

Reply to: Georgina Woods
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Re: Public notification of referral of Continuation projects for Hunter Valley Operations (HVO) North (EPBC ref 2023/09651) and South (EPBC ref 2023/09652) coal mine.

Lock the Gate welcomes the opportunity to comment on EPBC referrals submitted for the Continuation projects for Hunter Valley Operations (HVO) North (EPBC ref 2023/09651) and South (EPBC ref 2023/09652) coal mine.

Lock the Gate Alliance is a national grassroots organisation made up of 150,000 individuals and over 250 local groups who are concerned about the impacts of inappropriate mining. The mission of the Lock the Gate Alliance is to protect Australia's agricultural, environmental, and cultural resources from inappropriate mining and to educate and empower all Australians to demand sustainable solutions to food and energy production. Lock the Gate works with communities affected by mine expansion projects in the Hunter Valley and with local communities and groups engaged on the considerable task of preparing the Hunter region for the expected rapid decline in thermal coal exports that will occur as a result of the global energy transition and climate change.

The proposed Hunter Valley Operations Continuation project is referred to as two separate actions but they are clearly a single activity which will have profound impacts on several Matters of National Environmental Significance (MNES) beyond those identified and admitted in the referral documentation. These referrals are clearly a split referral and the Minister should refuse these separate referrals under s 74A of the *Environmental Protection and Biodiversity Conservation Act 1999* (Cth) (*EPBC Act*). Furthermore, the Environmental Impact Statement (EIS) and Biodiversity Matters of National Environmental Significance report submitted with the referral for the projects are incomplete and the Commonwealth is at risk of making a decision based on misleading information.

We note that these referrals replace two withdrawn applications for HVO Continuation South (EPBC 2022/09206) and HVO Continuation North (EPBC 2022/09207) and that this re-referral means these projects cannot be assessed under the NSW bilateral agreement. The proponent has, however, appended to its application the EIS it submitted to the NSW Government for the purpose of obtaining development consent as State Significant Development under the *Environmental Planning and Assessment Act 1979*. We would draw the Department's attention to inadequacies in that EIS highlighted by NSW agencies responsible for biodiversity, water resources and other environmental matters. The materials submitted to the Department fall short of what is required to understand the impact of these projects on matters of national environmental significance, particularly water resources and threatened species and communities. Further information has now been submitted to the NSW government dealing with both biodiversity impacts on nationally-listed entities and water resources but this information has not been provided to the Commonwealth with this application.

The potential hydrological impacts of coal mining on local and regional water resources are downplayed in the referral documentation but are significant. These impacts, predominately to surface water resources, are also likely to cause significant impacts downstream on the Kooragang Island (Hunter estuary) wetlands, a declared Ramsar wetland.

Furthermore, with this submission we provide evidence of specific harm to the Great Barrier Reef attributable to the greenhouse emissions generated by these projects. The proposed actions currently under consideration are materially distinguishable from the projects discussed in the *Environment Council of Central Queensland Inc v Minister for the Environment and Water (No 2) [2023] FCA 1208* (Living Wonders Decision) in their scale and context, and there is compelling evidence to suggest that the MNES triggers for impacts to the Great Barrier Reef and its World Heritage values, and additional listed threatened species and communities should be engaged in this instance.

We have attached expert evidence to this effect, recalling that context and intensity of impacts are crucial in assessing their significance under the terms of the *EPBC Act*. A report prepared by Professor Michael Bode (**Attachment B**) outlines a mathematical methodology that enables an estimate of the risk to the Great Barrier Reef from greenhouse gas emissions in terms of hectares of coral reef impacted. Professor Bode applies a two-step methodology to estimate that an additional 1 Gt of CO₂-e would remove over 1,000 hectares of suitable reef habitat from the Great Barrier Reef. The HVO Continuation project will be responsible for more than 1 Gt of CO₂-e.

The impacts on the Great Barrier Reef from these projects specifically is substantial and significant, and would occur against the context of carbon budgets which are currently oversubscribed if the earth is to remain on track for 1.5C and 2C warming, and where the Reef is already being impacted by numerous factors including climate change, dredging, ocean acidification, and ocean pollution.

We therefore strongly urge the Commonwealth government to refuse these split referrals, and then to consider the HVO North and South Continuation Projects as a single controlled action for which an Environmental Impact Statement must be prepared.

In summary:

- The volume of coal to be mined by these projects and length of time by which they would extend a highly damaging operation that is already causing a significant impact to water resources, alongside its excessive contribution to climate change, in our view amount to clearly unacceptable impacts.
- In any case, these projects will have significant impacts on several matters of national environmental significance, namely, threatened species, water resources, surface and groundwater resources and associated values, a wetland of international significance and the Great Barrier Reef and each of these must be listed as controlling provisions.
- Inadequacies in the EIS which has now been submitted to the Department of Climate Change, Energy, Environment and Water have been highlighted by the NSW agencies with statutory responsibility for various MNES, including water resources, and a Response to Submissions has now been provided to NSW by the proponent addressing some, but not all, of these gaps. However this material has not been supplied by the proponent with the EPBC referral.
- The separation of the HVO Continuation Project into North and South components is a “Split referral” under section 74A of the *EPBC Act* and the terms of associated policy. Splitting

these referrals is inappropriate and misleading since the ecological features and water resources form a continuum in the landscape and should not be divided to meet some arbitrarily determined boundaries. We urge the Environment Minister to refuse to accept the two separate referrals in accordance with s74A(1) of the *EPBC Act* on the basis that the action that is the subject of the referral is a component of a larger action that the proponent proposes to take.

