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Thank you for the opportunity to make a submission.

Lock the Gate 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. Additional expert review of the material presented by the proponent is being submitted on our behalf by the Environmental Defenders Office.

We object to this project and urge the Commission to refuse consent.

We are concerned that the Department of Planning's classification of issues raised by submitters as "key issues" and "additional issues" inappropriately prioritises matters of public interest that should properly all be given due consideration by the Commission, regardless of how many people raise them. A matter that is raised in many submissions is clearly important to the community and must be addressed, but all environmental and social impacts must be considered objectively and there is an implicit designation in the Department's classification that some issues are less important than others. Will this tiered system of issues, for example, mean that Aboriginal cultural heritage will weigh less in the balance because an officer of the Department did not consider it a "key" issue? This is frankly inappropriate bias and must not be repeated in the IPC's issues report.

Similarly, the Department's subjective decision to assess only the impacts of this project that are additional to the impacts of the project previously approved is not appropriate and must not be repeated by the Commission. It is difficult for the public to see the Department's action in this regard as anything less than a cynical attempt on the Department's behalf to make the impacts of this coal mine appear half as large as they will be. This is not appropriate and will lead to a decision by the IPC taken on incomplete information. Since the proponent intends to surrender the existing unused consent if this one is granted, this project is a replacement for the other consent, not a modification of it.

The impacts of this new coal mine must be assessed as impacts on the existing environment. The Vickery Coal Project has not proceeded so is not part of the existing environment.

The Department cites section 4.63 of the Act in support of its contention that the full scale of impacts of this project do not need to be considered by the IPC. We would draw the IPC's attention to subsection (3) of that section which clarifies that these provisions only apply if "the development to be authorised by that new development consent includes the continuation of any of the development authorised by the consent to be surrendered."

Since the Vickery coal project was never commenced by the proponent, this project cannot be a continuation of it. It is, rather, a replacement of the Vickery coal project with another mining project twice the size and with a different layout.

Doubling the size of the proposed Vickery coal mine more than doubles its environmental and social impacts. The construction workforce will be eight times the size. Though large jobs numbers are generally used as a shorthand for positive benefits, this is not the case when 500 people will be housed at a workers accommodation camp on the edge of town.

We are also concerned at the narrow and incomplete picture given to the Commission of the “Strategic context” of this project, based on what the Department has provided in the Preliminary Issues Report. This section outlines the context of historic coal mining, the land and water resources and the nearby state forests, National Parks and biodiversity offsets, but fails to lay out several matters of strategic importance for this project. The Department’s summary for example does not mention rail capacity for coal haulage to Newcastle from the Gunnedah Basin. Nor does it mention global agreements to meet challenging climate change goals and how the Scope 3 emissions from this project sit within known carbon budget constraints for meeting the goal of preventing global warming of 2 degrees above pre-industrial temperatures and striving to keep warming below 1.5 degrees. It is crucial to the strategic context of this project that there has already been 1 degree of average global warming, and the window for dramatically reducing greenhouse gas pollution in order to prevent accelerated climate change coincides with the window for development and production of this coal mine. We note that the global goals of the Paris Agreement are not only Australian Government policy as a party to the agreement, but are also the policy of the NSW Government.

We note that the proponent did provide some of the necessary strategic context for the project in its presentation to the Commission’s public hearing. The proponent cited the International Energy Agency’s “New Policies Scenario” in its World Energy Outlook as the coal market context for the project. What the proponent failed to mention is that this scenario is consistent with global warming of over 2 degrees and failure to meet the Paris Agreement goals. Conversely, the IEA also produces a “Sustainable Development Scenario” which it says is consistent with meeting the Paris climate agreement goals and Sustainable development goals of universal access to energy and improved air quality. In that scenario, in the latest World Energy Outlook published in November 2018, coal use globally drops by 59% in the next two decades.

We note the Land and Environment Court’s recent decision in *Gloucester Resources v the Minister for Planning* which cites case law and statutes to conclude that “The consent authority’s task is to determine the particular development application and determine whether to grant or refuse consent to the particular development the subject of that development application. Where the development will result in GHG emissions, the consent authority must determine the acceptability of those emissions and the likely impacts on the climate system, the environment and people.” (at paragraph 532). The Department of Planning and the Commission need to secure independent expert advice on the carbon budget for achieving the 1.5 degrees and 2 degrees warming limits and how coal use in the customer countries to be supplied by this mine can be expected to change if and when those goals are met.

Finally, the “Strategic context” section of the Preliminary Issues report neglected to mention the New England North West Regional Plan, which has as its first goal “A growing and diversified agricultural sector.”

Climate change creates the strategic context for this project in terms of local environmental conditions as well as global markets for coal and this context is highly visible at the present time given dramatically constrained water resources and drought in the Namoi Valley.

The current situation facing landholders and communities in the Namoi Valley has been described by NSW Water as “unchartered territory.” The time will come when the current situation has passed, but it provides us with an insight into the challenges of the future, and the potential consequences of the IPC’s decision about this project.

