

Reply to: Georgina Woods  
PO Box 290  
Newcastle 2300

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**Submission: Hume Coal Project and Berrima Rail Project**

Thank you for the opportunity to make a submission to these projects.

Lock the Gate Alliance is a network of community groups and individuals across Australia concerned about the impacts of inappropriate coal and gas mining.

We object to these projects and support Coal Free Southern Highlands and the Battle for Berrima in their efforts to secure the sustainable future of their region. It is incompatible with the surrounding land use and the impacts it will inflict on groundwater in the district and the landholders who use it, is not acceptable. Though small scale coal mining has historically occurred in this district, the scale and purpose of this new project amounts to a dramatic change of direction in the economic and social future of the Southern Highlands.

Wingecarribee Shire Council has been concerned about the impact of new coal mining operations in the area for many years. It has adopted a policy of opposing new coal mines in the Shire and reaffirmed that position many times. Most recently, last year the Council declared the Shire Coal Free and erected signage to indicate this decision. This coal mine proposal runs counter to strong and purposeful local decision-making which is focused on the economic, environmental and social needs of the area.

The groundwater impact of this project will be extensive. The proponent's own modelling indicates that 93 bores on 71 properties will experience drawdown of 2 metres or more, many of them for decades. Expert analysis commissioned by Coal Free Southern Highlands indicates that the actual impact may be even greater than this.

The proponent seems confident that "make good" agreements will compensate for this loss, but does not guarantee that replacement water will be provided. As there is no statutory framework for "make good" agreements, such flimsy commitments cannot mitigate the scale of impact that seems likely to occur as a result of this mine. The potential flow on economic, environmental and social impacts of large-scale groundwater drawdown appears to us to be beyond the proponent's ability to prevent or compensate should the predicted drawdown occur or be exceeded.

Furthermore, the EIS has not adequately described or assessed the impact of groundwater drawdown on baseflow to surface water in the area, nor the effect this may have on water quality. The quantum of baseflow loss is modelled, but the EIS does not describe how many no flow or low flow days this change would create.

The burial of coal rejects in the mining voids avoids the ugly, risky and health-damaging practice of mounding such rejects in piles at the mine site, but creates new problems and risks that are not adequately explored in the EIS. Specifically, the risk that storage of reject coal and the mine slurry in

the voids will compromise aquifer and surface water quality. This possibility is mentioned in the EIS and the work undertaken by the proponent indicates that this material may be acid generating. The proponent proposes lime mixing as a mitigation action to address this but there is little detail in the EIS exploring the scale and effect of this problem. We note that the IESC's advice appears to raise the possibility that this limestone amendment will not have the desired effect. In order to ascertain if this project can meet the neutral or beneficial effect test, much more rigorous investigation is needed. At this stage, it appears to us that this test will not be met and that the project should be rejected.

Surface water quality is also at risk from the proponent's proposal to discharge water into Oldbury Creek. The assessment against the "neutral or beneficial effect" test mentions a series of contaminants that could be present at high levels including magnesium, arsenic, aluminium, cadmium, chromium, selenium and others, but does not model the likely concentrations of these contaminants as a result of the mine's operation. The proponent mentions that these will be monitored "with the potential for treatment before release where required." What treatment is the proponent proposing? At what concentrations will treatment be deemed to be required? This is information that should have been provided in the EIS. It also does not appear that the proponent has modelled the likely changes to salinity in surface water as a result of this project.

The EIS describes the likely increase in upward movement of water from the Wianamatta Group shales to the upper Hawkesbury Sandstone as a result of the project and contends that this will not affect the beneficial use of the Hawkesbury Sandstone groundwater. But this assertion does not seem to be tested against the neutral or beneficial effect test. If there is any harmful effect on water quality, that test is not met.