- Similarly, the proponent’s argument that the “incremental” impacts beyond the harm already inflicted by this mine are not significant in their own right for most MNES should be rejected, since the projects propose a continuation and intensification of those impacts, which must be considered cumulatively.
- The referrals propose to clear a total of 2,772 ha of vegetation, including 234.4 ha of Central Hunter Valley Eucalypt and Woodland CEEC and 5.2 ha of Warkworth Sands Woodland of the Hunter Valley CEEC. We note that the MNES report (Umwelt, September 2023) was prepared prior to the completion of the amended Biodiversity Development Assessment Report (November 2023) for the NSW planning process and therefore the referrals do not consider the most recent information about the project or agency comments. Pertinent information about cumulative impacts on nationally-listed critically endangered ecological communities and further surveys for nationally listed species are among the missing information are not provided with this referral.
- The following are likely to be significantly impacted by the proposal:
 - three threatened plant species will be directly impacted;
 - 12 threatened fauna species will be indirectly impacted;
 - Fourteen migratory birds will also be directly impacted.

The MNES Report does not consider the cumulative impacts of surrounding mines on these species or their habitats. The referral incorrectly concludes the project will not have a significant impact on Regent Honeyeater, Swift Parrot, Grey-headed Flying Fox, Large-eared Pied Bat and Spotted-tailed Quoll.

- The MNES report also states that an assessment of significance is not required for the Striped Legless Lizard (*Delma impar*), because the species present has been recently identified as a distinct species, the Hunter Valley Delma. This is highly misleading. Since first being described in 2022, the Hunter Valley Delma has had a Species Expert Assessment Plan prepared to assess devastating habitat loss from the Black Summer fires. This species has now been nominated for Federal listing. Clearing 191 ha of known habitat for this species is of serious concern given that it has a restricted distribution and its EPBC nomination is on foot. This species is at risk of extinction from the cumulative impacts of mining in the region and must be assessed in this referral.
- Contrary to the assertions made in the referrals, the NSW DPE Water Division has advised that this project poses “a significant risk to a key water source in the Hunter Valley” since it will mine directly into sediments connected to the Hunter River alluvium. The HVO mine will also remove a huge amount of water from the Hunter River catchment by capturing rainfall and run-off and via its licensed extraction, potentially affecting downstream users, the environment and the Hunter estuary Ramsar site. Again, this impact is made clearer in

updated information provided in the NSW assessment process in November 2023, which has not been provided with this referral.

- We have appended expert advice from Dr Ian Wright (**Attachment C**) which asserts that water resources should be a controlling provision for the HVO Continuation project under section 24D of the EPBC Act, highlighting in particular the impact that the project may have on water quality in the downstream environment due to elevated levels of several contaminants in the mine water system.
- These projects together are estimated to be likely to produce total Scope 1, 2, and 3 greenhouse gas emissions of 1,135.43 Mt CO_{2-e}. The Hunter Valley Operations Continuation project will result in a net increase in global greenhouse gas emissions that is not consistent with preventing global warming of over 1.5C above pre-industrial levels and therefore, these projects of themselves will have a significant impact on matters of national environmental significance, specifically, the Great Barrier Reef. We refer the Department to expert advice from Dr Steven Turton (**Attachment A**) and Prof Michael Bode (**Attachment B**).
- Of particular relevance to the greenhouse gas emissions associated with the HVO Continuation Project is the advice from the NSW DPE Science, Economics and Insights Net Zero Emissions Modelling (NZEM) team to the EIS which stated that the “large increase in emissions from this Project in the mid-2040s will require other parts of the NSW economy to decarbonise to remain on track with the NSW Government’s target of net zero emissions by 2050”.¹
- For all of these reasons and given considerable information about the Project’s impacts has not been provided by the proponent, the Commonwealth must either refuse these projects as having clearly unacceptable impacts or assess them on the basis of an Environmental Impact Statement, including water resources, wetlands of international significance, all relevant and present threatened species and communities and the Great Barrier Reef among the controlling provisions.

Split referral

Where the Minister is satisfied that a proposed action is a component of a larger action – i.e. a ‘split referral’ – the Minister has the discretion to refuse to accept a referral under section 74A(1) of the *EPBC Act*. In addition, the Minister may request the proponent to refer the larger action to the Minister pursuant to section 74A(2)(c). The *EPBC Act Policy Statement Staged Developments – Split Referrals* (Split Referral Policy) provides guidance on the identification of a split referral and the exercise of this discretion. When a split referral is identified, the next question is whether the discretion should be exercised not to accept the referral. In determining whether to exercise the discretion, the Split Referral Policy provides, ‘(t)he key question for the Minister is: does the splitting of the project reduce the ability to achieve the objects of the Act?’.

The Split Referral Policy raises the following additional considerations:

¹ Department of Planning and Environment Environment and Heritage Group. “Advice in relation to the Hunter Valley Operations Continuation Project, Predicted Greenhouse Gas Emissions” dated 27/2/23.
<https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-11826681%2120230430T221752.809%20GMT>

- a. Can the impacts of Part 3 matters only be assessed through the consideration of a larger action?
- b. Will the referral of a series of single actions result in the larger action being effectively taken without the need for an approval?
- c. Is it preferable to assess and approve the larger action as a whole?

The HVO North and HVO South EPBC referrals constitute a “split referral.” It is clear that the actions proposed by HVO North EPBC 2023/09651 and HVO South EPBC 2023/09652 comprise two halves of a larger action, being the HVO Continuation Project. As noted in both EPBC referrals:

The proposed action forms part of the larger HVO Continuation Project, which includes HVO North and HVO South...

While the two mine sites are approved under separate development consents, they operate as one complex with fully integrated environmental management systems. The HVO Continuation Project seeks to maintain separate development consents for HVO North and South, as is currently the case.

The proponent acknowledges (Section 4.1.4.7 of both referrals) that the activities across the entire mine complex (including HVO North and HVO South) should be deemed to be controlled actions due to risk of potentially significant environmental impacts, but incorrectly excludes a number of threatened species and additional matters of national environmental significance as controlling provisions for both.

