Environmental Protection Act 1986

Section 40 (2) (a)

NOTICE OF ADDITIONAL REQUIREMENTS TO ASSESS A REFERRED PROPOSAL

PERSON TO WHOM THIS NOTICE IS GIVEN: Alcoa of Australia Limited (ABN: 93 004 879 298) 181-205 Davy Street BOORAGOON WA 6154

PROPOSAL TO WHICH THIS NOTICE RELATES: Pinjarra Alumina Refinery Revised Proposal Assessment No. 2253

Explanation:

The proposal is a significant amendment to the existing Pinjarra Alumina Refinery proposal which is already approved and being implemented under Ministerial Statement No 646.

In November 2021, the Environmental Protection Authority (EPA) advised Alcoa of Australia that amendments to the *Environmental Protection Act 1986* (EP Act) and the EPA's EIA procedure suite commenced on 22 October 2021, and that these were likely to affect the requirements for assessment of their proposal. The EPA also advised that in order to decide if there were any amendments to or additional assessment requirements, the EPA first needed information and confirmation on the nature and scope of the proposal.

On 19 May 2022, Alcoa of Australia submitted a request to amend a referred proposal during assessment under s. 43A of the EP Act. The proposed amendment is for the inclusion of an additional 2,652 ha of clearing at the Huntly Mine for the purpose of supplying bauxite to the Kwinana Alumina Refinery. The clearing for supply of bauxite to the Kwinana Refinery was always planned to be undertaken by the proponent; however, it was excluded from the original referred proposal on the basis it would instead be authorised under Alcoa's State Agreement and the Alcoa-Huntly and Willowdale Mine Sites Exemption Order 2004.

Following consultation with the EPA, the proponent considered that the additional clearing should be included as part of the referred proposal and be subject to the public review process.

The amendment increases the total clearing for the Huntly Mine component of the proposal from 6,621 hectares (ha) to 9,273 ha. The proposed amendment will be contained within the 41,403 ha mine development envelope of the proposal, which is currently under assessment. The amendment was approved by the EPA Chair on 24 June 2022.

As part of the amendment assessment, the EPA has decided to perform additional functions which include a review and revision of the Environmental Scoping Document (ESD) to ensure additional, cumulative, and holistic impacts are adequately considered, understood and assessed; and that the ESD contains the requirements of the recent EP Act amendments passed in October 2021.

As a result of its review, the EPA has decided additional matters need to be included in the proponent's Environment Review Document (ERD), and these are required under section 40 (2)(a) of the EP Act. To ensure a transparent and consolidated source of ERD requirements, the EPA has prepared an addendum to the ESD including the additional work requirements. The addendum is set out below (Table 1).

Amendment to indicative timeline

The EPA also decided to review the time likely to be required under section 40 (5) for public review of the proponent's review document. When level of assessment was set, the public review period was expected to be 8 weeks. Given the additional assessment matters being required in the ESD, and the larger area of impact of the proposal, and for consistency with recent similar public review periods, the EPA considers the public review period should be 10 weeks. A revised indicative timeline is provided as Attachment 1.

Proposal content document

The proponent is also required to prepare a consolidated proposal content document (PCD) for inclusion in the ERD. The PCD is required to be consistent with:

- the EPA's Instruction and template How to identify the Content of a Proposal,
- the proposal elements in the original referral documentation (as amended by the section 43A change approved on 24 June 2022) and the Huntly Bauxite Transition referral (EPBC 2022/09204) and the Pinjarra Alumina Refinery – development of water storage ponds and associated borrow pits referral (EPBC 2022/09213), and including proposed mine operations life of approximately 10 years only, and
- the proposal elements which are assessed in the ERD, including final development envelope, indicative disturbance footprints and greenhouse gas emissions (subject to any application under section 43A to approve any changes to the proposal).

