The Coordinator-General
C/ - Project Manager, Winchester South project
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Dear Coordinator-General

Re: Submission on the revised draft Environmental Impact Statement for the Winchester South Project

Thank you for the opportunity to make this submission on the revised draft Environmental Impact Statement **(EIS)** for Whitehaven WS Pty Ltd's **(the Proponent)** Winchester South Project **(the Project)**.

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 believes that opening new or expanding existing coal and gas projects:

- is contrary to meeting Australia's emission targets and Queensland's emission targets,
- is likely to result in irreparable damage to our local landscape and result in stranded assets,
- will put our local community at further risk of extreme weather such as increasing the intensity and frequency of storms, floods, droughts and bushfires,
- will damage our significant coastal resources including our beaches and the Great Barrier Reef through storm surge and increased coral bleaching events,
- will further degrade wildlife habitats of state and national significance through both habitat loss and climate change, and
- rarely take into consideration the views of Traditional Owners and local communities who are concerned about protecting their land from fossil fuel development.

The Winchester South Project

The proponent proposes to develop an open cut coal mine with a rail connection to the Norwich Park Branch Railway, a water pipeline to the Eungella pipeline network, an electricity transmission line and access road. The mine is expected to produce up to 15 million tonnes per annum of a combination of metallurgical (58%) and thermal coal (including pulverised coal for injection (PCI) for approximately 28 years.

On 17 April 2019, the Coordinator-General declared the project a 'coordinated project' under section 26(1)(a) of the *State Development and Public Works Organisation Act 1971*, triggering the requirement for an EIS.

Whitehaven first submitted a draft environmental impact statement ('EIS') for the Winchester South mine to the Queensland Government in August 2021. The Coordinator-General requested more information from Whitehaven in December 2021, and the federal environment department and the Independent Expert Scientific Committee **(IESC)** also gave advice about additional work that needed to be done.

The revised draft EIS currently open for submissions is Whitehaven's response to these requests. From the review of the supplementary information provided, it appears that the only real changes that have been made to the original draft EIS are a small reduction to the disturbance footprint and the backfilling of one of the four mine voids and increasing the depths of the two of residual voids.

In parallel to the EIS process, the Project is one of the 18 fossil fuel projects that federal environment Minister Tanya Plibersek has agreed to reconsider following a request by the Environment Council of Central Queensland. This reconsideration is in relation to the substantial new information about the impacts of climate change on Matters of National Environmental Significance (MNES). The Minister is yet to make a decision on the review of Project and hence it would be premature to endorse this draft EIS until it is clear on further information that might be required from the proponent.

In relation to the EIS under review, EnvA strongly recommends that the EIS be rejected on the basis of insufficient and flawed assessments of the impacts and their mitigation, particularly in respect to:

- biodiversity values including listed threatened species,
- an inappropriate offset management strategy,
- ground and surface water both during the operation of the mine and after closing,
- greenhouse gas emissions and climate change, and
- the permanent transformation of a natural ecosystem into a highly altered artificial landform.

Our specific concerns are outlined below.

Terrestrial ecology

The total proposed disturbance footprint of the mine is 7,130 ha which will result in significant impacts on the terrestrial ecology of the site. However, it remains unclear about the extent or significance of the impacts as there is insufficient and poorly presented detail and mapping in relation to footprint and the extent of the current vegetation cover.

Vegetation

The Project will result in the removal of 569.3 ha of remnant vegetation and 6,408.6 ha of non-remnant vegetation that provides habitat for flora and fauna to varying degrees.
Specifically, this project will result in the loss of:

- 46.7ha of concern eucalypt woodland on alluvials (RE 11.3.3c and 11.3.4)
- 9.6ha of endangered Poplar Box Grassy Woodland on Alluvial Plains (RE 11.3.2),
- 107.7ha of endangered brigalow (RE 11.3.1, 11.4.8, 11.4.9 and 11.9.5),
- 405.3ha of ecosystems of least concern, and
- up to 6,408ha of non-remnant vegetation including regrowth.