Other factual indicators include:

- Same proponent, source of funding, and overall vision for the project: Both referrals have been made by the same proponent, HV Operations Pty Ltd, which relies on funding from the unincorporated HVO Joint Venture. The basis of the two EPBC referrals as stated by the proponent is “a long term plan for the complex beyond the approved mine life,” confirming that the vision for the project has always been as one operational complex.
- Co-dependence: There is a high degree of codependency between HVO North and HVO South, given they are operated as the one complex with fully integrated environmental management systems. Adding to this codependency, the cost benefit analysis provided by the proponent rests on the assumption that HVO North and HVO South are run as a single operation, being the HVO Complex. It is unlikely the projects would be economically viable to the same degree if only one of HVO North or HVO South were approved. As such, it is artificial to treat these two halves of the project as stand-alone components in any respect.
- Timeframe: Both referred actions are proposing to commence at the same time (being a continuation of existing actions). The only difference in timing is that HVO South is proposed to cease operations five years earlier than HVO North, which is of limited significance given the nature of the activities to be conducted at both sites is still fundamentally the same.
- Geographical relationship: HVO North and South are immediately adjacent to each other, so they do not represent activities that are being “undertaken in significantly different geographic locations” as noted in the Split Referral Policy. Further, as explored below, the impacts on matters protected by the *EPBC Act* – for example, threatened species and communities, surface water, groundwater, and world heritage and climate – are related.

The referrals squarely fall into the category described in the Split Referral Policy whereby a larger action “has been referred in separate ‘lesser referrals’ for commercial or other operational reasons.” It is more consistent with the objects of the *EPBC Act* to assess impacts on MNES from the

continuation of the HVO Complex as a single proposed action. Split referrals may also lead to the perverse outcomes where activities conducted on one part of a larger site are determined to be a controlled action while those on another part of the site are not. This does not recognise the connectivity and functionality of ecology and water across the wider landscape. It is not reasonable to assume that impacts occurring in one part of a development site, however large it may be, are occurring in isolation.

In the case of the proposed actions, the impacts of the continuation of the HVO complex on MNES can only be properly assessed when the impacts of HVO North and HVO South are combined. We note the objects of the *EPBC Act* to protect MNES, promote ecologically sustainable development (ESD), and promote the conservation of biodiversity. We also remind the Minister of the principles of intergenerational equity and the conservation of biological diversity and ecological integrity that form part of the principles of ESD.

In her judgment in the case of the *Wilderness Society (Tasmania) Inc v the Minister for the Environment*,² Justice Mortimer found that:

“The whole purpose of the s74A is to engage the Minister (or delegate) in the question of whether there is in reality a larger action, which needs to be assessed as a whole, and if so, to compel a referral of the larger action under s74A(2).”

Justice Mortimer also cautioned that separating an action into components may *“lead to the Minister (or delegate) failing to appreciate the true level of impact of an action; or failing to understand how mitigation measures proposed to be taken (or which might be imposed) will operate in a context where further, and subsequent action(s) are planned or proposed”*.

While the Hunter River separates the operations named HVO North and HVO South, the two are in most respects one complex mining operation inflicting impacts on the same environmental values on both sides of the river. It is clear from the biodiversity reports that the ecological communities and flora and fauna species are mostly identical within both referral areas and the two operations together cause significant impacts on the Hunter River and its alluvial aquifer as well as several other water resources in the vicinity. There is therefore no valid reason that the entire mine site should not be considered in a single referral so that disturbance footprints, biodiversity and water impacts and rehabilitation and offset proposals can be viewed and assessed in their entirety. Indeed, the proponent has assessed the impacts of the projects together in the Matters of National Significance report and the NSW Biodiversity Development Assessment Report, indicating that it accepts that they are essentially the same activity.

For these reasons, we urge the Minister to refuse to accept the two separate referrals in accordance with s74A(1) of the *EPBC Act 1999* on the basis that the action that is the subject of the referral is a component of a larger action that the proponent proposes to take. It is not possible for decision makers to undertake a comprehensive assessment of impacts on biodiversity, water resources and other matters of national environmental significance, or to assess the effectiveness of mitigation measures, by applying a split approach to referrals based on separate materials.

Breach of duty to provide accurate information

Section 72(2) of the *EPBC Act* requires that a referral includes the information prescribed by the regulations. The *Environmental Protection and Biodiversity Conservation Regulations 2000 (EPBC*

² *The Wilderness Society (Tasmania) Inc v Minister for the Environment* [2019] FCA 1842

Regs), reg 40.3 and schedule 2, stipulate the information that must be included in a referral under the *EPBC Act*. The regulations require, amongst other matters:

4.01 A description of the proposed action must include the following: ...

(h) whether the action is related to other actions or proposals in the region; [and] ...

(k) details of any environmental assessment of relevant impacts of the action that has been, or is being carried out under State, Territory or Commonwealth legislation, including copies of assessment documentation; [and]...

(l) a description of any public consultation undertaken or occurring, including with indigenous persons that may be affected by the action, and copies of documents recording the outcomes of any consultations.

The proponent has provided further information under the NSW State Significant Development assessment processes addressing impacts on various MNES in response to agency comments. However, without any explanation, these documents have not been included in the documents provided for the assessment of these EPBC referrals. This includes information about the impact of the project on water resources, nationally threatened species and its greenhouse gas emissions.

In our opinion, the proponent's omission of any reference to this documentation is inaccurate and/or misleading. Further, the submission of two EPBC referrals to provide for the separate assessment of two components of what is in actuality one larger action is similarly inaccurate and misleading.

Section 489 of the *EPBC Act* makes it an offence to provide false or misleading information to obtain approval or permit where the person is "reckless" or "negligent" as to whether the information is false or misleading in a material particular. There are strong penalties under the *EPBC Act* for breaching the duty to provide accurate information. Where a body corporate contravenes section 489 of the *EPBC Act*, in certain circumstances, criminal liability can be extended to executive offices.

