km radius of the proposal is an indication of the scale of social disruption that has occurred. These were all once operating farming enterprises and dairies with families who interacted socially and economically in this fertile area of the Hunter Valley.

There is further indication of these social impacts in the discussion of water source impacts:

'Mining companies own much of the land immediately downstream of the Project and adjacent to Wollombi Brook. Similarly, the land adjacent to Wambo, North Wambo and Redbank Creeks is mostly owned by mining companies.'⁸

The social impact of continued loss of private property owners and operating farming enterprises is a key issue for the Hunter Region that is not being addressed.

DPE acknowledges that 'the Project would have a social impact on the local community and that social dynamics and community cohesion has experienced changes as a result of other mining projects in the area.'

'While the Project would largely meet relevant criteria and acceptable impact levels set under NSW Government policy, particularly given the acquisition of land within and around the Project area, the Department acknowledges that there would be residual social impacts borne by the local community.'⁹

This is evidence that the NSW Government is prepared to continue to shift the burden of environmental and social impacts of mining onto the community with no consideration of these costs in the public benefit analysis and no offer of compensation for loss of amenity, well-being, health, neighbours or industry support and no recognition of economic disadvantage through stranded assets and loss of services.

This is an entirely unjust and irresponsible position that we urge the PAC to distance itself from.

2. Water Impacts

2.1 Surface Water

The PAR reflects the substantive current cumulative impact of mining on water sources.

'It is important to note that the existing catchment areas have been significantly modified, mainly due to historic mining operations, which are not limited to current operations at either United or Wambo.

This includes diversions to North Wambo Creek and reductions in catchment areas and changes in flow volumes. Consequently, many of the tributaries are already considered to be highly modified watercourses.'¹⁰

⁸ Ibid p 79

⁹ Ibid p 100

¹⁰ Ibid p 74

This should be the strongest reason for not approving further damaging impacts to essential water ways rather than an excuse to continue on the same road of environmental destruction and deterioration of irreplaceable public assets.

This position from DPE demonstrates a wilful disregard of the principles of ESD and cannot be supported.

DPE acknowledges that the Project would reduce the Wollombi Brook, North Wambo Creek and Redbank Creek catchment areas relative to currently approved final landforms but does not consider the cumulative impact from previous approvals for all mining activities in these catchments.

The cumulative loss of total catchment area is not addressed.

The United Wambo project is predicted to cause a net average water deficit of 96 ML/per year when comparing modelled inflows with outflows and including discharges through the Hunter Salinity Trading Scheme. This is a significant annual loss to natural surface flows.

The fact that over 6GL per year is predicted to be captured within the mine workings is a significant change to natural surface flows. This impact is not clearly addressed.

While there is discussion of the volumes of water held in licences for the mining operations (and thus remove this resource from food production), there is no discussion of the volume of held licences that will need to be retired to compensate the permanent loss of base flows and aquifer interference.

The other large adjacent mine expansion currently under consideration by the PAC, HVO Sth Mod 5, is required to surrender 524 ML of water access licence to compensate for permanent loss of alluvial and Permian groundwater.

The ongoing loss of licenced productive water in the Hunter Region has not been assessed.

The joint venture partners between them currently own 2,350 ML of various types of water licences. This is a significant volume of water. There is no discussion on how much of this may need to be retired out of the water market.

2.2 Groundwater

The discussion of groundwater impacts also highlights the current poor condition of groundwater sources due to long-term mining impacts: ‘mining in the area has already significantly altered the groundwater environment.’¹¹

Again, this is a strong argument for protecting the remaining groundwater sources by not approving any more mine impacts in this area.

¹¹ Ibid p82

The PAR states that:

'The zone of depressurisation from the proposed extraction area is predicted to extend up to 2.5 km southwest in the Wambo Seam; 2.5 km west and up to 2 km south in the Glen Munro Seam; and 3.5 km from the edge of the proposed extraction area in the Arrowfield Seam.'

'Depressurisation of the hard rock aquifers is predicted to also result in drawdown in the alluvial aquifers adjacent to Wollombi Brook and the Hunter River.'¹²

There is limited discussion in the PAR of cumulative draw down of alluvial aquifers from adjacent mining projects. The HVO Sth Mod 5 has predicted a decrease of base flows to the Hunter River of 584 ML/year and to the Wollombi Brook of 107 ML/year. It is not clear that these losses are factored into the figures of cumulative loss of base flows in the PAR.

The PAR refers to predictions that the cumulative net annual loss in base flows is 450ML/yr to Wollombi Brook (fig 21) and 400 ML/yr to the Hunter River (fig 22) with the United Wambo project being a small percentage of this.

The lack of a regional assessment of the cumulative impact of groundwater depressurisation caused by mining is a key failure of the assessment and approvals process in the Hunter.

There is no analysis of the environmental impacts of cumulative loss of base river flows, particularly at times of low flow, and particularly on the unregulated Wollombi Brook.