These threatened communities have been subject to historic clearing for agriculture and mining. The cumulative impacts of the removal of over 160 ha of threatened vegetation communities must be considered clearly inappropriate.

Fauna

The impacts on the vegetation will directly remove the habitat and habitat connectivity for 178 native fauna species including the nationally conservation significant ornamental snake (*Denisonia maculata*), greater glider (*Petauroides volans*), koala (*Phascolarctos cinereus*), squatter pigeon (*Geophaps scripta scripta*) and painted snipe (*Rostratula australis*) which will be directly impacted.

While the revised mine plan claims to reduce the clearing of the breeding and foraging habitat of the squatter pigeon (southern subspecies), koala and greater glider, significant loss of threatened species habitat will still be removed, including:

- 1,834.2ha of ornamental snake habitat
- 115.5ha of squatter pigeon habitat
- 168.9ha of koala habitat, and
- 132.8ha of greater glider habitat.

The EIS acknowledges the highly cleared and fragmented vegetation in the Bowen Basin but fails to acknowledge the high functional significance of all vegetation on the project site, including non-remnant and regrowth vegetation that provides linkages for wildlife movement between areas of remnant vegetation.

All remaining vegetation, remnant or regrowth, is significant to species survival in such a landscape and this is well recognised in the scientific literature. In support of the value of regrowth vegetation, specimens of the endangered (NC Act) *Solanum adenophorum* were identified in brigalow regrowth within the project area as was the ornamental snake, *Denisonia maculata*.

Cumulative impacts on threatened species and communities

The assessment of the cumulative impacts on threatened species and communities is misleading and does not adequately demonstrate that the cumulative impacts are "minimal because of the localised nature of the Project".

The Proponent has assessed cumulative impacts on threatened species and communities based on the amount of habitat available within the Isaac Conners and Northern Bowen Basin Subregions and providing an incomplete table of clearing proposed for the Project and other select coal mines. The Proponent concludes that there are relatively low cumulative impacts using this methodology.

EnvA argues that this does not represent a valid assessment of cumulative impacts on species or communities. The cumulative impact assessment fails to incorporate other developments where threatened species and communities have been removed or the impacts of climate change.

In the last twelve months, the koala and greater glider have been reclassified from vulnerable to endangered, largely due to the loss and fragmentation of habitat, and the impacts on climate change and the consequent severe weather and fire events.

A thorough assessment of the cumulative impacts on threatened species and communities is required which takes into account all 'threats' including habitat loss and climate change. It is the cumulative impacts which have resulted in the poor and deteriorating State of the Environment in Australia.

Offsets

The stated avoidance and minimisation strategies remain limited, and the mitigation measures are less than adequate, in relying on fauna to move to other areas. This assumes unoccupied habitat availability which rarely exists. Offsets are typically of minimal success, short duration,

and certainly do not address the cumulative impacts from the loss and disturbance of habitat in areas such as the Bowen Basin.

The significant biodiversity impacts are proposed to be dealt with through offsets, as set out in the new 'Offset Management Strategy'. However, EnvA is concerned that the offsets are not suitable for the following reasons:

- Whitehaven only owns one of the three proposed offset properties, with the other two privately owned. No evidence is provided that these landholders would be willing to have their land used for biodiversity offsetting.
- There is recognition that there will need to be an offset for impacts on habitat connectivity but there is no information to show how the offset areas will preserve connectivity.
- There is no indication of how matters of state significance would be preserved through the proposed offsets, merely citing the requirements for such offsets and promising that the Queensland Department of Environment would be provided with information about proposed offsets in future.
- The offsets appear to involve 'averted loss' offsets, whereby areas of existing habitat are allegedly preserved to compensate for the destruction of habitat elsewhere. Such averted loss offsets are widely considered to be ineffective and have recently been explicitly rejected by the Federal Government.
- Despite describing the proposed offset properties as affected by degradation from grazing, etc., there are no proposed measures to protect and improve habitat on the offset properties. Further, there is no evidence that Whitehaven would be willing or able to protect these offset areas in the long-term.

