Worsley Alumina Pty Ltd
PO Box 344
Collie, 6225
Western Australia
Australia
T: +61 8 9734 8311

south32.net

14 January 2022

[redacted]
A/g Director, South WA Section
Environment Assessments West (WA, NT, SA) Branch
Environment Approvals Division
Department of Agriculture, Water and Environment
GPO Box 858
Canberra City ACT 2601

Dear [redacted]

South32 Worsley Alumina Pty Ltd – Worsley Mine Expansion - Revised Proposal (EPBC 2019/8437) – Section 156A Request to Vary Proposal to Action

South32 Worsley Alumina Pty Ltd (Worsley Alumina) would like to formally request the Department of Agriculture, Water and the Environment (DAWE) consent for a change to the Worsley Mine Expansion (Revised Proposal) through the *Environment Protection and Biodiversity Act 1999* (Cth) (EPBC Act) section 156A; and the *Environmental Protection and Biodiversity Conservation Regulations 2000* (Cth) (the Regulations) Division 5.4.

The current operations undertaken by Worsley Alumina are the subject of existing State environmental approvals, an EPBC Act exemption, and EPBC Act expansion approval 2004/1566. Worsley Alumina submitted a referral to DAWE for the expansion and amendment to the Revised Proposal on the 22 May 2019. DAWE notified Worsley Alumina that the project activities for the Revised Proposal would be assessed by accredited assessment, under the *Environmental Protection Act 1986* (EP Act) (WA).

This request to vary the proposal for which consent is being sought is for the inclusion of the following:

1. Reduction of native vegetation clearing from 5,841 ha to 4,399 ha (see **Attachment 1** and **Spatial Data**) to reflect avoidance and management measures that have been adopted (e.g. habitat avoidance and ecological linkages).
2. Modify the shape of the Worsley Mining Development Envelope (WMDE) footprint to expand the south-eastern portion of the WMDE (please see **Attachment 2** with proposed location and **Spatial**

Data) and remove a like for like portion (e.g. size and vegetation type) of the WMDE to avoid an increase to the proposal footprint and additional native vegetation clearing. The applicable area is 2.8ha of pasture and contains one potential habitat tree, which will be assessed and avoided as required. The purpose of this variation is provide a direct connection to an extended mining area, which is already approved under Ministerial Statement 719 and EPBC Act expansion approval 2004/1566.

Table 1 Requested Variation to Revised Proposal

Element	Location	Existing Authorised Extent	Proposed Change (This Proposal)	Proposed Authorised Extent (Revised Proposal)
Bauxite Mining				
Mining Development Envelope (WMDE)	**Attachment 2**	Mining Development Envelope (previously referred to as the Primary Bauxite Area (PBA); 22,102 ha as per the 2005 ERMP [MS719])	Expansion of the Mining Development Envelope to 27,796 ha	27,796 ha, including the PBA *Note: no change to size of WMDE, modification of shape involves a like for like exchange of 2.8 ha pasture to avoid increase of the WMDE.*
Clearing of Native Vegetation (WMDE)	**Attachment 1**	Up to 5,263 ha clearing of native vegetation (4,321 ha of which has been cleared at the time of the referral)	Up to **4,020*** ha of additional clearing of native vegetation	Up to **9,662*** ha clearing of native vegetation *Note: This represents a decrease in native vegetation clearing from 5,841 ha to 4,399 ha (totalling a reduction of 1,442ha or 25%)*
Bauxite Transport				
Clearing of Native Vegetation (BTC)	**Attachment 1**	N/A	Up to **130*** ha clearing of native vegetation within the BTC	**130*** ha clearing of native vegetation within the BTC
Refinery				
Clearing of Native Vegetation (CBME)	**Attachment 1**		Up to **244*** ha of native vegetation clearing for the purpose of contingency bauxite mining (including residue storage) within the CBME (747 ha), which occurs within the Refinery Lease Area (RLA).	Up to 244* ha of native vegetation clearing for the purpose of contingency bauxite mining (including residue storage) within the CBME (747 ha), which occurs within the Refinery Lease Area (RLA).
Clearing for Maintenance	**Attachment 1**	66.6 ha native vegetation clearing approved (available for maintenance activities within the RLA)	An additional **5*** ha of disturbance (for a water containment dam and access track), all of which is native vegetation clearing	71.6 ha disturbance and native vegetation clearing for maintenance

*Values in bold represent those values subject to this request

An updated Key Characteristics Table is available in **Attachment 3**.