Regardless of the emphasis on the small percentage contribution of cumulative loss of base flows attributed to the United Wambo project, it is still an increase in the loss and needs more rigorous analysis than is provided.

We are deeply concerned with the DPE conclusion that: 'The shallow alluvial and hard rock groundwater aquifers have been and continue to be affected by mining undertaken at United, Wambo and a number of other nearby mines. The Project would result in the continued depressurisation of the hard rock aquifers in the coal seams.'¹³

The ongoing long term impacts on groundwater systems in this locality are unacceptable

We strongly disagree that management plans and TARPs are sufficient mitigation measures against additional unpredicted groundwater loss. That DPE considers it acceptable to continue on with cumulative drawdown impacts in this locality disregards ESD principles.

The United Wambo project is a significantly large expansion of open cut mining in this highly impacted area of the Hunter River catchment and should not be approved because of the increased cumulative impacts on key water sources.

¹² Ibid

¹³ Ibid p 86

2.3 Final Voids

Hunter Communities Network strongly opposes the cost shifting exercise onto the environment and community by not requiring all disturbed mine land to be backfilled.

The retention of hypersaline pit lakes left in the Hunter landscape in perpetuity is a costly toxic legacy that will not be offset by coal royalties or rehabilitation bonds.

The PAR states that the complete removal of voids from the final landform would be ‘impractical’ at an increased cost of around \$450m. There is no consideration or costing for the ongoing management of two very large hypersaline pit lakes post mining in perpetuity.

If the United Wambo project cannot generate enough income to afford to backfill the entire mine site, then it is not a viable operation and should not be approved.

It appears that consideration of the scale of the final voids is still a work in progress. DPE identifies that further investigations are required to achieve lower salinity levels such as leaving one single void and redirecting post-mining run-off.

We consider this to be a key failing in the proposal and that DPE cannot recommend that the United Wambo project be approved when such important outstanding issues are yet to be resolved. Fig 17 showing final landform provides no clear description of the arrangement for final voids.

The cumulative impact of multiple final voids in the Hunter landscape is not addressed. The likelihood of future spills into the surrounding environment of hypersaline water with a high concentration of heavy metals is ignored by the NSW Government.

The lack of a government policy on final voids should not prevent the PAC from recommending that no final voids be retained in the United Wambo post-mining landscape because of cumulative impact.

3. Biodiversity impacts

The proposal to continue clearing critically endangered ecological communities that provide habitat for nationally listed threatened species should not be approved.

The lack of a comprehensive biodiversity offset package that provides ‘like-for-like’ protection for these important features in the Hunter landscape is a strong case to recommend the rejection of the United Wambo project.

We strongly oppose that a high percentage of offsets be credited to the success or otherwise of future mine rehabilitation efforts.

The likelihood of regional extinctions of native flora and fauna caused by mining expansion is now very high in the Hunter. This long-term cost to the environment and community has not been included in the costs benefits analysis for the proposal.

4. Greenhouse Gas Emissions

The continued expansion of coal extraction in the Hunter Region in a carbon restrained economy is irresponsible, to say the least.

The proposal to extract an additional 150 Mt of coal over 23 years is inexcusable in the context of climate change impacts on the economy and society.

The Wambo Mine is known to have high levels of methane. The discussion of fugitive emissions from open cut mining compared with capture or flaring from underground operations is not provided in the analysis of greenhouse gas emissions (GHG) or opportunities for reduction.

The PAR quotes the proponent's assessment that the proposal will account for around 0.053% of Australia's annual GHGs levels in 2030. There is no context provided for the cumulative increase in GHG emissions from the Hunter coal industry over that period of time.

The consideration of approving any increase in GHG while the costly impacts of climate change are now being felt across the globe is unjust and unwarranted.

5. Economic analysis

The economic justification for the United Wambo project is based on the public benefit of delivering \$40m worth of royalties to the NSW Government over the life of the project.

DPE maintain that: 'the Project would need to result in \$39 million of additional non-quantifiable costs for each year of operation, in order to outweigh the quantified net benefits of the Project.'¹⁴

This analysis is deeply flawed because many of the costs of the proposal extend way beyond the life of the mine. This approach ignores the environmental costs over time of:

- the retention of hypersaline toxic pit lakes in the landscape in perpetuity
- the impact of increased GHG on the economy into the future
- the loss of threatened species and ecosystems and their environmental services and high likelihood of regional extinctions

There are also many social and economic impacts that are not considered when calculating net public benefit:

- loss of productive water from the market through retirement of water licences

¹⁴ Ibid p 15

- loss of viable agricultural industries on prime land
- loss of rural service industries through depopulation of large areas
- loss of rural communities and social function

The economic costs should be calculated well beyond the life of mine to provide a more accurate approach to net public benefit of large scale coal mining projects.

Conclusion

The cumulative impacts of the United Wambo project are too great and have not been adequately assessed or considered. The proposal should not be approved.

For further information contact

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Convenor

