Enquiries: *Jane O'Malley*
Our Ref: *058_2022_07_27*
Your Ref: *2022/09204*
File Ref: *CM_CS_100*

27 July 2022

Referrals Gateway
Department of Climate Change, Energy, the Environment and Water
Submitted via: EPBC Act Public Portal

Dear Sir / Madam

EPBC Act reference No. 2022/09204 – **Alcoa Huntly Bauxite Mine Transition – Recommend Controlled Action**

The Peel-Harvey Catchment Council Inc. (PHCC) appreciates the opportunity to lodge this submission.

PHCC is a community based, Natural Resource Management (NRM) regional body working across the Peel-Harvey NRM Catchment, covering over 1.1 million hectares of the Serpentine, Murray, Hotham, Williams and Harvey River catchments. With funding provided through the Australian Government's National Landcare Program, PHCC's current projects support a suite of activities and actions that closely align with the Peel-Harvey NRM Strategy, *Bindjareb Boodja Landscapes* 2025 and the Australian Government's Threatened Species Recovery Plans and Conservation Advice. The focus is working with the community, landholders and other relevant stakeholders to improve the status of native vegetation, health of waterways and trajectory of a range of threatened species, including threatened Black Cockatoos across the Peel-Harvey Catchment. Given these interests, PHCC is lodging this submission to the Department of Climate Change, Energy, the Environment and Water.

It is noted that the proponent has requested that the assessment of Matters of National Environmental Significance (MNES) be undertaken as part of the Environmental Protection Authority's (EPA) assessment, under the Bilateral Agreement between the Commonwealth and WA Government. This approach is not supported by the PHCC, as the proposal is a major development that will significantly affect the Jarrah Forest interim Australian Bioregion, a unique ecoregion in the global biodiversity hotspot of south west of Western Australia. For reasons outlined in the following, PHCC requests that the proposal be considered a Controlled Action under the Environmental Protection and Biodiversity Conservation Act EPBC Act 1999 (EPBC Act) in addition to the assessment to be undertaken by the EPA.

Proposal 2022/09204 falls within the Peel-Harvey Catchment, and will involve the clearing of 9,273 ha of the Northern Jarrah Forest which will have major impacts on its ecology.

58 Sutton Street, Mandurah
Western Australia 6210
T: +61 8 6369 8800
www.peel-harvey.org.au

The Northern Jarrah Forest of south west Western Australia has been included in a list of Australia's ten most endangered landscapes as assessed by a team of 26 leading ecologists from the Innovative Research Universities of Australia, "*we identify the 10 major terrestrial and marine ecosystems in Australia most vulnerable to tipping points, in which modest environmental changes can cause disproportionately large changes in ecosystem properties*" (Laurence *et al.* 2011, - see: https://www.sciencedirect.com/science/article/abs/pii/S000632071100036X).

The PHCC is therefore of the opinion that an independent review of the Northern Jarrah Forest and threats that it faces including threats from climate change but also other activities including mining is warranted, beyond this referral.

In addition to the adverse impacts on the ecology and biodiversity of the Northern Jarrah Forest, PHCC requests that the following impacts and aspects of the proposed actions in Alcoa's current referral are considered, and that the proposal should be regarded as a Controlled Action and subject to Public Environmental Review:

1. Impacts on a Wetland of International Importance - Peel-Yalgorup System Ramsar 482

The PHCC challenges the claim made by the proponent in Section 4.1.3.2 of the referral document that the proposed "will not cause direct impacts", and "is highly unlikely to cause significant indirect impacts to the Peel-Yalgorup System".

The proposed activities are located within the upstream catchment of the Peel-Yalgorup Wetland System. This system was designated as Wetlands of International Importance under the Ramsar Convention on Wetlands in 1990 as Global Ramsar Site 482.

Based on the Ecological Character Description of the Peel-Yalgorup Ramsar Site (Hale and Butcher 2007) the system meets six criteria for listing as a wetland of international importance, including *Criterion 1: The site includes the largest and most diverse estuarine complex in south-western Australia (i.e. the Peel-Harvey Estuary) and also particularly good examples of coastal saline lakes and freshwater marshes*.

In 2018, the Australian Government implemented the National Landcare Program / Regional Land Partnerships (NLP/RLP), a $450 million investment over five years to deliver its national environmental priorities. One of the primary outcomes set by the Australian Government through this program was that *by 2023, there is a restoration of, and reduction in threats to the ecological character of Ramsar Sites, through implementation of priority actions*. Through the NLP/RLP, the Australian Government recognised the importance of actions both in the Ramsar Upstream Catchments as well as within the boundaries of the Ramsar Site. For the Peel-Yalgorup Ramsar Site, the entire Peel-Harvey Catchment was designated as the Ramsar Upland Catchment (see the maps at http://erin.maps.arcgis.com/apps/MapSeries/index.html?appid=c2606f315ee74d899c4f7ae478c29ccc). The PHCC therefore contends that, as a logical extension, actions which may have adverse effects on the environmental and ecological values of the Ramsar upstream catchments may also have adverse effects on the ecological character of the Ramsar Site itself. The Peel-Harvey Estuary

has already been identified as an at-risk estuary by the Western Australian State Government primarily due to nutrient enrichment of its waters and sediments from nutrient-rich water and sediment flowing down from the catchment – see https://www.water.wa.gov.au/water-topics/estuaries/regional-estuaries-initiative.