Significant impacts on endangered ecological communities

The referrals assess the removal of a total of 234.4 ha of Central Hunter Valley Eucalypt and Woodland CEEC and 5.2 ha of Warkworth Sands Woodland of the Hunter Valley CEEC. While both communities are rare, the proposed clearing of Warkworth Sands CEEC represents 1.59% of its estimated 333 ha extent (DPE submission to EIS).³ The percentage estimation does not accurately convey the rarity of this community which the NSW Biodiversity Conservation Division advised was at risk of Serious and Irreversible Impacts (SAII) as a result of this project. Moreover, it is not protected in any conservation reserves (OEH 2022).⁴

³ Department of Planning and Environment Biodiversity and Conservation Division. "Hunter Valley Operations Continuation Project (SSD-11826621 & SSD-11826681) – Review of Environmental Impact Statement" dated 13/3/23.

<https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=PAE-54032209%2120230313T043955.683%20GMT>

⁴ "Warkworth Sands Woodland in the Sydney Basin Bioregion - profile" Last updated March 2022. NSW Office of Environment and Heritage <https://threatenedspecies.bionet.nsw.gov.au/profile?id=10833>

The Revised BDAR (Umwelt, November 2023 - hereafter referred to as the Revised BDAR)⁵ submitted to the NSW Government but not included with this referral, reported that clearing of up to 9.8 ha of this CEEC has been avoided through the proposed realignment of Lemington Road, including the 4.9 ha that was assessed as part of the EIS. This information has not been included in the referral or supporting documents. The referrals state that alternative alignments of Lamington Road are being investigated with the caveat that this would be “*clarified within the further assessment material if the Project is determined to be a controlled action*” (Section 4.1.4.8 in both referrals). This raises two issues. Firstly, the referral process is based on the premise that every effort has been made to avoid and minimise impacts prior to submission and not kept aside only to be used in case the Project is determined to be a controlled action. Secondly, this means that the documents put out for public consultation do not contain the most recent information relevant to the nationally-listed communities and species within the HVO mine site.

Although most direct impacts to Warkworth Sands CEEC may have been avoided, it still may be impacted indirectly from edge effects and alterations to groundwater generated by mining. The DPE advice on the EIS noted that the Warkworth Sands CEEC in the vicinity of BAM Plot 18 appeared to be in a discharge zone of the local aquifer and recommended that an assessment of the local aquifer within the sandsheet be undertaken to ensure that there would be no impacts by either draining the upslope section of sandsheet or blocking the flow of water. The proponent has refuted this, but in our view, this indirect impact warrants assessment by the Commonwealth.

It is clear that these two CEECs in particular are subject to incremental losses due to the cumulative impacts of mining in the Hunter Valley and that offsetting has been unsuccessful in halting their decline. Large mining companies make little effort to avoid and minimise impacts and assume the use of offsets instead. The proponent has not disclosed how it intends to offset its impacts on Central Hunter Valley Eucalypt Forest and Woodland with like-for-like land-based offsets and given the extensive clearing of this community in recent years, offsetting is not a credible mitigation strategy. There is confusion around the quality of the rehabilitation sites to be re-disturbed between the MNES report (September 2023) and the Revised BDAR (November 2023). The former report states on page 56 that additional surveys were conducted to determine if mine rehabilitation domain 2c conforms to the listing criteria for the CEEC and that this would be assessed as part of the BDAR. However, Section 2.4 of the Revised BDAR listed reasons that the rehabilitation areas to be re-disturbed do not require formal assessment, including that none are required to conform to a Threatened Ecological Community.

The long history of mining in the area, piecemeal approach to rehabilitation and offsetting and the staging of mine operations make it difficult to follow progress of any revegetation undertaken. Although 2,770 ha of previously mined land will be subject to rehabilitation at HVO, approximately 1,580 will be re-disturbed as part of the referred Project. Plantings within these areas vary in age from 10-20 years with the oldest being 23 years. They are therefore likely to be providing some limited habitat value for fauna species. However, the Revised BDAR states that rehabilitation areas are conceptual only and have not been formally set aside for nature conservation, revegetation of native vegetation or as a native vegetation offset. This demonstrates that, despite the mine being operational for over 60 years and progressively clearing up to 7,100 ha (Table 6.4 in the Revised

⁵ Umwelt November 2023. *Submissions Report Appendix E: Revised Biodiversity Development Assessment Report - Hunter Valley Operations Continuation Project*.
<https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-11826681%2120231109T045909.592%20GMT>

BDAR), there is an enormous time lag before any native vegetation is re-established within the mine site.

Significant impacts on threatened species

The MNES report states in Section 2.3.4 that further targeted surveys will take place during spring and summer 2023 for Green and Golden Bell Frog, Grey-headed Flying-fox, Large-eared Pied Bat and Spotted-tailed Quoll. Apparently, results of these surveys will be included in the required assessment documentation “should the Project be deemed a controlled action.” But the proponent has already indicated in the referral material that it does not consider the impact of the project on these species to be significant. We disagree, and the Commonwealth should list Grey-headed Flying-fox, Large-eared Pied Bat and Spotted-tailed Quoll as controlling matters for these projects and require adequate surveys and full EIS assessment.

The MNES report does not describe any limitations that may apply to survey or assessment of MNES species or communities. The response to the original BDAR (Umwelt, December 2022) from the NSW Biodiversity Conservation Division of the Department of Planning and Environment noted that survey effort and/or timing for several species was not in accordance with relevant Guidelines.⁶ This is the case for Koala, Large-eared Pied Bat, *Thesium australe* and *Cryptostylis hunteriana*, all of which are EPBC-listed species. Some of this failure has been addressed in the final BDAR provided to the NSW Government in November 2023 which the Commonwealth does not have. The latter document confirms that surveys were still insufficient for Gang Gang Cockatoo breeding activity, *Thesium australe* and Green and Golden Bell Frog as of November 2023 (Table H.1 in Revised BDAR).

