

Reply to: Georgina Woods
PO Box 290
Newcastle 2300

25 October 2018

Submission: Vickery coal mine

Thank you for the opportunity to make a submission to this mine proposal.

Lock the Gate Alliance is a network of hundreds of groups and tens of thousands of individuals around Australia that are concerned about the impacts of coal and unconventional gas mining. We object to this mine proposal.

Social impacts

We are concerned that the escalation of large scale open cut coal mining around Boggabri will have lasting consequences for agriculture, water and the social fabric of the district. We note that the infrastructure the company is proposing could service greatly expanded mining in the district and farmers know from bitter experience that coal mines tend to grow.

The recent experiences of farming communities surrounding Boggabri and the township itself indicate that large scale coal mining has been disruptive and damaging and that commitments and promises about positive benefits outweighing negative environmental and social consequences have not been kept. People in the small community of Boggabri believe the community cannot handle a fifth mine in close proximity to the town. They're concerned that the scale is too large for the town to cope with. Furthermore, the conduct of the company has exacerbated the social and personal impact of mining in the Maules Creek community and raises concern that division and conflict will be intensified as a result of this project. This is reflected in the social impact assessment for the mine, which reveals landholder frustration at lack of timely information, lack of consultation and a lack of trust in the proponent's environmental management.

The EIS indicates that people in Boggabri have raised their concerns with the company, including "Loss of farming families in Boggabri through land acquisition for mining affecting population that are not being replaced with settled mining families." This issue has serious long-term consequences, "The loss of a large number of farming families from the local area since 2006, attributed to land acquisition for mining and reductions in agricultural employment, was referred to by a number of stakeholders as changing rural character and rural way of life, including community participation and involvement." Despite getting baseline input from the workshops that this loss is not being replaced by settled mining families, the social impact assessment glibly states that "existing mining operations would have increased the population in the region providing additional people available for community members available for participation and involvement." If this is not happening, and evidence from the community indicates that it is not, then it needs to be

assessed and understood, and indicates that increasing the concentration of mining in the district, and further eroding the agricultural community by driving further land acquisition with another large open cut mine is not sustainable and should be refused.

Agriculture

The agricultural impact assessment at Appendix H considerably underestimates the impact of the mine on agricultural production because it does not consider the depressive impact acquisition of agricultural properties by the company is likely to have. Already, 76 family farms have been purchased by Whitehaven in close proximity to the town of Boggabri. This has hollowed out the township, affected local businesses and rent the social fabric of the district.

The mine itself is not on strategic agricultural land, but it will degrade the agricultural capability of the lands within the mine site, including entirely sterilising lands expected to be left behind as a final void pit lake, high wall and sediment dam. Specifically, the property identified as qualifying for acquisition under the Voluntary Land Acquisition and Mitigation Policy is a highly productive cotton farm with high capital investment and owned by a family with “intergenerational ties to the land, and consultation identified their desire to stay on the property, however they fear it would be uninhabitable due to noise and dust impacts” (Social Impact Assessment). If this property were rendered uninhabitable by noise impacts from the mine, that would have considerable implications for agricultural production that are not considered in the EIS. There are six other properties that have at least one residence within approximately 1 km of the rail spur, with two of those properties bordering the rail spur.

There is no information provided to allow analysis of the agricultural productivity of the lands already purchased by the company. The EIS should have provided, for example, a comparison of production over time on the properties in question, before and after acquisition, and information about the productivity of other districts, like Maules Creek, that have experienced broadscale land ownership change and buy-up by a mining company.

The agricultural loss section of the economic impact assessment only values “the foregone agricultural production from land that would be established as a biodiversity offset, as well as from land directly disturbed for mining and infrastructure purposes.” This must be expanded to include foregone production on land expected to be acquired by the proponent under the Voluntary Land Acquisition and Mitigation Policy.

Water

The open cut is too close to the Namoi alluvium and will cause seepage from the alluvium and the Namoi River to the coal seams and the mine. The proponent’s statement that the mine will have “No direct contribution of groundwater from the Upper Namoi Alluvium” is misleading, since the EIS clearly identifies loss of water from the alluvium for generations to come.

The groundwater impact assessment is poorly laid out and difficult to understand. There is no clear diagram depicting groundwater drawdown in the Namoi alluvium. The assessment repeatedly states that the proponent has sufficient licences to account for the take of water from various sources, and

“All water demands are predicted to be within surface and groundwater licences currently held by Whitehaven” but also states that licences will be “sought” from DOI Water, including from water sources that are fully allocated. The EIS does not provide a table summarising mine water demand, the maximum take from each source including borefield pumping and surface water catchment and the entitlements held to account for that take. Appendix 6 purports to provide this information but Table A6-2 of that Appendix details only groundwater inflow estimates and does not articulate what site water demand for running the mine is expected to be, nor what rainfall and run-off capture is expected. The EIS indicates that Whitehaven intends to operate a borefield to meet site water demand but does not clearly identify what annual extraction it proposes from that borefield. It appears to us likely that in years where available water for general security licences in the Namoi River are reduced and pumping against the company’s general security Namoi River licences is unavailable, the company’s current entitlement may struggle to provide for site water demands, though what that demand will be is not articulated in the EIS.