Assessment as accredited assessment

The proposal as amended under s. 43A of the EP Act now aligns with two referrals made under the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act) being the Huntly Bauxite Transition referral (EPBC 2022/09204) and the Pinjarra Alumina Refinery – development of water storage ponds and associated borrow pits referral (EPBC 2022/09213). The two referrals were determined to be controlled actions on 18 August 2022 to be assessed by accredited assessment under the EP Act. The assessment of Matters of National Environmental Significance (MNES) in the ERD will now relate to these referrals.

Table 1. Addendum to the environmental scoping document

Flora and Vegetation

Required work

- 100. Provide a map of the survey effort applied in relation to the development envelopes, identifying the direct and indirect impact areas.
- 101. Provide an indicative footprint of areas to be cleared, across the mine development envelopes for Myara North and Holyoake.

Provide indicative footprints (or other information if these are not available) of other clearing proposed by the proponent which is not within the proposal scope (such as clearing proposed to be exempt under the EP Act or clearing considered to be regulated by the State Agreement).

102. Identify the key biodiversity indicators (relevant to all applicable key factors, i.e., not just flora and vegetation) which are adequate, scientifically robust and appropriate to assess whether the impacts of, and environmental outcomes resulting from, the proposal are likely to be consistent with the ongoing ecological integrity of the Northern Jarrah Forest.

Key biodiversity indicators must take account of the impacts of the proposal, cumulative impacts from past, current and reasonably foreseeable future activities, and ongoing pressures such as fire, water resource availability and climate change.

- 103. Provide a detailed framework which describes how Alcoa will assess, and monitor, across the whole of mine life (including post-closure), the status and trends in the key biodiversity indicators used to assess whether the potential impacts to, and environmental outcomes of, the proposal are likely to be consistent with the ongoing ecological integrity of the Northern Jarrah Forest.
- 104. Assess which rates of clearing of the proposal in the Northern Jarrah Forest are likely to be consistent with the ongoing ecological integrity of the Northern Jarrah Forest, taking into account the principles of the EP Act.

Provide a comparison of rates of clearing from past, current and reasonably foreseeable future activities

- 105. Commission and include an independent peer review of the key biodiversity indicators and detailed framework, to ensure it is adequate, scientifically robust and appropriate, to assess and monitor:
 - environmental outcomes for the whole of mine life (including post-closure)
 - whether the EPA's objectives for all applicable key environmental factors can be met, and
 - whether the proposal is likely to be consistent with the ongoing ecological integrity of the Northern Jarrah Forest.
- 106. Ensure all surveys, findings and analyses conducted as part of this assessment be made publicly available. This includes any past research commissioned by Alcoa (e.g. on success of rehabilitation and on soil profile pre and post mining).

	107.	Provide a breakdown of the condition (e.g., forest age, dieback status, past mining, fire frequency) of each vegetation association and vegetation complex occurring within the Northern Jarrah Forest. This should also include the same breakdown for the portions protected for conservation.
		Assessment should also be included of the particular vulnerabilities of each vegetation association and complex to reasonably foreseeable impacts (e.g., climate change,
		dieback, fire etc.).
		Describe how mature forest (but not old growth) has been/will be considered for avoidance.
	109.	Provide a comparison of the key biodiversity indicators and ecological values between:
		 undisturbed vegetation areas within the proposal area; and
	110	rehabilitated areas of previously disturbed areas. Taking into account the key hindiversity indicators, described.
	110.	Taking into account the key biodiversity indicators, describe how the proposed rehabilitation can successfully restore an
		ongoing ecological function post-disturbance, at a large scale. Provide information on the expected changes between current ecological functioning and post disturbance ecological functioning.
	111.	Commission independent peer review of rehabilitation
		methods and success to date and proposed ongoing rehabilitation methods and, taking into account the key biodiversity indicators, assess whether ongoing rehabilitation for the proposal is likely to be consistent with the ongoing
		ecological integrity of the Northern Jarrah Forest. Provide a summary of rehabilitation success to date by vegetation unit.
	112.	Assess the impact(s) of increased operational water consumption and dust suppression on flora and vegetation, including the likely impacts on ecological values that flora and vegetation supports.
Terrestrial Fauna		
Required work		Provide an assessment of potential impacts (including cumulative) to known and probable drinking sites (both permanent and ephemeral) for terrestrial fauna.
	114.	Ensure the assessment includes consideration of all available habitat data for black cockatoos (e.g. Birdlife Australia data, DBCA datasets etc.).
Air Quality		
Required work		Ensure the updated 2014 health risk assessment includes consideration of the interaction of CoPC, and commission and include an independent peer review of the updated 2014 health risk assessment (relates to items 62 and 66 of original ESD).
Greenhouse Gas E		
Required work		Quantify reduced carbon sequestration capacity from loss of mature forest, as well as the emissions from burning the wood sold for charcoal production and other end-uses; the burning of wood on the ground following clearing; and the loss of soil carbon following clearing and burning.
	11/.	Ensure the assessment and Greenhouse Gas Management Plan requirements for the GHG emissions factor considers all ongoing sources of emissions from the existing proposal, changes to emissions as a result of the significant amendment, and the combined ongoing emissions.