The MNES report measures the loss of threatened species’ habitat as a percentage of that available in the entire region, as if corridors, vegetation cover and riparian strips linking the mine site to conservation reserves are not also at risk of clearing. In reality, there is considerable clearing of habitat for the same EPBC listed species, including Regent Honeyeaters, Swift Parrots, Large-eared Pied Bats, Grey-headed Flying Foxes and Spotted-tailed Quolls, being approved over and over again for expanded coal mining in the Hunter Valley. The authors justify the removal of 4.33 ha of large mature Spotted Gum, a preferred mainland foraging habitat for critically endangered Swift Parrots, as unimportant compared to foraging habitat in Wollemi National Park and Ravensworth State Forest. Again, this represents an incremental net loss of habitat for Swift Parrot, Regent Honeyeater and Spotted-tailed Quoll and ignores the repeated reduction in area of Ravensworth State Forest by the Mount Owen coal mine in the last twenty years.

The MNES report admits that these projects will result in a reduction of the potential area of occupancy for the Swift Parrot, but declines to undertake a significant impact assessment, despite extensive cumulative clearing for this species in the Hunter, which is admitted to host 10% of the population seasonally.

One of the reasons that the removal of threatened species’ habitat is frequently assessed as not significant is the failure to consider cumulative losses in the local and regional areas. The MNES report refers only to the cumulative impacts of HVO North and HVO South but does not mention the cumulative loss of vegetation associated with surrounding mines. The final BDAR provided to the

⁶ Department of Planning and Environment Biodiversity and Conservation Division. “Hunter Valley Operations Continuation Project (SSD-11826621 & SSD-11826681) – Review of Environmental Impact Statement” dated 13/3/23.
<https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=PAE-54032209%2120230313T043955.683%20GMT>

NSW Government in November 2023 does provide some cumulative impacts as context. Table 6.4 cites approximately 530 ha of clearing for the United Wambo Open Cut, 475 ha for Mt Pleasant Optimisation Project and 700 ha for Warkworth Continued Operations. Together with the 7,100 ha already cleared as part of the HVO mine also listed in this table, this represents a habitat loss of up to 8,805 ha in the local area. However, there is no mention of cumulative impacts in the MNES report provided with this referral except in reference to previous impacts of HVO North and HVO South where they are used as an argument to demonstrate how impacts of these projects would be minimised (i.e. since they are smaller than what has already been inflicted).

United Wambo, Mount Pleasant and Warkworth are not the only recent coal mine expansions which have been granted approval to clear critically endangered bushland in the Hunter, however. Others include the Mount Owen Continued Operations, Bulga Optimisation, and Bengalla Continuation projects. Lock the Gate estimates that in the order of 2,000 hectares of Central Hunter Valley Eucalypt Forest and Woodland community has been approved for clearing for coal mines in the last decade. Much of this area was also habitat for nationally-listed species including Regent Honeyeater, Swift Parrot and Grey-headed Flying Fox. The Commonwealth should ensure that an accurate estimation of cumulative impacts is undertaken as part of a full Environmental Impact Statement for these projects.

Hunter Valley Delma - Delma vescolineata

The Project would result in the removal of 191ha of grassland habitat for the Hunter Valley Delma, which has only recently been described.⁷ As this species is not listed nationally or in NSW, it has not been considered further in the MNES report, despite the fact that its discovery at the proposed Mount Pleasant coal mine delayed approval of the mine's extension in 2022, and led to a suite of special conditions being drafted by the Independent Planning Commission.⁸ As the Commonwealth Scientific Committee considers that the Delma species meets the threshold for listing as Endangered, and DCCEEW's call for consultation on the listing eligibility for this species closed on 4 August 2023,⁹ we would expect the Commonwealth to take a necessarily precautionary approach by requiring the proponent to consider this species in the HVO referrals.

The criteria for listing a species as Endangered include, "a restricted area of occupancy and extent of occurrence with ongoing loss of habitat due to industry that is occurring and is almost certain to continue." As described in the 2023 listing advice, the Hunter Valley Delma has a very localised distribution – a 25 km wide corridor between Maitland and Muswellbrook – that overlaps an area subject to intense past, current and future mining activity and is extensively disturbed and fragmented as a result. Of the 41 coal mines operating in the Hunter Valley, twenty currently occur within the species' range and several expansion projects are proposed for the Valley. The species is not known to occur in any protected areas. Together with habitat fragmentation and predation, the effects of climate change including changed fire regimes and increased frequency of drought are considered threats to this species.

Significant impacts on water resources

⁷ Mahony et al. (2022). A new species of *Delma* Gray 1831 (Squamata: Pygopodidae) from the Hunter Valley and Liverpool Plains of New South Wales. *Zootaxa* 5162, 541-556.

⁸ NSW Independent Planning Commission 2022. Mount Pleasant Optimisation Project: Statement of Reasons for Decision.

⁹ DCCEEW 2023. Consultation on Species Listing Eligibility and Conservation Actions - *Delma vescolineata*. <https://www.dcceew.gov.au/environment/biodiversity/threatened/nominations/comment/delma-vescolineata>

The proponent claims this project will not have a significant impact on water resources, but this is clearly not the case. The mine will remove a huge amount of water from the Hunter River catchment by capturing rainfall and run-off and via its licenced extraction, potentially affecting downstream users, the environment and the Hunter estuary Ramsar site.