We recommend that the proponent be required to:

- Provide detailed mapping and analysis of impacts on all native vegetation communities, including both remnant and regrowth across the study area and the project area, including the utility corridors (pipeline, electricity, road).
- Fully assess the corridor and stepping-stone functions provided by the existing remnant and regrowth vegetation.
- Undertake an appropriate assessment of cumulative impacts within the northern Bowen Basin resulting from all development and ecosystem loss and degradation by land use and the impacts of climate change on threatened species and communities.
- Prepare a detailed and justified offset management strategy.

Ground and Surface Water

Whitehaven indicate that they will be seeking an external water supply of 3,800 ML per year to meet water demand for coal washing and dust suppression. They suggest this would give them a '*greater than 78% probability'* (improved from the 75% stated in the draft EIS) of meeting all site demands in any one year. It's unclear what would happen in the 22% probable scenario that this amount is insufficient.

While the Proponent states it would source water from an external supplier or via water sharing with other mines, it has not provided any evidence that this amount of water is available, or whether or not it would impact on other water users. In times of drought, most mines in the region are likely to be short of water so water sharing is unlikely to be viable when most needed.

The groundwater model on which the assessment of groundwater impacts is based has a Class 2 confidence level. Given that graziers in the region are entirely dependent on groundwater, and the serious risks of cumulative groundwater impacts from the large number of coal mines in the vicinity, a model with Class 1 confidence level is warranted.

The project proposes to release untreated mine-affected water to the Isaac River as controlled releases during moderate and high flows and there are risks of uncontrolled releases during major rain events. Sediment dams will also discharge into the Isaac River.

In total, there are nine water storages that will overflow into the Isaac River and two that will discharge into Ripstone Creek. This represents an enormous threat to those waterways. This water will be highly polluted (particularly the mine-affected water) and will increase the total pollutant load in the river, which already has significant water quality issues. With the continued increase in the number of coal mines within the northern Bowen Basin, there is a real risk of the cumulative discharge of poor-quality water feeding into the local sub-catchment and subsequently into the larger Fitzroy Basin and the Great Barrier Reef Marine Park.

The proposed flood levees will affect the distribution of flood waters, and in a very large flood event it is predicted that the levees will push water northwards beyond the project area but there is little information provided about the impacts on agricultural production in the affected area.

The IESC recommended multiple additional assessments that the Proponent needed to do to properly assess water impacts from the mine. Whitehaven have failed to address many of the IESC's recommendations in the revised EIS. For example:

- There is still barely any analysis of cumulative groundwater impacts.
- There is no new information to show how diversion and loss of ephemeral creeks will affect the local floodplain and groundwater dependent ecosystems **(GDEs)**.
- The revised groundwater impact assessment does not include the required additional work to ground-truth the presence/vulnerabilities of GDEs
- There are no plans to monitor residual void water quality, or any modelling of the final geochemical characteristics of the pit water, as recommended by the IESC

Further, Whitehaven fails to consider the impact of long-term drainage of water from the Isaac River into dewatered aquifers due to the changing climate, and the likelihood of longer spells of dry or drought conditions.

We recommend that the proponent be required to:

- Identify all sources of water needed for the mine's operation and provide evidence that it can secure the required water supply at a much higher than 78% confidence, particularly given the changes to rainfall patterns the region has experienced over the last decade or more and predicted rainfall variability resulting from climate change.
- Conduct an assessment of groundwater impacts at a Class 1 confidence level to provide confidence of continued ground-water supply to landholders and reduced threat to the Isaac River alluviums.
- Design the water storages for nil release and/or ensure that all wastewater is treated to a high standard before any release or overtopping event.
- Address the IESC recommendations related to information required to properly assess water impacts from the mine.

Greenhouse gas emissions

<u>Scope 1 emissions</u>

The Project will release over 15 million tonnes of greenhouse gas scope 1 emissions from diesel use, fugitive methane and land clearing. The equates to the average yearly emission of 503,512 tonnes of greenhouse gas pollution every year for 31 years just in scope 1 emissions.

