

**Enquiries**

Please ask for Sharon Pope
Direct 02 6549 3868

Our reference

Your reference SSD 4960 MOD 3 & DA
376-8-2003 MOD 7

5 November 2019

**Laura Evans
Resource Assessments
NSW Planning and Environment
GPO Box 39
SYDNEY NSW 2001**

Dear Ms Evans,

Bulga Optimisation Project (SSD 4960) MOD 3 and Bulga Underground (DA 376-8-2003) MOD 7 – Muswellbrook Shire Council Comment

I refer to the Environmental Impact Statement, prepared by Umwelt for the Bulga Optimisation Project (SSD 4960) MOD 3 and Bulga Underground (DA 376-8-2003) MOD 7. Council appreciates the opportunity for comment.

The proposal seeks approval for:

- Extension of the development consent to the year 2039.
- An extra 63Mt of coal extraction.
- An increase in disturbed area of 22ha.
- A revised mining sequence that allows extraction of deeper coal resources.

Council's submission is primarily in regard to cumulative impacts the planning authority determining this application should consider:

1.0 The compounding impacts of multiple mining operations stretch environmental, social, human and economic capital. Multiple mining operations may demonstrate additive effects (e.g. mine impact + mine impact) and compounding effects (e.g. mine impact x mine impact). The conventional mine-by-mine approach to assessment, management and mitigation does not provide confidence for the local communities impacted.

2.0 Impact assessments for individual mine projects flag that it is difficult to consider cumulative impacts due to factors beyond the control of the proponent. A cumulative assessment typically consists of an aggregation of the contribution of the project to the impacts of existing activities and whether the increased impacts meet regulatory standards. Such analysis is almost exclusively conducted on sink impacts such as noise, air quality and traffic. Assessments rarely assess the effect of planned and foreseeable future projects and do not employ explicit methodologies to model plausible future scenarios, understand the pathways of interaction of cumulative effects, or determine or describe thresholds and limits.

3.0 A better approach would involve investment in regional datasets, scientific modelling, scenarios and preferred futures, research into impact interactions, trends, effects pathways and areas of maximum mitigation impact, better regional planning, the establishment of thresholds and limits, joint monitoring, the collection of information on planned developments and more consistent data standards and methodologies. The

*Upper Hunter Cumulative Impact Study and Action Strategy 1997*¹ needs to be updated by an independent party.

4.0 Solastalgia –Albrecht et al. in 2005² published a paper on the impact of mining on individuals in the Hunter Valley of NSW. He found that people exposed to environmental change had negative reactions brought about by a sense of powerlessness over the unfolding environmental changes and uncertainty in a once predictable environment. Added to environmental change is the loss of place and communities (through properties being purchased by mines), loss of social contacts (as people move away) and feelings of differential treatment, as some are purchased and families get to move away from the stress of being a neighbour to a mine, while others have to remain. The effects of solastalgia are not overcome by Community Enhancement Contributions.

5.0 Impacts on rural landscapes. Cumulatively, the various mines have impacts on the sense of place felt by the community, and attractiveness of the Upper Hunter experienced by the travelling public. Drive along the New England Highway, Golden Highway, and Denman Road and the visual landscape is definitely industrial, with open pits, overburden stockpiles, road and rail infrastructure and CHPP clearly visible. Some of these changes are temporary (maybe 50 years), others, if there aren't appropriate rehabilitation actions, will be permanent. Are the short and long-term cumulative visual impacts acceptable?

6.0 The Upper Hunter suffers amenity impacts from the mines, and these are not offset by economic benefits due to Drive In, Drive Out work and travel arrangements, and major support industries/companies building their headquarters closer to Newcastle for connectivity, workforce and lifestyle reasons.

7.0 While the cumulative air pollution analysis assesses total concentration of air pollutants from the two MODS, being background pollutants plus project-specific contribution, the area of analysis is limited to the surroundings of the mine. The surrounding region has a total of ten coal mines, ash dams and coal-fired power stations.

8.0 Air quality issues in the early morning hours are very visible at any time of the year. Council is informed that this occurs as a result of a strong inversion that forms over the Muswellbrook and Singleton LGAs trapping dust and other pollutants.