The Namoi Valley is experiencing its lowest inflow, its worst drought, since 1918, and there is no indication of relief coming soon. General security licence holders have zero allocation in the Lower Namoi and have had since August 2017.¹ Three quarters of the volume of water held in licences cited by the proponent as being held for this project are Namoi River General Security Licences.

Climate change forecasts about rainfall for this region are uneven, but there is agreement that evaporation will increase and availability of water will decrease. The CSIRO estimated 12 years ago that the best estimate of climate change by 2030 would be a reduction in average surface water availability in the Namoi by 5 percent. Under the dry extreme 2030 climate there would be decreases of 30 percent in average water availability. This will compound the existing trend whereby groundwater extraction is reducing stream flow with these losses estimated by CSIRO of 19GL a year, which could increase to 76GL a year by 2030 if groundwater extraction continued to increase as expected.

The Greenhouse “assessment” undertaken for this project is not an assessment at all, but a presentation of data. Given 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.² 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.

Water availability and impact

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 and does not appear to list any porous rock water access licences.

¹ Water NSW. 11 January 2019. Namoi Valley Water Allocation Update.

² For analysis of coal use pathways consistent the Paris Agreement goals, see Climate Analytics, November 2016. *Implications of the Paris Agreement for Coal Use in the Power Sector*.
https://climateanalytics.org/media/climateanalytics-coalreport_nov2016_1.pdf

The IESC notes that the specific storage values used in the alluvial areas of model layer two could be unrealistically high. This may cause the predicted extent and magnitude of drawdown to be underestimated and could result in non-compliance with the NSW Aquifer Interference Policy.

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.

There is also a risk that evapotranspiration rates used in the model are too low to accurately model evaporative losses. We note that in the Hunter Regional Water Strategy, increased evaporation as a result of climate change is one of the key drivers of water security risk.³ That strategy considered that higher temperatures will increase evaporation rates from water storages of between 5-20% depending on future greenhouse emissions scenarios. In the modelling conducted for the Hunter regional water strategy this increase in evaporation resulted in “an average decrease of 19% in General Security annual water allocations across all modelled scenarios. In scenarios where mining losses are included the general security allocations decreased by up to 24%.”

The proponent’s water balance indicates that over the life of the mine, 60% of the water on site will be sourced from captured run-off with a further 10% from rainfall directly onto storages with a further 18.4% is expected to be sourced from the Namoi River.⁴ There is considerable variation in the modelling of this run-off in the Environmental Impact Statement and annual capture ranges from less than 1,000ML to more than 4,500ML.

The proponent does not have sufficient water access licences to account for this take of water. 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. This is a legal issue that is currently being investigated by the Natural Resources Access Regulator. In Lock the Gate’s view the exemption cited is not an exemption to section 60I of the *Water Management Act 2000*, and therefore does not alleviate the proponent from the obligation to hold a water access licence to account for its captured take of surface water.

³ Department of Industry, Water. November 2018. *Greater Hunter Regional Water Strategy*.

⁴ *Vickery Extension Project EIS Appendix B Table 8.9*

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* clarifies 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* states 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* to section 60I, which is specific to water captured in the course of mining. Moreover, section 60F 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 without obtaining water access licences to account for this take.

Rehabilitation

DRG recommended that an independent review of the final landform, and final void design be undertaken. We strongly agree with this recommendation.

DoI recommended that the rehabilitation objectives should aim to maximise the area of land suitable for future agricultural land use. The proposal to leave a large final void is at odds with this objective. The proposed new final void would have a catchment area of approximately 250 ha. In accordance with the existing approval it would act as a long-term groundwater sink, with inflows equilibrating at approximately 0.3 to 0.5 ML/day, sustained primarily from infiltration through the western emplacement

Social

We are disappointed by the social impact assessment conducted for this project and ask the Commission to seek additional analysis of this issue. 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 of mining now proposed by Whitehaven is too large for the town to cope with. The 500 people, mostly men, expected to form the construction workforce is 58% of the population of Boggabri. The two local Councils that will host this mine have submitted that Whitehaven should place a higher emphasis on the local workforce rather than external labour, with recommended programs for local and indigenous employment, training and skills development. We note that the approved mine which is now being abandoned by the proponent had a far smaller construction workforce. We believe that mining companies need to better integrate their operations into existing communities and economies to avoid doing lasting damage. We are told often that mining is a temporary land use, but if the social and economic fabric of the local area is irreversibly damaged by the disruption of mining that is out of proportion to the local area, the effects will be lasting.

It must be said that 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. Some of the anguish created by the Maules Creek mine and this proposal was in evidence at the Commission's public hearing. This reality 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.

On that topic, we share local people's concerns that the registration of a new subsidiary company, Vickery Coal, to be the proponent of this project has enabled the proponent to distance itself from the environmental and social record of the Maules Creek coal mine. Section 6.1.2 of the Environmental Impact Statement, regarding the environmental record of the proponent, states that no proceedings have been brought against Vickery Coal, but does not list the series of penalty notices, warnings and environmental investigations into the Maules Creek operation.

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 EIS admits that, "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 stated 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.

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 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.