The revised EIS includes a new 'Greenhouse Gas Management and Abatement Plan', but this document fails to propose any meaningful measures to mitigate scope 1 emissions from the mine.

The Proponent states, with no evidence or explanation, that pre-mining drainage of methane from coal seams - which can reduce the fugitive emissions from open-cut coal mining - was 'not considered to be feasible based on current technology'. Instead, the mitigation proposed is to 'encourage car-pooling and the use of the shuttle bus service' and conduct regular maintenance of its equipment. This is a particularly poor response given the policy, framework and targets detailed in depth in the Proponent's proposed Greenhouse Gas Management and Abatement Plan.

The Proponent further claims to be "committed to evaluating further opportunities for reducing Scope 1 and 2 emissions, including the possibility of setting targets". Whitehaven has an extremely poor track record in environmental compliance and management and is likely to do nothing that is not regulated in this space. The Proponent has been found guilty or investigated for regulatory breaches 35 times for offences including taking 1 billion litres of water without a licence from Maules Creek during drought conditions, polluting waterways, breaching noise limits, illegal clearing and breaking workplace health and safety laws. The proponent needs to commit to taking action to reduce Scope 1 emissions before any approvals for this mine should be considered.

Scope 2 emissions

The Proponent has committed to purchasing carbon neutral electricity certified under Climate Active to eliminated Scope 2 emissions from the Project's operations. Scope 2 emissions from the project are relatively small when compared with Scope 1 and miniscule when compared to Scope 3.

The Proponent has apparently not yet identified a source for the proposed carbon neutral electricity. With competition among the industry and mining sector for the currently limited renewable energy supply, and no secured supply identified, it is likely that renewable energy will not be available from the commencement of mining operations. The Proponent must either confirm that a carbon neutral energy supply has been sourced or be realistic in that the Project will be contributing to Scope 2 emissions for a number of years.

Scope 3 emissions

Scope 3 emissions figures were provided in the original EIS and estimated at 531.78 million tonnes CO_2-e. These are significant emissions which, cumulatively will increase global temperature, resulting in significant adverse impacts to the environment and the comfort of our lifestyles.

Australia, and of particular concern to EnvA, Central Queensland (where this mine is proposed), is already experiencing climate change impacts that include an increased frequency and severity of coral bleaching, storms, heat waves and wildfires, and an increase in the number of endangered species and ecosystems. If warming increases to 1.5°C and above, these impacts will increase in severity.

In a recent Queensland Land Court decision, Land Court President Fleur Kingham, found that as a matter of law, GHG emissions can be taken into account in applying the principles of ecologically sustainable development and in considering whether the applications are in the public interest. Wherever the coal is burnt the emissions will contribute to environmental harm, including in Queensland. This same court decision notes that the climate science demonstrates that the remaining carbon budget for keeping temperatures to 1.5°C in 2100 will be exhausted in 8 years at the current rate of emission, and to keep temperatures to well below 2°C by 2100, will be exhausted in 15.5 years. This proposal will contribute to an increase in the current rate of emissions and consequently will result in a failure of Australia and Queensland to meet emission reduction targets and our responsibilities under the Paris agreement.

The original draft EIS failed to include climate change in risk assessments, failed to consider the contribution of project emissions (including scope 3) to global warming and its impacts on environmental, cultural or social values, and failed to provide baseline information in relation to climate change as a relevant environmental risk. None of these issues have been addressed and hence the revised EIS fails to give an accurate picture of the impacts of the project.

The Queensland Government's position is that "Coal projects in Queensland will continue to be supported as long as they stack up economically, environmentally, and socially. Each project must proceed on its own merits, based on demand and economic viability, and meet the highest environmental and community standards. The revised draft EIS for the Project does not provide a reasonable assessment on which to base a decision that the mine 'stacks up'.