A change in ecological character is defined as the human-induced adverse alteration of any ecosystem component, process and/or ecosystem benefit/service (Ramsar Convention 2005). Four components and processes have been identified as being important in maintaining the ecological character of the Peel-Yalgorup Ramsar Site, namely climate, geomorphology, hydrology and water quality (Hale and Butcher 2007, PHCC in prep). We believe that the **proposed actions may have an adverse impact on both the hydrology and water quality of the Ramsar Upstream Catchment**. This contention is supported by the determination of the Western Australian Environmental Protection Authority (EPA 2020), albeit in relation to the protection of drinking water sources that "*The proposed mining areas lie over the catchment areas of developed reservoirs that are used for drinking water, which may lead to impacts on Inland Waters*".

Given the close proximity of the proposed Huntly mine expansion areas to the catchments of the Serpentine and Murray Rivers which provide the majority of the freshwater flows to the Peel-Harvey Estuary, the proposed actions may also adversely impact the water quality and water flow to the estuary, and thereby the ecological character of the Peel-Yalgorup Ramsar Site. Scientific research has shown us that the estuary is already suffering under existing impacts and management issues of poor water and sediment quality, treatment and disposal of dredge spoil, declining groundwater quantities and quality, declining surface flows in streams and rivers due to climate change, physical disturbance of birds, loss of aquatic and terrestrial flora, loss of habitat for birds and aquatic fauna and pressures from recreational and commercial fishing (for example Valesini *et al.* 2019).

The previous referral of this proposed action (Alcoa of Australia Limited's proposal (Assessment Number 2253)), and the subsequent decision by the Commonwealth Government, has already established the requirement to assess impacts on the Peel-Yalgorup System. Despite the proponent's original statement in July 2020 that the consideration of the Peel-Yalgorup System was "not relevant" to this controlled action, the subsequent decision by the relevant Commonwealth Department on 4 September 2020 required the proponent to include this MNES as a relevant controlling provision.

The PHCC's position is that the proponent cannot reasonably assert that direct or indirect impacts on the Ramsar site are unlikely, and thus as part of Controlled Action, the proponent must be required to assess the direct and indirect impacts. The cumulative impacts on the values of the Peel-Yalgorup Ramsar Site, in particular the Peel-Harvey Estuary, from the afore-mentioned existing pressures, in combination with the additional impacts of the proposed expansion of the mining and refining operations must also be considered in this assessment.

2. Threatened Species (multiple; six fauna and eight flora)

Regarding the statement in the proponent's referral document, "The Proposed Action is likely to cause significant impacts to Black Cockatoos, Woylie, Chuditch and Quokka and to eight EPBC Act listed threatened species", the Australian Government has approved Recovery Plans for:

- Carnaby's Cockatoo (*Calyptorhynchus latirostris*), 2013
- Forest Black Cockatoo (Baudin's Cockatoo *Calyptorhynchus baudinii*) and Forest Red-Tailed Black Cockatoo (*Calyptorhynchus banksii naso*), 2008
- Woylie (*Bettongia penicillata*), 2012
- Chuditch (*Dasyurus geoffroii*), 2012
- Quokka (*Setonix brachyurus*), 2013

Each of the Recovery Plans make reference to habitat clearing and disturbance as a key threatening process to these species. In particular the PHCC draws your attention to the quote from the Carnaby's cockatoo (*Calyptorhynchus latirostris*) Recovery Plan;

"Clearing for mining that results in the loss of eucalypts with nest hollows will result in a loss of breeding habitat for a significant time and so is likely to impact the species. Eucalypts do not grow large enough to provide nest hollows for Carnaby's cockatoo for at least 100 to 200 years (Saunders et al. 1982; Rose 1993; Whitford and Williams 2002) and despite any revegetation that seeks to replace breeding tree species, any loss of breeding trees or habitat could be considered equivalent to permanent clearing of these breeding trees." page 17. See https://www.environment.gov.au/system/files/resources/94138936-bd46-490e-821d-b71d3ee6dd04/files/carnabys-cockatoo-recovery-plan.pdf