9.0 Given this naturally occurring phenomenon is well known, it is Council's view that the 24 hour averaging period for air pollution monitoring has the unintended consequence of obscuring issues of elevated dust levels in the early morning hours, and that a 12 hour average would be better. Council acknowledges there may be insufficient empirical evidence as to the effect on human health of exposure to elevated levels of dust at night. In light of this, Council requests that the State Government commission a study into the effects to human health of exposure to night-time dust levels in the Upper Hunter. This research is essential to improving the understanding of the consequences to human health, particularly respiratory and cardiovascular health, of exposure to night-time dust levels generated by mining.

¹ New South Wales. Department of Urban Affairs and Planning. 1997, *Upper Hunter : Summary - Upper Hunter cumulative impact study and action strategy* Department of Urban Affairs and Planning [Sydney]

² Albrecht, Glenn (February 1, 2007). "Solastalgia: The Distress Caused by Environmental Change". *Australasian Psychiatry*. 15: S95–S98. doi:10.1080/10398560701701288. PMID 18027145.

10.0 The Upper Hunter region's equine industry is a significant contributor to the regional economy with 85 per cent of all operating expenses spent within the Hunter Valley region³. The equine industry suffers from reputational risks due to local coal mines and this conflict has been documented in prior coal mines applications (e.g. Bickham, Drayton South, Dartbrook). Reputational risk is also posed to the local viticulture industry. The expansion of the mining industry has claimed a number of wineries in the past, which has reduced the critical mass of the viticulture cluster in the Upper Hunter, in turn affecting the tourism market.

11.0 Water sharing now and in the future. Each of the mines has a permanent impact on water availability in the local catchment they are located in, and the Hunter River and Goulburn River more generally. Each mine operation dismisses this by saying they hold sufficient water licences to cover this "loss of water". But the loss is permanent, and if the water sharing regime needs to change in the broader catchment for societal, ecological, or climate change reasons, or to satisfy the requirements for emerging industries, the water loss due to mines will place limitations on the ability to change the water sharing regime.

12.0 The project will add to or prolong current levels of traffic movements on the New England Highway, Golden Highway and train movements Main Northern Railway Line. Movements should be included in models held by Transport NSW and Roads and Maritime Services to understand the cumulative impacts on:

- The level of service on State Roads and significant intersections from Muswellbrook through to the Newcastle Link Road and Pacific Highway.
- Passenger rail service movements, including future ability to increase frequencies of service between Muswellbrook and Newcastle.
- Rail noise and dust along the railway corridor from Singleton to the Newcastle Port.

13.0 Transitioning to a Post-Coal future. Communities in the Hunter, from near the mine sites to the coast, have experienced rapid transitions associated with expansion of the coal mining industry. In the next few decades they face the prospect of the coal mine industry contracting as a result of declining global resource demand. While communities have benefited from the expansion of the coal industry through the creation of jobs and the investment in economies, an abrupt and/or unplanned transition would have resounding social and economic impacts on the Region and the State.

14.0 A working party with participants from the two Councils, DPIE, Premiers and Cabinet, the Mines, local Chambers of Commerce, traditional owners and local land council members and the Hunter JO Economic Transitions Committee should be established to commence planning for the transition to a post-mining future.

15.0 Local communities are typically highly dependent on nearby mines for socio-economic. The impact of closure on local and even regional socio-economics can therefore be significant and should be a key consideration in closure planning processes and documents. At the close of mining operations every effort should be made to maintain the quantum of employment opportunities, in turn avoiding economic and social

³ Department of Primary Industries, Upper Hunter Region Equine Profile, Fact sheet No.6, June 2013

disruption to the local community through loss of job opportunities. Post-mining land use opportunities for rehabilitated mine land could include:

- Recreational uses
- Hydropower and other renewable energy generation activities
- Tourism and Theme parks
- Wildlife habitat and conservation
- Water storage and irrigation
- Intensive Agriculture / Aquaculture
- Industrial Development

16.0 Transition to post-mining activities should commence before mining ceases. This may require adjustments to Mining Lease conditions and the Singleton LEP to facilitate.

17.0 The applicant should be required to prepare an Export Management Plan that ensures that any coal extracted from the development that is exported from Australia; is only exported to countries that are:

- a) parties to the Paris Agreement within the UN Framework Convention on Climate Change; or
- b) countries that have established policies to reduce greenhouse gas emissions to a level similar to the Paris Agreement.

Council appreciates the opportunity to comment and would be pleased to provide additional information if requested.

Yours faithfully



Fiona Plesman
GENERAL MANAGER