The formal request for these changes to the Revised Proposal is consistent with South32's discussions with the Senior Environmental Assessing Officer, Jessica Allen, and A/Manager EIA South Branch, Natalie McAlpine, from the EPA Services Directorate of the Department of Water and Environmental Regulation (DWER) on 6 January 2022 and 11 January 2022.

On 7 January 2022, DAWE was provided with verbal and written notification of the proposed changes to the Revised Proposal and a request to vary proposal to take action would be formally submitted under section 156A of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act).

Background

The Worsley Bauxite-Alumina Project (Project) was granted approval in 1980 and commenced operation in 1984. In 2016 Worsley Alumina considered expanding operations and referred a proposal to the Western Australian Environmental Protection Authority (EPA) in 2017 in relation to the "Hotham Mining Extension and Refinery Production Increase" under section 38 of the EP Act. During this assessment process, Worsley Alumina identified a requirement for significant changes to some components of the referral and ultimately withdrew their request of the proposal in November 2018.

Current Project mining activities are the subject of Ministerial Statement 719 (MS719), and related EPBC Act exemption. Additional bauxite resources have been confirmed in the region since the primary approvals were last granted, and 942 ha of native vegetation remains approved for clearing for mining purposes under the current MS719 and EPBC Act exemption.

On 5 April 2019, Worsley Alumina referred the Revised Proposal to the EPA under section 38 of the EP Act and to DAWE under section 68 of the EPBC Act.

The EPA determined to assess the Revised Proposal at the level of Public Environmental Review with an 8-week public review period on 18 July 2019.

On 24 October 2019 the EPBC Act Minister's delegate determined the Revised Proposal was a 'controlled action' and determined it be assessed under accredited assessment under the EP Act.

Following submission of the EP Act and EPBC Act referrals, the Revised Proposal was further refined and optimised. Consequently, Worsley Alumina have provided three applications to DAWE for a 'Request to Vary a Proposal' under section 156A of the EPBC Act Division 5.4 of the Regulations, comprising follows:

- The first application on 12 December 2019, which was approved on 16 January 2020 (Attachment 5); and
- The second application on 12 June 2020, which was approved on the 17 July 2020 (Attachment 6).
- The third application on 25 June 2020, which was approved on the 28th July 2021 (Attachment 7)

The proposed changes were accepted and are incorporated into the current Revised Proposal, including a decrease in the native vegetation clearing requirement from 7,119.5 ha to 5,841 ha (a 1,278.5 ha or 18%

decrease); a decrease in the overall Primary Assessment Area (PAA) by 5 ha (reducing the size of the development envelope from 29,362 ha to 29,357 ha); removal of 1 ha Lower Hotham Road Bridge area from the 29,357 ha development envelope; and to include an extension to the existing BRDA site, within the RLA, and change the bauxite residue deposition rate from 18.5 Mtpa (wet) to 18.5 Mtpa (dry).

Consideration of Alternatives for Proposed Changes

The request for variation for the inclusion of the following:

1. Reduction of native vegetation clearing from 5,841 ha to 4,399 ha (see **Attachment 1** and **Spatial Data**)
2. Modify the shape of the WMDE footprint to expand the south-eastern portion of the WMDE (please see **Attachment 2** with proposed location and **Spatial Data**)

will not change the intent of the activities defined in the Revised Proposal that have been identified for the WMDE and further alternatives have not been considered due to the changes having no additional impact and/or resulting in a decrease in impacts to matters of national environmental significance (MNES). The above alternatives are preferred because they have lower environmental impacts and promote transparency in the assessment process.

Reason for the Proposed Variation and Details of Nature of Variation Activities

The proposed described variations to the proposal will not have an additional significant impact to the Revised Proposal related to MNES, or the environment in general. Native vegetation clearing will be reduced by 1,442 ha (25% decrease) through adoption of avoidance and mitigation measures, including:

- Additional habitat avoidance, including specific habitat type avoidance for MNES; and
- Implementation of ecological linkages.

There will be a like for like exchange of 2.8 ha of pasture area to allow reshaping of the WMDE footprint to connect the WMDE with an already approved Extended Mining Area under MS719, which does not require an increase the proposal footprint or native vegetation clearing. No additional environmental impacts are expected due to no increases in the WMDE footprint and amount/type of native vegetation clearing. The above variations to the proposal will also result in a decrease in environmental effects to flora and vegetation (including vegetation complexes vegetation communities and fauna habitat types) (see **Attachment 4**).