Furthermore, offsetting residual impacts and rehabilitation post-mining may be ineffective for these species. The Western Australian EPA has found that where there has been significant residual impacts from development, frequently offsets for the species has contributed to the overall reduction in the area of its habitat (Department of Water and Environmental Regulation 2019).There are concerns associated with the standard of the rehabilitation that has occurred and likely to occur post-mining. There are suggestions that the rehabilitation which has previously taken place has not taken into account the drier climate of the region. PHCC is of the opinion that the proponent ought to be required to demonstrate the impact of proposed rehabilitation on the groundwater. Further to this the inquiry into the Waroona bushfires of 2016 ("The Reframing Rural Fire Management – Report of the Special Inquiry into the January 2016 Waroona Fires" considered the impact of rehabilitation from mining on bushfires and identified an opportunity, (Opportunity No. 3) for "*The Department of Parks and Wildlife and the Forest Products Commission to explore policy options for mechanical thinning of forest, including mining rehabilitation forest, for the purpose of bushfire mitigation". (*See: https://naturaldisaster.royalcommission.gov.au/system/files/exhibit/RCN.900.014.0120.pdf , p110)

3. Level of Community Interest

The previous referral of this proposed action (Alcoa of Australia Limited's proposal (Assessment Number 2253)) had significant community interest through the EPBC assessment process. There were 1732 submissions with 91% of these as "Assess through a Public Environmental Review".

4. Findings of 2021 State of the Environment Report

Australia's State of the Environment report (Australian Government 2021, https://soe.dcceew.gov.au) was released on 19th July 2022 with dire warnings on the health of our environment and threatened species, both at regional and national levels. The report found land, biodiversity, waters and climate to be in poor and declining condition over the past 5 years due to pressures of climate change, habitat loss, invasive species and mining. Since the previous report in 2016, 202 new species have been listed as nationally threatened, with the majority of threatened species either not showing improvements or further decline. Australia has lost more mammal species than any other continent, and has one of the highest rates of species decline in the developed world due to habitat destruction and invasive species. The report found abrupt changes in some ecosystems, with the Jarrah Forests in WA being one of 19 now showing signs of collapse or near collapse. New large scale clearing proposals, such as that submitted by the Proponent for large scale mining expansion are not congruent with threatened species' Recovery Planning, are not environmentally sustainable and do not meet principles of intergenerational equity. The current proposal is therefore at odds with the objective of halting environmental decline, improving the trajectory of threatened species, and improving the health of the climate, water and land.

Please do not hesitate to contact me on (08) 6369 8800 or email admin@peel-harvey.org.au if you would like any further information.

Yours sincerely

Melanie Durack
Operations Manager, Land Conservation and Agriculture
for Jane O'Malley
Chief Executive Officer

Attachment 1: References

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Australian Government, 2021. Australian State of the Environment - see https://soe.dcceew.gov.au/

EPA, 2020 - Public record pursuant to s39(1) of the Environmental Protection Act 1986 – see https://www.epa.wa.gov.au/sites/default/files/Extract_of_determination/CMS17836%20-%20Chairmans%20Determination.pdf

Department of Water and Environmental Regulation (2019) *Review of the Western Australian environmental offsets framework*, Final Report, Joondalup Western Australia 6027, https://www.wa.gov.au/system/files/2021-10/Review_of_the_WA_environmental_offsets-framework.pdf

Hale, J. and Butcher, R., 2007. Ecological Character Description of the Peel-Yalgorup Ramsar site. Report to the Department of Environment and Conservation and the Peel-Harvey Catchment Council, Perth, Western Australia.

Laurance, W., Dell, B., Turton, S., Lawes, M., Hutley, L., MacCallum, H., Dale, P., Bird, M., Hardy, G., Prideaux, G., Gawne, B., McMahon, C., Yu, R., Hero, M., Schwarzkopf, L., Krockenberger, A., Douglas, M., Silvester, E., Mahony, M., Vella, K., Saikia, U., Wahren, C., Xu, Z., Smith, B., and Cocklin, C. (2011) The 10 Australian ecosystems most vulnerable to tipping points. Biological Conservation, 144(5), pp. 1472-1480.

Peel-Harvey Catchment Council (in prep.). Ecological Character Description for the Peel-Yalgorup Ramsar site: Addendum. A report by Jennifer Hale for the Peel-Harvey Catchment Council, Mandurah Western Australia.

Ramsar Convention, 2005. Resolution IX.1 Annex A. A Conceptual Framework for the wise use of wetlands and the maintenance of their ecological character.

Valesini, F., Hipsey, M., Eyre, B., Kilminster, K., Plummer, P., Elliott, M., Hallett, C., Huang, P. Busch, B., Wells, N., Hennig, K., Cronin-O'Reilly, S., Reshid, M., Krumholz, O., Horsley, J., Trinh, J., 2019. Balancing estuarine and societal health in a changing environment: Summary Report ARC Linkage Project LP150100451, accessed online at https://github.com/AquaticEcoDynamics/Peel_ARC/blob/master/Documents/1.%20Summary%20Report/Peel%20ARC%20Summary%20Report%20v2%2020200624.pdf