

Department of Environment, Science and Innovation
Business Centre Coal
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By email: CRMining@des.qld.gov.au

28 August 2024

Attention: Alison Cummings

**Re: Submission on the application for an Environmental Authority amendment
for the Blair Athol coal mine (A-EA-AMD-100464270)**

Thank you for the opportunity to make this submission in response to the Orion Mining Pty Ltd (**the Proponent**) application for an amendment to the environmental authority EPML00876713 (**EA**) in relation to a change to the final void outcome and construction design at the Blair Athol Coal Mine (**the Project**). The Project seeks to amend *Condition F4* of the EA to allow for a 302ha residual void 'not in stable condition' or able to sustain vegetation.

Environmental Advocacy in Central Queensland (EnvA) is a Central Queensland association with an interest in ensuring that all land use is sustainable and does not significantly impact on the environment. We are particularly concerned about the risks associated with coal mining, coal seam gas and climate change.

EnvA opposes this EA amendment application on the basis that the proposed Project is inconsistent with Queensland's position on Non-Use Management Areas (**NUMA**)¹ and other aspects of Queensland's regulatory and policy framework related to mine rehabilitation. If approved, it will lead to ongoing safety and environmental impacts.

Our reasons for this objection are set out below.

Compliance with the NUMA Guideline and other regulatory requirements

Rehabilitation to the Greatest Extent Possible and Best Practice Management

The NUMA guideline notes that:

"the approval of a NUMA does not reduce a mining company's responsibility to rehabilitate the land identified within the NUMA to the greatest extent possible using best practice environmental management for the area to minimise risks to the environment" (Section 1).

The application report does not engage with the concept of best practice environmental management, nor does it adequately outline consideration of options to minimise the residual void and associated risks to public safety and the environment.

¹ [Queensland government's Non-Use Management Area guideline](#)



Access to the area

The NUMA Guideline requires that access to the area must be “prevented or minimised to the greatest extent possible”. The issue of public access, and public health and safety, is not addressed anywhere in the application or supporting information. Given that the residual void will exist in perpetuity, a robust approach is required to ensure the physical safety of future generations of humans and wildlife.

Alternatives

The NUMA Guideline states that “a NUMA can only be nominated after all post mining land use (PMLU) options have been assessed and it is considered that the land cannot be rehabilitated to a stable condition”

The application does not provide any discussion of alternatives. It does not state the currently approved PMLU for the void, nor does it set out why this PMLU cannot be achieved, apart from some statements about the expected high salinity levels in the residual void. Other possible options, including fully backfilling the void, or ceasing mining earlier so as to minimise the size of the void, are not explored in any detail.

The supporting information states “the final landform has been developed to maximise the potential land returned to a PMLU of grazing, while minimising the size and extent of the NUMA”.

EnvA considers that more work is needed to clearly demonstrate that a NUMA is the only available option for the residual void and that every effort has been made to minimise the extent of the residual void.

Floodplains

The NUMA Guideline states that a NUMA involving a void in a floodplain will not be approved.

The application notes that “The Mine is located within the flood extent of a relevant watercourse defined by DES (2019). The diversion drains are needed to stop floodwater ingress into the final landform.”

EnvA considers that the Project is clearly inconsistent with:

- the NUMA Guideline,
- the Voids in Floodplains Information Sheet²,
- the Progressive Rehabilitation and Closure Plans Statutory guideline³,
- section 126D(3) of the *Environmental Protection Act 1994 (EP Act)*, and
- section 41C of the *Environmental Protection Regulation 2019 (EP Regulation)*.

A further concern is the reliance on the two diversion drains which seem to be ‘artificial features’, and as such, should be excluded from any. The Project application notes that these diversion drains will carry high velocity flows, with some overbank flows along the Western drain, and that erosion control is recommended.

While no details are given, this seems to imply that ongoing maintenance of these drains is required if the drains are to provide flood immunity in perpetuity. This is not addressed at all in the application and seems to contravene the requirements in Section 41C of the EP Regulation regarding the required level of flood immunity for a final void.

² Queensland Government’s [Voids in Floodplains Information Sheet](#)

³ Statutory guideline - Progressive rehabilitation and closure plans

NUMA Acceptance Criteria

Section 3 of the NUMA Guideline requires any Proponent to demonstrate compliance with either criteria 1 or criteria 2(a) and 2(b). EnvA's view is that the application does not show compliance with these criteria as described below:

Criteria 1. Rehabilitating the land would cause a greater risk of environmental harm than not rehabilitating

The application does not discuss this criterion at all.

Criteria 2

(a) the risk of environmental harm as a result of not carrying out rehabilitation of the land is confined to the area of the relevant resource tenure

The application provides a very cursory overview of potential environmental risk and impacts associated with the change of rehabilitation from PMLU to NUMA for the void and claims that "the amendments do not change any rehabilitation objectives stated in EA (EPML00876713) in a way that results in significantly different impacts on environmental values than those previously permitted".

Given that there is no direct comparison of the previously approved PMLU and the requested NUMA, we do not consider that the Proponent has demonstrated a lack of environmental harm. EnvA also notes that in spite of predicting no change in the rehabilitation objectives, the Proponent is seeking to have all rehabilitation objectives in relation to the residual void removed.

The application and attached technical reports demonstrate that the residual void will be a net groundwater sink. However, the extent of groundwater drawdown in intersected aquifers, including the tertiary basalt aquifer which provides usable water for neighbouring agricultural users as well as alluvial aquifers and associated groundwater dependent ecosystems have not been assessed. The Proponent notes that groundwater monitoring is undertaken to monitor effects of drawdown during mining, the results of this monitoring are not presented in the application.

EnvA's view is that drawdown affecting aquifers outside the relevant resource tenure would constitute environmental harm as defined in the section 14 of the EP Act as any adverse effect on an environmental value.

EnvA also has concerns about flooding of the residual void and the long-term management and maintenance of the two artificial diversion drains. There is not detail on the long-term management and maintenance which does not provide any certainty that the required level of flood immunity is achieved in perpetuity.

(b) the applicant considers, having regard to each public interest consideration, that it is in the public interest for the land not to be rehabilitated to a stable condition

The issue of public interest is not addressed anywhere in the application, nor is information that can be used for a public interest evaluation provided (for example benefits from the mining activity, long term impacts on the environment and community and alternatives analysis).

Residual Risk

Section 4 of the NUMA policy identifies the potential for ongoing management to be needed to ensure that residual risk remains within acceptable levels. EnvA considers that long term management must be designed to:

- Maintain the integrity of the two diversion channels, to ensure that the void is not at risk of inundation

- Monitor the effects of the void on groundwater drawdown
- Prevent and manage public access.

These are not addressed in the application and hence EnvA considers that the risk of significant environmental harm will remain well after the end of the life of the mine.

Proposed Amendments to Conditions

The Proponent requests that the residual void be exempt from all four standard rehabilitation outcomes, that is, that the residual void is not required to be:

- (a) safe for humans and wildlife,
- (b) stable,
- (c) able to sustain vegetation, and
- (d) non-polluting.

While it seems that the Proponent is identifying that the residual void will not be able to support vegetation, it is not clear why the other requirements should be removed.

It is EnvA's recommended that this Project should be refused as it is clearly inconsistent with Queensland's regulatory and policy framework related to mine rehabilitation. The Project will cause environmental harm and will create a significant residual impact for future generations.

Yours sincerely



Dr Coral Rowston
Director
Environmental Advocacy in Central Queensland