We are concerned that the EIS may be under-estimating the impact of extensive and dramatic groundwater drawdown on groundwater dependent ecosystems. The EIS claims that, "predicted impacts to ... groundwater dependent ecosystems ... have been assessed as insignificant." But in reviewing the EIS material, there does not appear to have been sufficient work undertaken to draw such a conclusion. The proponent appears to consider that the impact of the mine only needs to be assessed for "high priority" GDEs, but the extensive draw down up to and in excess of 10 metres is likely to have considerable significant flow-on effects for aquatic and terrestrial ecology, including any potentially EPBC listed species and communities. This has been insufficiently considered by the EIS. We note the IESC makes specific recommendations for additional work to be prepared on this front. That committee notes that, "two listed ecological communities (an area of Southern Highland Shale Forest and Woodland CEEC, an area of Tablelands Snow Gum, Black Sallee, Candlebark and Ribbon Gum Grassy Woodland) and a large area of Koala habitat are located in areas predicted to be subject to drawdown of greater than 10m in places."

The proponent proposes a 400 person workers camp, euphemistically called an "accommodation village" for the construction phase of the project. Such a facility is socially damaging and unnecessary. It is not in keeping with the social context of the Southern Highlands and highly unnecessary given the area's close proximity to population centres. The social impact assessment reveals that this accommodation village will be "dry" but that having a gym, dining hall and "recreation room" means there will be limited interaction between the workforce and the local community. This is hardly credible. If the accommodation village is dry, the workers that desire

alcohol will go in to town for it. In any case, limited interaction between a workforce and a local community is a dubious selling point. Exclusion of the workforce from the surrounding community creates social division and suspicion and precludes the workforce from forming social bonds and responsibilities. It exacerbates the social damage of mining contributing to gender imbalance, income inequality and lack of social cohesion. It is the kind of arrangement used in remote mining operations, not in developments proposed in populated areas and is known to have a damaging impact on the workers and their families as well.

The accommodation village will have a capacity of 400 and is proposed to remain for three years. It is also stated that the operations phase of the coal mine will peak at 300 employees, but that these will not require the accommodation village. The Social Impact Assessment contextualises this number within the population of the entire Wingecarribee Council area to minimise its lack of proportion with the surrounding area. The sum of the construction workforce with other concurrent construction projects is given as 472 people. This is equivalent to 5% of the current population of Mittagong, 6% of the population of Moss Vale, 81% of the population of Sutton Forest and 78% of the population of Berrima.

Other serious social impacts include the damage of inflicting a project on a community that rejects it (see recent Wingecarribee Council polling of residents), delays in emergency vehicle response times, and stress and anxiety associated with anticipated loss of amenity, water, business value and social cohesion. The Social Impact Assessment raises the solastalgia effect, where people experience an erosion of their sense of place and home as it changes around them. It is a concept that was described specifically in response to the effects of the coal mining industry. It is also clearly a major concern that has been raised by the local community and goes to the heart of this project's incompatibility with the surrounding land uses and the social and economic fabric of the district. Despite this obvious relevance, the proponent concludes that no examination of this potential effect of the project is warranted.

The Social Impact Assessment is naïve and incomplete. Though it is clear there will be considerable negative social impacts that the proponent admits, the assessment is too superficial to be meaningful and omits important factors such as gender balance, income inequality, lack of integration and dislocation of people from affected adjacent properties.

The inappropriate scale and nature of this coal mining project is an indication of the proponent's failure to understand the environmental, social and economic context in which it proposes to introduce it. It is our view that this project is incompatible with surrounding land uses and that it poses unacceptable economic and environmental risk.

Wingecarribee Council with local Chambers of Commerce and Industry together have developed Southern Highlands Development Framework, established in 2015 through a process involving 250 community members and providing an economic framework for the region out to 2031. This framework highlights carbon-neutral energy sources, intensive agriculture agro-tourism and high-quality health care as key development initiatives of the region, which sees its crucial role as a rural breathing space, and potential food growing land, between Canberra and Sydney. The Shire is not in need of economic stimulation but rather, has clear growth strategy with which this project is at odds. This project puts Southern Highlands Development Framework vision at risk and threatens to derail the region's economic future by shackling it to the short-term boom and bust of resource

extraction at the expense of more sustainable and diverse activities which are better able to co-exist together.

The Australia Institute has already uncovered evidence that this project is delaying or preventing investment in the region. It is already doing damage. We urge the NSW Government to refuse consent quickly and restore certainty for the businesses and communities of the Southern Highlands. The Australia Institute points out that the economic assessment for the Hume coal mine appears to have been developed purely on a desktop analysis, divorced from the actual economic framework and activity of the region. It appears that local businesses have had no input into the local effects analysis.