We note that the water modelling predicts increase in rainfall recharge of 0.6ML per day “due to infiltration through the waste rock emplacement (Appendix A page 42). This has implications for water quality, particularly where the western spoil pile overlies the Namoi alluvium. The groundwater impact assessment indicates that seepage from the western emplacement area will be only 0.03ML per day. Though the groundwater impact assessment acknowledges that the mine waste is likely to have enriched concentrations of Arsenic, Boron, Antimony and Selenium, there is no analysis of the concentrations of these metals in the alluvium below the spoil pile, the assessment simply states that “the Project would not increase concentration of these metals in comparison to the in-situ material.” This is a glib and unacceptably shallow analysis, especially given the admission that the overburden will contain potentially acid forming materials, and therefore have the potential to mobilise heavy metals that may otherwise have been present but not soluble. No evidence is presented about the quality of the water currently moving into the alluvium from the coal seam.

The proponent claims that most of the surface water it will collect on site will be exempt from requiring a water access licence because it is either collected under a harvestable right, or collected in a dam that is exempted from the harvestable right calculation because the dams’ purpose is to avoid pollution by capturing run-off over disturbed areas. As Lock the Gate has made clear to the Natural Resources Access Regulator, which is investigating this issue, the exemption cited is a not an exemption to section 60I of the *Water Management Act 2000*.

Section 60I of the *Water Management Act 2000* is very clear that water taken in the course of mining requires a licence. Moreover, the EIS states that “The Project would **utilise runoff collected in the sediment dams and the open cut as the primary source of water for operational purposes**” (Appendix B Surface Water assessment, page 71). Lock the Gate does not dispute that it is preferable that the Vickery mine should use mine-affected run-off to meet its water demand, rather than pumping fresh water from the Namoi River or its alluvial aquifer. We do, however, contend that the *Water Management Act 2000* and the 2018 regulation clearly require that water access licences be held to account for the *use* of this water.

Section 60I (1) of the *Water Management Act 2000* makes it clear that “A person who takes water in the course of carrying out a mining activity is, for the purposes of this Act, taking water from a water

source” and subsection (3) clarifies: “To avoid doubt, a person who takes water in the course of carrying out a mining activity as referred to in subsection (2) is required to hold an access licence authorising the taking of that water.” Further, Section 53 (2) of the *Water Management Act 2000* is clear that “(b) if water (other than water captured or stored in exercise of a harvestable right) is also captured or stored by the work or works--an access licence and water use approval is required to authorise the taking and use of water from that source for any volume taken and stored in excess of the maximum harvestable right volume unless the water is taken under the authority of a domestic and stock right or native title right”

Section 60F provides a defence to prosecution for taking water without a licence if the person that took the water “was exempt, pursuant to this Act or the regulations, from any requirement for an access licence in relation to the taking of water from that water source.” An exemption is provided for in section 21 of the *Water Management Regulation 2018*, but it is limited – it only provides an exemption to section 60A (1) and (2) of the Act, not section 60I. Moreover, it only provides an exemption for persons specified in Part 1 of Schedule 4 when such a person “takes water for any of the purposes, and in the circumstances, specified in that provision.”

Part 1 of Schedule 4 includes among the persons listed “Any landholder--in relation to the taking of water from or by means of a work referred to in item 1, 2, 3, 4, 6, 7 or 9 in Schedule 1 that is situated on the land, for the purposes and in the circumstances specified in Schedule 1 in respect of the work.” This refers to the excluded works cited by the proponent in the EIS in its discussion of its harvestable right. However, excluded works in Schedule 1 of the *Water Management Regulation 2018* cited by the proponent make it clear that the purpose of work must be *solely* for the prevention of soil erosion (section 1 Schedule 1), or “Dams *solely* for the capture, containment and recirculation of drainage and/or effluent, consistent with best management practice or required by a public authority (other than Landcom or the Superannuation Administration Corporation or any of their subsidiaries) to prevent the contamination of a water source, that are located on a minor stream” (Section 3 Schedule 1, our emphasis). In short, it is unreasonable for Whitehaven to maintain that the excluded works provisions of Schedule 1 of the Regulation act to provide it with a broad exemption to capture all run-off on its landholding and use that water for the purposes of mining.

The proponent provides an account of the amount of water it believes it is entitled to take as a harvestable right, but not of the total quantum of surface water that it will capture and use, though the EIS makes clear that this is intended to be one of the primary sources of water to meet mine demand.