The HVO Carrington West Pit proposes to mine in paleochannel deposits of unconsolidated alluvial sediment which the NSW Department of Planning Water Division considers to be part of the Hunter Regulated River Alluvial Water Source. The Water Division advised that “a significant risk exists of a hydrological connection between the Hunter River/alluvial aquifer and the mine pit that requires a precautionary approach” and described this as “a significant risk to a key water source in the Hunter Valley.”¹⁰ The proponent has declined to agree to DPE Water’s recommendation for a 150m setback from the alluvium, which is NSW policy, saying that its “low permeability barrier wall” will prevent harm to the aquifer. We note that DPE Water has previously advised that “The proposed barrier wall will not stop the drawdown in the alluvium completely as depressurisation of the Permian aquifer underlying the alluvium allows drawdown to occur beneath the barrier wall. Uncertainty analysis conducted by the proponent shows it is very likely (90-100% probability) that the Project will result in more than 2 meters of drawdown around the barrier wall which will result in associated drawdown in the alluvial groundwater system and loss from the Hunter River.”¹¹

The Submissions Report prepared by the proponent for the NSW Department of Planning provides a water balance table at Table 4.12.¹² It shows that the mine will capture 16,229 ML of water as run-off in the mine site during 95th percentile conditions in year 11 (2033). This is in addition to licenced extraction and direct rainfall capture. For context, this is the equivalent of nearly three quarters of the total volume of water represented by High Security entitlements in the Hunter Regulated River.

Combining rainfall, run-off and river extraction in the 95th percentile conditions in Year 11 according to the water balance totals 23,029 ML - more than the entire volume of high security licences and more than 9% of the volume of *all* entitlements in the Hunter Regulated River. Since the majority of this water removal is unlicenced, it is not accounted for in water allocation modelling, and therefore its removal poses an unknown risk to the Kooragang Island Ramsar site, downstream users and the downstream environment. Moreover, the water balance shows a *deficit* for the 5th percentile year in all modelled years and a deficit in median conditions in year 18 (2040).

In addition, nearly 300 ML of water will leak from the regulated Hunter River at the peak of impact as a result of water table decline and draw down of the Hunter River alluvium will affect groundwater dependent ecosystems.

The proponent’s argument that this is not a significant impact is plainly absurd, but insufficient information has been provided to the Commonwealth regarding the impact of this project on water resources so a full Environmental Impact Statement is now required. We refer the Department to the attached advice from Dr Ian Wright (**Attachment C**) which further finds that there are significant concentrations of several contaminants, including salinity, in the water managed and sometimes

¹⁰ DPE Water Advice on EIS.

<https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=PAE-54032208%2120230308T234922.933%20GMT>

¹¹ *ibid.*

¹² *Hunter Valley Operations Continuation Project Submissions Report*. EMM, November 2023.

<https://majorprojects.planningportal.nsw.gov.au/prweb/PRRestService/mp/01/getContent?AttachRef=SSD-11826681%2120231112T224201.938%20GMT>

discharged at HVO and his conclusion that section 24D of the EPBC Act must be listed as a controlling provision for this project.

Significant impacts on wetlands of international significance

The impact of large scale water removal from the catchment and high saline concentrations in mine water discharge on the salinity of the Kooragang Island Ramsar site 70 kilometres downstream has not been considered by the proponent but may be significant, especially in the context of cumulative system losses from mining and climate-change induced evaporation - therefore the Ramsar site must also be listed as a controlling provision.

The majority of the surface water to be removed from the Hunter River system by these mining projects (the captured run-off) is unlicensed, so it is not accounted for in water allocation modelling, and therefore in our view its removal poses an unknown but likely significant risk to the Ramsar site, downstream users and the downstream environment. This is especially the case when considered in the context of cumulative losses attributable to mining operations more broadly in the region and increased evaporation losses, both of which were estimated for the Greater Hunter Regional Water Strategy.

The *Greater Hunter Regional Water Strategy* sets a salinity target for maintaining the ecological character of the Ramsar site.¹³ Given the captured run-off in particular is not accounted for in the system-wide catchment modelling, it is possible that salinity levels at the Ramsar site will be affected by reduced flows from this project, from saline water discharge and from the impact of this project cumulatively with mining losses and increased evaporation rates in the Hunter River system. There has been no attempt made by the proponent to model or understand this impact, but given that it will also create a net increase in global greenhouse gas emissions inconsistent with preventing warming of 1.5 degrees C above pre-industrial temperatures, the impact of this project on the Kooragang Island Ramsar site requires assessment via an Environmental Impact Statement.

Significant impact on the Great Barrier Reef - climate change and Living Wonders decision

The proposed action currently under consideration is materially distinguishable from the projects discussed in the *Environment Council of Central Queensland Inc v Minister for the Environment and Water (No 2) [2023] FCA 1208* (Living Wonders Decision). There is compelling evidence to suggest that the MNES triggers for impacts to the Great Barrier Reef and its World Heritage values, and listed threatened species and communities should be engaged in this instance.

There is strong evidence to suggest that the contribution of the proposed action to global net greenhouse gas emissions and thus to climate change, is likely to have a significant impact on multiple MNES, including the World Heritage values of the Great Barrier Reef, and listed threatened species and communities.

Applicable legal test

In making a decision under s 75 *EPBC Act*, the Minister's task will be to determine whether the action is a controlled action, and if so, which controlling provisions apply. The latter question rests on whether the action has or will have, or is likely to have, a significant impact on the MNES protected under Part 3 *EPBC Act*. The phrase "significant impact" is not defined in the *EPBC Act*, but it has been

¹³ NSW Department of Industry and Environment, 2018. Greater Hunter Regional Water Strategy. https://www.dpie.nsw.gov.au/_data/assets/pdf_file/0006/502557/greater-hunter-regional-water-strategy.pdf

held to mean an “impact that is important, notable or of consequence having regard to its context or intensity”¹⁴

Pursuant to s 527E(1) of the *EPBC Act*, impacts can be direct or indirect. For an event or circumstance to constitute an indirect consequence of the action, s 527E(1)(b) specifies that the action must be a “substantial cause” of that event or circumstance. There is strong evidence which suggests the proposed actions will be a substantial cause of the climate impacts on both the Great Barrier Reef and listed threatened species and communities.