We also note that Table 1 of the Assessment of Project Final Landform Alternatives that the Proponent has identified that there will be increased GHG emissions compared to the original draft EIS due to the increase in ROM coal removed and the prolonged operation of the diesel-powered fleet for the backfilling of an extra void, but expects that this will be a benefit to Queensland . There is insufficient detail on how increasing Scope 1 and 3 emissions can benefit Queensland relative to the draft EIS.

We recommend that the proponent be required to:

- Identify mechanisms and commit to taking action to reduce Scope 1 emissions.
- Confirm that a carbon neutral energy supply has been sourced or include details of the Scope 2 emissions for the Project.
- Assess the impacts of climate change which will be further accelerated with the release of over half a billion tonnes of CO_2-e from the Project. This should not be limited to local environmental matters but to all matters of State and National Environmental Significance.
- Undertake a meaningful analysis of the economic, social and environmental cost-benefit for this project to justify the project proceeding which incorporates the impacts of climate change.

Rehabilitation and final landform

The Rehabilitation Management Plan appears to have no intention of restoring the extensive area of wildlife habitat that will be lost during mining operations.

Of concern, where the post mining land use is grazing, the species composition will aim to include native grass species, buffel grass and suitable grazing grasses. This is of concern given that there are a number of grass species (i.e. buffel grass) which will impact on the condition of vegetation communities of conservation significance through limiting natural re-establishment and promoting fire intensities.

The rehabilitation plan and conditions do not accord with best practice or even leading practice in mine rehabilitation and are contrary to the Queensland Government's Mined Land Rehabilitation Policy (noting that the Proponent believes they are exempt from these provisions as they lodged an application for a site-specific environmental authority before the 'Progressive Rehabilitation and Closure Plan start date').

EnvA notes that the Proponent has reviewed and 'improved' the final landform. The project will now leave three (reduced from the original four) final voids by backfilling the South Pit void. This is one of the smallest pits proposed and further from the Isaac river than the other three planned residual voids. The three remaining planned voids are within close proximity (approximately 3-4 km) of the Isaac River floodplain. The south pit mine void, that the revised project now intends to backfill is the furthest from the floodplain.

In the assessment of the options for the final landform, the Proponent has clearly placed economic gain as more important than the protection of the local environment. Table 2 of the submitted Enclosure 1 – Assessment of Project Final Landform Alternatives is misleading and does not provide an unbiased assessment balancing environment, social and economic values. Specifically the Proponent argues that:

- backfilling of all mine voids would take longer and cost more,
- further GHG emissions would be increased by approximately 1 MT CO_2-e, which is negligible when compared to the over 530 1 MT CO_2-e which the mine will cause,
- dust emission and noise would continue for a further six years on top of the 28 years of dust and noise emissions from the operation of the mine, and
- there will be no change to the disturbance of native flora and fauna despite the loss of large areas of land which should be rehabilitated.

We recommend that the proponent be required to:

- Backfill and rehabilitate all pits rather than retaining dams with high salinity water.
- Assess the cumulative impacts of mine voids in the northern Bowen Basin with a focus on the impacts to 'clean' surface and groundwater.
- Reconsider the concept of using introduced grass species in revegetation activities and incorporate reinstatement of regional ecosystems, particularly those ecosystems that are threatened or support threatened flora and fauna.

Justification

The production of approximately 396 million tonnes (Mt) of coal over the 28-year production schedule of this project is justified in the EIS as necessary to meet current and future demands for coal products in the overseas market. EnvA believes that the current approved metallurgic and thermal coal extraction adequately meets the requirements to meet market demand for a number of decades.

A further justification is based on net economic benefit to Queensland. This economic analysis is based on a flawed assumption that global thermal and metallurgical coal demand and prices will remain largely unchanged until 2050. While demand beyond 2050 is unknown, it is likely to be significantly reduced (compared to current demand) as new technologies are established and industry moves to cleaner, low emission manufacturing.

We believe that it is inappropriate to approve this project given the significant environmental impacts, including a significant contribution to climate change.

Thank you for the opportunity to make a submission on the Winchester South Project revised EIS.

Yours sincerely,

Dr Coral Rowston
Director
Environmental Advocacy in Central Queensland