Terrestrial Environ	menta	I Quality
Required work	118.	Investigate the potential risks stemming from acid sulphate soil as a result of disturbance for river crossings and discuss contingency and management of this risk.
Other		
Required work		Include a closure plan which meets the requirements of the Department of Mines, Industry Regulation and Safety's (DMIRS) Statutory Guideline for Mine Closure Plans and Mine Closure Plan Guidance for all areas of the site, including operational areas and the refinery.
		Provide a cumulative environmental impact assessment of the proposal. Cumulative environmental impacts are the successive, incremental, and interactive impacts on the environment of a proposal with one or more past, present and reasonably foreseeable future activities - including past clearing, mining, logging, water resource allocation, fire, and other impacts, not only existing or reasonably foreseeable impacts. Required for all key factors. This should also include discussion of cumulative impacts of climate change on all factors, and cumulative impacts to Aboriginal cultural values to the extent they directly affect or are affected by physical or biological surroundings.
	121.	Discuss the additional avoidance and mitigation measures to be put in place to provide a buffer for potential cumulative impacts.
	122.	Analyse, assess and discuss rehabilitation in the context of a drying/heating climate. Efficacy and suitability of the rehabilitation methodology should be independently assessed by a suitably qualified expert in this matter.
	123.	 Undertake a holistic impact assessment of the proposal on the environment, applying the EPA's principles and the EPA's objectives for environmental factors: Outline the connections and interactions between environmental factors or values that in combination have the potential to have a significant effect on the environment. Provide a diagram of the links between environmental factors or values. Summarise the potential combined environmental effects. Summarise any additional mitigation measures proposed to mitigate combined environmental effects. Summarise any significant residual combined environmental effects. Summarise proposed additional environmental outcomes for the proposal on the environment as a whole, and (optional) any proposed conditions for consideration by the EPA.