This “substantial cause” requirement is subject to s 527E(2), which provides:

- (2) For the purposes of paragraph (1)(b), if:*
- (a) a person (the primary person) takes an action (the primary action); and*
 - (b) as a consequence of the primary action, another person (the secondary person) takes another action (the secondary action); and*
 - (c) the secondary action is not taken at the direction or request of the primary person; and*
 - (d) an event or circumstance is a consequence of the secondary action;*
then that event or circumstance is an impact of the primary action only if:
 - (e) the primary action facilitates, to a major extent, the secondary action; and*
 - (f) the secondary action is:*
 - (i) within the contemplation of the primary person; or*
 - (ii) a reasonably foreseeable consequence of the primary action; and*
 - (g) the event or circumstance is:*
 - (i) within the contemplation of the primary person; or*
 - (ii) a reasonably foreseeable consequence of the secondary action.*

In this case, the primary action is the mining of coal for the HVO projects and the secondary action is the eventual combustion of that coal by end users. The mining of the coal facilitates, to a major extent, the eventual combustion of that coal. The eventual combustion of the coal is within the contemplation of HVO, as supported by references in its EIS documentation to the coal consumption and the expected export market, primarily in Asia, for the coal that is to be mined. Alternatively, it is a reasonably foreseeable consequence of the mining of the coal.

We address the requirements of s 527E(2)(g) below in respect of the Great Barrier Reef and listed threatened species and communities in turn. A natural reading of ss 527E(2)(f) and 527E(2)(g) suggests that the “or” in s 527E(2)(f)(i) and 527E(2)(g)(i) is intended to be disjunctive, conveying the meaning “either or”, rather than “both and.” As such, for the purposes of s 527E(g), it is not a requirement for an event or circumstance to satisfy both s 527E(2)(g)(i) and s 527E(2)(g)(ii) in order to constitute an impact under s 527E – one is sufficient.

Great Barrier Reef and its World Heritage values (ss 12, 15A)

The ‘event or circumstance’ in respect of this MNES trigger is the number of hectares of the Great Barrier Reef projected to be killed by the increase in global temperatures caused by the proposed action. An increase in net global GHG emissions and the attendant climate impacts on the Great Barrier Reef is an event or circumstance that is a reasonably foreseeable consequence of the eventual combustion of the coal by end users.

¹⁴ *Booth v Bosworth (2001) 114 FCR 39 at [99]–[100].*

Listened threatened species and communities (ss 18, 18A)

The 'event or circumstance' in respect of this MNES trigger is the degree of decline in the listed threatened species and communities on the project site projected to be caused by the increase in global temperatures caused by the proposed action. These species and communities include but are not limited to:

- Warkworth Sands Woodland (critically endangered)
- Central Hunter Valley Eucalypt (critically endangered)
- Koalas (endangered)
- Grey-headed Flying Foxes (vulnerable)
- Hunter Valley Delma (nominated, decision pending)

An increase in net global greenhouse gas emissions and the attendant climate impacts on these listed threatened species and communities is an event or circumstance that is a reasonably foreseeable consequence of the eventual combustion of the coal by end users. We attach expert advice from Associate Professor Grant Wesley Wardell-Johnson (**Attachment D**) which provides more context for this harm. Ass Prof Wardell-Johnson concludes that "Not only is it certain that Serious and Irreversible damage will be done to the Critically Endangered Threatened Ecological Communities by the clearing, mining, and burning of coal associated with these expansions, but the proposals do not provide any means of preventing this serious or irreversible damage to the environment, or of addressing risks to the Critically Endangered Threatened Ecological Communities or to society as a result of these expansions."

Distinguishing Living Wonders: material difference in impact and context

The proposed actions, the continuation projects for HVO North and HVO South, are materially distinguishable from the projects the subject of the reconsideration request in the Living Wonders case which was recently the subject of a decision by the Federal Court. There is compelling evidence to suggest that the MNES triggers for impacts to the Great Barrier Reef - World Heritage values should be engaged by the Commonwealth in this instance for the following reasons:

1. These projects will produce significantly higher total greenhouse gas emissions than actions considered in the Living Wonders case. The total Scope 1, 2, and 3 greenhouse gas emissions for the proposed action are estimated to be 1,135.43 Mt CO₂-e, representing significantly more than the estimated emissions for the Mount Pleasant Optimisation Project (874.17 Mt CO₂-e), and estimated emissions of the Narrabri Underground Mine Stage 3 Extension Project (259.445 Mt CO₂-e)
2. The proposed action will cause a net increase in global greenhouse gas emissions that will not be consistent with an increase by 1.5C from pre-industrial levels. The world is at 1.8C warming this year and headed to 3 degrees of warming by 2100.¹⁵ Scientists use the concept of carbon budgets to assist in determining whether emissions are consistent with 1.5C. Under current policy settings, the remaining carbon budgets are being rapidly depleted and if approved, this project will remove 0.3% and 0.09% of the total remaining atmospheric CO₂ budget, respectively, required for limiting global warming to 1.5° and 2.0° C above pre-industrial levels. Against this context, the temperature increase generated by the HVO Continuation project alone and in cumulative context *constitutes a substantial cause of*

¹⁵ UNEP, *Emissions Gap Report 2023*, <https://wedocs.unep.org/bitstream/handle/20.500.11822/43922/EGR2023.pdf?sequence=3&isAllowed=y>, XV, XXII.

climate impacts. This is because reaching net zero CO₂ emissions by 2050 entails *cutting* total anthropogenic CO₂ emissions by about 0.4GtC (1.4Gt CO₂) each year on average (linear decrease), comparable to the decrease observed in 2020 during the COVID-19 pandemic. We refer you to the expert report of Professor Stephen Turton which sets out the contribution of this specific project to carbon budgets and therefore climate change (**Attachment A**).