There will be no additional negative environmental impacts (e.g. cumulative environmental and holistic impacts) to environmental factors and environmental values (including MNES) from the proposed variations for the following reasons:

- A reduction in native vegetation clearing
- No additional increase in the proposal footprint

- No additional developments are proposed;
- No changes to preliminary key environmental factors and/or other factors are request for the assessment
- No additional residual impacts.

Consistent with the proponent's two previous draft ERD submissions (6 July 2020 and 10 January 2021) to EPA services and DAWE, it was identified that native vegetation clearing would result in residual environmental impacts to terrestrial fauna, which would require a Biodiversity Offset Plan (BOP). A Biodiversity Offset Plan will still be required but significant residual environmental impacts will decrease due to implementation of the mitigation hierarchy, specifically the adoption of avoidance and mitigation management, which will decrease required native vegetation clearing and significant residual impacts.

Significance of Change Assessment

There is unlikely to be a significant effect on the environment (including cumulative and holistic impacts) from the proposed variations if they were approved for the reasons stated above.

The character of the proposed amendments will be substantially the same character as the referred proposal for the reasons identified in this application and Worsley Alumina respectfully requests your consideration of this variation to the proposal to take an action to the Revised Proposal under section 156A of the EPBC Act. Please note that Worsley Alumina has also submitted a Request to Change Proposal During Assessment to the WA EPA, under section 43A of the EP Act.

Should you require any additional information regarding this request, please contact [redacted]

Yours sincerely,

[redacted]

Vice President Operations

South32 Worsley Alumina Pty Ltd

Cc: [redacted], Senior Environmental Officer, EIA South | EPA Services

ATTACHMENTS

Attachment 1 – Indicative Disturbance Footprint Commitments and Revised PAA Boundary

Attachment 2 – Worsley Mining Development Envelope and Revised PAA Boundary with Insets

Attachment 3 – Updated Key Characteristics Table

Attachment 4 – Fauna Habitat, Vegetation Complex and Vegetation Communities

Attachment 5 – s156A Approved on 16 January 2020

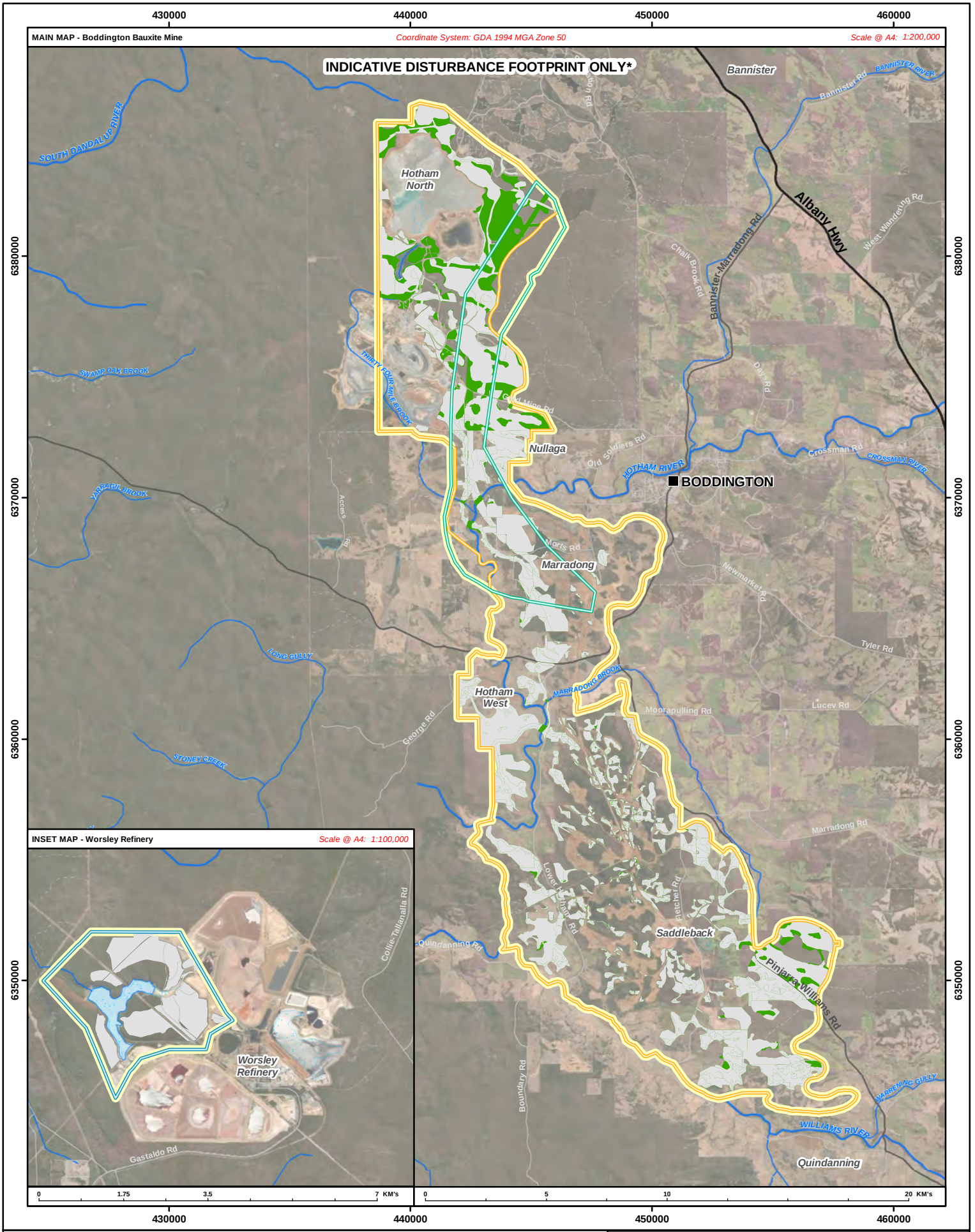
Attachment 6 – s156A Approved on 17 July 2020