The ERD is to be completed by following the EPA's Instructions -Form and content How to prepare an Environmental Review Document. general The ERD must identify the activities, boundaries and values requirements relevant for the cumulative impact assessment in relation to each The ERD must provide information about whether and how another decision-making process can mitigate the specific likely impacts of the proposal and whether those impacts are likely to be consistent with the EPA's objectives. Information must address the matters in the EPA's Interim Guidance - Taking decision making processes into account in EIA. Applicable environmental outcomes must be identified consistent with the EPA's Interim Guidance - Environmental outcomes and outcomes- based conditions. Information about offsets must be consistent with the requirements on page 8-9 of the EPA's Instructions: How to prepare an Environmental Review Document. Significant 124. The following additional requirements apply as the proposal is amendment a significant amendment to an approved proposal and needs additional to be considered in accordance with section 40AA of the EP Act: Information is required regarding: requirement The approved proposal, so the environmental effects of the significant amendment may be considered in the context of the approved proposal. The combined effects that implementation of the approved proposal and the significant amendment might have on the environment. The existing implementation conditions relating to the approved proposal and whether the proponent considers they should be inquired into. This should include consideration of whether the existing implementation conditions are adequate to ensure the proposal's ongoing elements are consistent with the EPA's environmental factor objectives. Include the information required for significant amendments on page 8 to 9 of the Instructions for Referral of a proposal under section 38 of the EP Act. Include the information required for significant amendments on pages 3, 7, 8, of the EPA's Instruction and template: How to prepare an Environmental Review Document. Matters of National Environmental Significance (MNES) Required work 125. List the controlled action provisions. 126. List the relevant policy and guidance for the MNES. Documents that require consideration in addition to those in the original ESD include: Referral guideline for the 3 WA threatened black cockatoo species (2022) Approved Conservation Advice for *Tetraria* australiensis (Southern Tetraria) (Canberra:

the Arts, 2008)

Tufted Plumed Featherflower (*Verticordia plumosa var. ananeotes*) Recovery Plan (Western Australia:Department of Environment and Conservation, 2008)

Department of the Environment, Water, Heritage and

 Approved Conservation Advice for Thelymitra stellata (Star Sun-orchid) (Canberra: Department of the Environment, Water, Heritage and the Arts, 2008)

- Conservation Advice Falco hypoleucos (Grey Falcon) (Canberra: Department of Agriculture, Water and the Environment, 2020)
- Slender Andersonia (Andersonia gracilis) Interim Recovery Plan 2006-2011. Interim Recovery Plan No. 228. (Department of Environment and Conservation)
- Conservation Advice Synaphea sp. Serpentine (G.R. Brand 103) (Canberra: Department of the Environment and Energy, 2018)
- Conservation Advice Charadrius leschenaultii (Greater sand plover) (Canberra: Department of the Environment, 2016)
- Glossy-leafed Hammer Orchid (*Drakaea elastica*) Recovery Plan (Western Australia: Department of Environment and Conservation, 2009)
- Approved Conservation Advice for *Drakaea micrantha* (Dwarf Hammer-orchid) (Canberra: Department of the Environment, Water, Heritage and the Arts, 2008)
- 127. Provide a summary of the existing environmental value(s) that relate to the MNES.
- 128. Summarise the potential impacts (direct, indirect, and cumulative) on the MNES.
- 129. Provide relevant tables and maps.
- 130. Summarise the assessment on the relevant environmental factor/s to determine the level of significance of the impact on the MNES. Include how the mitigation hierarchy has been applied.
- 131. Summarise any proposed mitigation.
- 132. Summarise whether offsets are required in relation to the MNES and if so, provide details of the proposed offset and how the offset addresses the EPBC Act *Environmental Offset Policy*.

Attachment 1. Indicative assessment timeline

Key assessment milestones	Completion date*
EPA approves Environmental Scoping Document	November 2022
Proponent submits first draft Environmental Review Document	31 March 2023
EPA provides comment on first draft Environmental Review Document	12 May 2023
(6 weeks from receipt of ERD)	
Proponent submits revised draft Environmental Review Document	26 May 2023
EPA authorises release of Environmental Review Document for public review (2 weeks from EPA approval of ERD)	23 June 2023
Proponent releases Environmental Review Document for public review for 10 weeks	7 July 2023
Close of public review period	14 September 2023
EPA provides Summary of Submissions	6 October 2023
Proponent provides Response to Submissions	3 November 2023
EPA reviews the Response to Submissions (4 weeks from receipt of Response to Submissions)	1 December 2023
EPA prepares draft assessment report and completes assessment	26 January 2024
(6 weeks from EPA accepting Response to Submissions)	
EPA finalises assessment report (including two weeks consultation on draft conditions) and gives report to Minister (6 weeks from completion of assessment)	8 March 2024