3. This increase in greenhouse gas emissions will be a substantial cause of the physical effects of climate change on the Great Barrier Reef. Compared to the projects subject of the Reconsideration Decision, the attendant impacts of the project flowing from climate change will be significantly higher on MNES, including the Great Barrier Reef. In addition, there is now evidence available that draws a direct relationship between the expected greenhouse gas emissions generated by this specific project, and climate impacts on the Great Barrier Reef. We refer you to the expert research by Professor Michael Bode which sets out a basis for calculation of the expected impact on the Great Barrier Reef resulting from the increase in average global temperatures generated by the project. That methodology has been used to calculate the area of the Great Barrier Reef that would be directly affected as a result of these projects' contribution to global warming (**Attachment B**).
4. The increase in GHG emissions will be a substantial cause of the physical effects of climate change on listed threatened species and communities. There is evidence available that suggests that the listed threatened species and communities extant on the site are already under a considerable degree of stress from climate change. These projects propose to exacerbate this situation, which will significantly increase the risk of further extinction events. We refer you to the expert report of Professor Grant Wardell-Johnson which assesses the indirect impacts of climate change arising from this project on the species and communities extant on the site (**Attachment D**).
5. The market substitution argument is an unsatisfactory explanation of coal market dynamics: if the proposed action does not proceed, there is no evidence that an equivalent amount of coal from another supplier will be substituted, resulting in an equivalent amount of greenhouse emissions when combusted as if the action is approved. Even if this were the case, the impacts of the projects before the decision-maker are the relevant considerations, not speculative impacts by unknown and unspecified other activities. We refer you to the submission of Rod Campbell, The Australia Institute, which addresses the fallacies involved in this argument and outline further information about this matter below.

In her reasons for the reconsideration request for the Mount Pleasant Optimisation Project, the Minister accepted the argument that prospective buyers would purchase an equivalent amount of coal from a supplier other than the proponent, which would result in an equivalent amount of greenhouse gas emissions when combusted (at [115]-116]). Similarly, in its EIS, the proponent claims that when used for power generation, the "high quality, high energy bituminous coal" produced by the project would produce 10% less CO₂ emissions than lower quality sub-bituminous coal and 20% less CO₂ emissions than lignite quality brown coal that would be supplied by Indonesia or India.

This argument has been conclusively rejected in a series of court decisions, including *Gloucester Resources Ltd v Minister for Planning* [2019] NSWLEC 7 (Rocky Hill) and *Waratah Coal Pty Ltd v Youth Verdict Ltd & Ors* (No 6) [2022] QLC 21 (Waratah). The reasons provided by the Courts in those cases included:

- It was unlikely that refusal of an Australia coal mine would lead businesses to move production from Australia to other countries with less stringent climate policies, thus resulting in an increase in emissions (termed "carbon leakage"): Rocky Hill at [536]. This

argument was also rejected by the Hague Court of appeal in *Netherlands v Urgenda Foundation* 200.178.245/01, 9 October 2018.

- There was no certainty that there would be market substitution by new coal mines in India or Indonesia or any other country supplying the coal that would have been produced by the Project: Rocky Hill at [538]. This was due to increasing climate action and ambition by key countries heavily reliant on coal to reduce greenhouse gas emissions as well as air pollution. Developing countries could also be encouraged to take emissions mitigation measures by following the lead of developed countries in refusing fossil fuels projects.
- In a situation where coal produced from an Australian mine might displace other supply in its market, that would most likely be other high rank coal, with similar greenhouse gas emissions: Waratah at [31].
- The substitutability of the coal would be affected by various market variables including the demand and supply of substitute sources of coal and any difference in price between coal from the project and from other substitute sources: Rocky Hill at [541]. The market was subject to significant forces driving a decline in demand for electricity generated by thermal coal, including policy settings driving a transition from fossil fuels and the increased competitiveness of other sources of energy in the market – it could not be established that there was ongoing, strong demand for coal: Waratah at [995] and [1001].
- A simple one-for-one substitution is not realistic given the many variables (e.g. climate policy) that act on the coal market: Waratah at [1004]
- The contribution of the project coal to the remaining carbon budget was “material” (being 1.58Gt in that instance), narrowing the options for achieving the goals under the Paris Agreement, Waratah at [1409] and [1937]:

... Approving the Project ... makes a material contribution to [pushing towards a 3°C temperature stabilising scenario], by making available coal for combustion that would generate 1.58 Gt of CO2 emissions. It is material because the remaining carbon budget to achieve the Paris Agreement temperature goal will be exhausted in somewhere between 8 to 15.5 years from now at the current rate of emissions, excluding the emissions from combusting the Project coal. This makes it more difficult to achieve [a scenario of temperature stabilising well below 2°C above the pre-industrial level], narrowing the options for achieving the Paris Agreement goals.

...

...The contribution of the combustion of the Project coal to the remaining carbon budget to meet the Paris Agreement goal is material (1.58 Gt to a remaining carbon budget of between 320 Gt and 620 Gt). Approving the Project would narrow the options for achieving that goal.'

We note that the total greenhouse emissions from the HVO Continuation project is similar in scale to the “material” contribution to climate change found in the Waratah case.

At minimum, there is sufficient evidence to suggest that the proposed actions are likely to have a significant impact on the Great Barrier Reef due to the net increase in greenhouse gas emissions that will be caused by the projects. Context and intensity of impacts are crucial in assessing their significance under the terms of the EPBC Act: the impacts on the reef from this project would occur against the context of carbon budgets which are currently oversubscribed if the earth is to remain on track for 1.5C and 2C warming, and where the reef is already being impacted by numerous factors including climate change, dredging, ocean acidification, and ocean pollution.