Attachment 7 – s156A Approved on 28 July 2021

GIS Data Layers (Provided separately due to file size):

- Revised WMDE Boundary
- Revised PAA boundary
- IDF Commitments (with lower native veg clearing)

Attachment 1 – Indicative Disturbance Footprint Commitments and Revised PAA Boundary



LEGEND

Town | State Highway | Main Road | Minor Road | Track | Major River | Minor River | Lake | Reservoir

NORTH

Disturbance Envelope

- Bauxite Transport Corridor (BTC)
- Contingency Bauxite Mining Envelope (CBME)
- Worsley Mining Development Envelope (WMDE) (Revised 7th January 2022)
- Primary Assessment Area (PAA) (Revised 7th January 2022)

Indicative Disturbance Footprint

- PAA Indicative Disturbance Footprint (IDF) (Updated January 2022)
- Previous PAA IDF

The Indicative Disturbance Footprint may change within the PAA and will be refined based on detailed planning for disturbance within the PAA and will be submitted in accordance with the Worsley State Agreement (10 Year Mine Plan).

SOUTH32 Worsley Alumina Pty Ltd

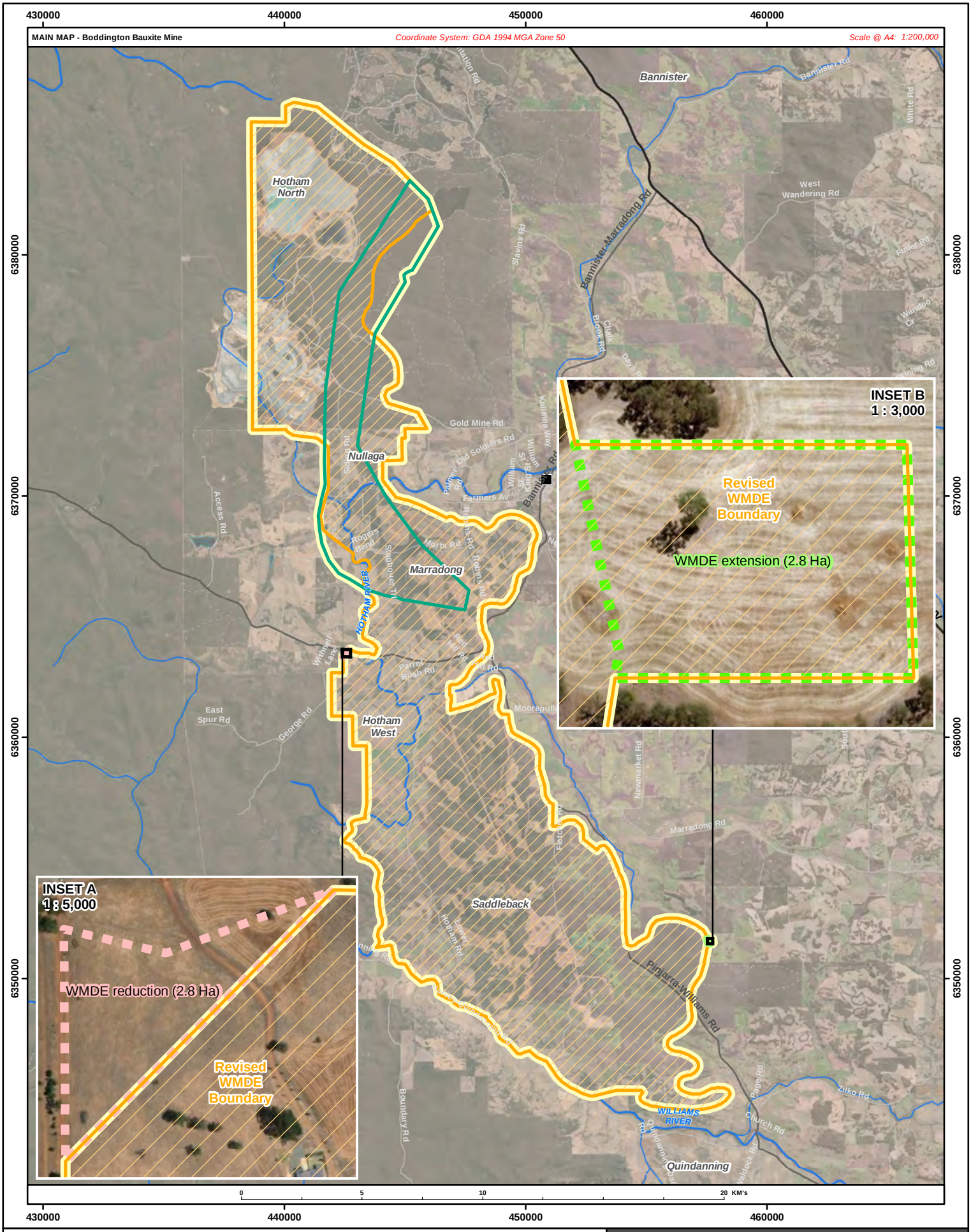
Indicative Disturbance Footprint Commitments and Revised PAA Boundary

FIGURE 1

Author: dlimm1 Created: January 2022

Plan: ERD_s43A_Figure_01_PrimaryAssessmentArea_CommitmentsIDF_PAA_BTC_CBME_WMDE_A4P_20220113.mxd

Attachment 2 - Worsley Mining Development Envelope and Revised PAA Boundary with Insets



SOUTH32 Worsley Alumina Pty Ltd