Cultural and heritage impacts

We are concerned about the impact of the mine on the cultural and heritage values of the historical property “Kurumbede” as well as its impact on Gamilaraay cultural heritage. The EIS notes that Kurumbede is considered to be of at least “local” heritage significance, but concedes that it has potential state significance. The significance of the property for the poet Dorothea MacKellar is one of the top ranked features of Gunnedah Shire’s website for visitors to the area, and the statue of MacKellar in Gunnedah depicts the poet on a horse turned to face “her beloved Kurumbede.” MacKellar is reputed to have partially composed her iconic poem “Core of My Heart” (later known as

“My Country”) while staying at Kurrumbede, though it was mostly written in England, in expression of the poet’s longing for the landscapes of home. The EIS does not provide an adequate independent assessment of the heritage significance of Kurrumbede and this is crucial information for assessing the impact of the mine. Given the treasured place of this poem and MacKellar in white Australians’ understanding of their identity and connection to the countryside, the heritage significance of the property needs to be thoroughly assessed before the impact of the mine can be adequately understood.

We are aware that Dr Sue Rosen previously completed a heritage assessment of the property in around 2011 before the Vickery tenement was purchased by the current proponent and are disappointed that that study is not provided with this EIS.

We are informed that another important building is also located on Kurrumbede the significance of which has been omitted entirely from the EIS. This building was home to Australian Freestyle Multi-Olympiad [Boy Charlton](#) during his eight years as a jackaroo on the historical property. During this period he would train in the Namoi River adjacent to Kurrembede and went on to compete at three Olympic games. He won one gold medal, three silver and one bronze and set five world records.

Regarding the impacts on Gamilaraay/Gomeroi cultural heritage and social and cultural practices, we are concerned at the superficiality of the cumulative impact assessment presented in the Environmental Impact Statement and ask the Department of Planning to commission an independent expert to conduct a study of the cultural heritage of Gamilaraay/Gomeroi people in the Liverpool Plains and Namoi River area, including cultural landscapes, the cultural and social importance of water resources, access to land and oral histories of Gamilaraay experience and culture since colonisation and conduct a cumulative impact assessment of mining activities at the regional scale to inform decision-making about this project.

Rehabilitation

We are concerned about the lack of detail and clarity in the proponent’s rehabilitation planning and that it sets a weak and lax framework for progressive rehabilitation. We are also concerned that the indicative timeframe for future rehabilitation indicates rehabilitation will take place after considerable delay, and will fall well behind the active face of mining. There is no adequate explanation for why this would be the case.

The Rehabilitation Strategy makes general claims about the biodiversity and other values on the rehabilitated land at the Vickery site, without providing details about the benchmarks Whitehaven is working towards and evaluation of whether those benchmarks have been met. The strategy additionally provides only general information about the rehabilitation approach for the new mine, such as “Minimise active disturbance areas by progressively rehabilitating, and by restricting clearing to the minimum required for operations.” The public expects specific, timed and measurable benchmarks, objectives and timelines for rehabilitation, for example, mandating how close behind the active mine face rehabilitation must remain, proportions of mine area required to be under active rehabilitation relative to active mining and targets for species richness and soil productivity. We note that the EIS promises that a Mine Operations Plan (MOP) “would include detailed and quantifiable performance measures and completion criteria” but also note that the Resources Regulator is proposing to overhaul the planning, monitoring and compliance arrangements for mine rehabilitation from early 2019, including replacing MOPs with Rehabilitation Plans and that the

Department of Planning and Environment is also proposing more wide-ranging overhaul of rehabilitation management, including bringing more specific rehabilitation outcomes into consent conditions.

Rehabilitation objectives and staging are part and parcel of mine planning and the detailed and quantifiable performance measures promised by the proponent must be included in the material put before the Independent Planning Commission in its consideration of this mine. This is crucial for a number of reasons, not the least of which is that the rehabilitation approach affects the economic justification of the mine. Delayed or inadequate rehabilitation is an economic consideration and the success or failure of rehabilitation affects the value of the affected land and its district into the future. Moreover, in the absence of the Environmental Rehabilitation Fund recommended by the Chief Scientist, the balance of benefits and costs to the state of NSW must account for the liability the state will carry for any long-term environmental risk.

The proponent claims to be reducing the number of final voids within the Project area from five to two, but this purely numerical approach to considering the impact of voids is superficial and misleading. The cross-sections provided of the conceptual final landform illustrate that the large void proposed to be left behind by the proponent at the end of mining is much larger and much deeper than the existing voids. It is, in fact, 235m deeper than the existing landform, will have a catchment of 250 hectares and will as a result be a groundwater sink. Table 7 of the Agricultural Impact Assessment at Appendix H indicates there will be 156 hectares sterilised as either pit lake, highwall or sediment dam. This is not acceptable. Whitehaven must be required to fully rehabilitate the entire site, with no final voids, no highwalls and sediment dams and productive use of all land, either for biodiversity or agriculture.

Greenhouse

The Greenhouse “assessment” is not an assessment at all, but a presentation of data. Given the analysis that indicates that use of unabated coal in OECD countries must be phased out by 2030 to meet the Paris climate agreement goal of limiting warming to less than 2 degrees and given the Paris commitment is NSW policy, some context of the global carbon budget and the phase out of coal forecast by credible analysis consistent with meeting the Paris agreement is necessary from the proponent. Either there will be a dramatically shrunken market for the coal proposed to be mined from Vickery or the proponent and the NSW Government do not expect the Paris goal to be achieved. At the very least, the proponent should be required to articulate which of these futures it believes the Vickery expansion project forms part.