January 2022 Revised WMDE / PAA Boundary

FIGURE 2

Author: dlimm1

Created: January 2022

Plan: ERD_s43A_Figure_02_Revised_WMDE_A4P_20220113.mxd

Attachment 3 – Updated Key Characteristics Table

Element	Location	Existing Authorised Extent	Proposed Change (This Proposal)	Proposed Authorised Extent (Revised Proposal)
Bauxite Alumina Project				
Alumina Production	N/A	4.7 Mtpa	No change	4.7 Mtpa
Greenhouse Gases	N/A	3.75 Mtpa of CO_2-e	No change	3.75 Mtpa of CO_2-e [1]
Bauxite Mining				
Mining Development Envelope (WMDE)	Refer to Figure 1-2# *[Refer to figure attachment 2 of this application]*	Mining Development Envelope (previously referred to as the Primary Bauxite Area (PBA); 22,102 ha as per the 2005 ERMP [MS719])	Expansion of the Mining Development Envelope to 27,796 ha	27,796 ha, including the PBA
		Extended mining areas (74,918 ha)	No change	Extended Mining Areas (74,918 ha)
Clearing of Native Vegetation	N/A *[Refer to figure attachment 1 of this application]*	Up to 5,263 ha clearing of native vegetation (4,321 ha of which has been cleared at the time of the referral)	Up to **4,020** ha of additional clearing of native vegetation	Up to **9,283** ha clearing of native vegetation
	N/A	Up to 8,400 ha of clearing of native vegetation in Extended Mining Areas	No change	Up to 8,400 ha of clearing of native vegetation in Extended Mining Areas
Mining Rate	N/A	Up to 18.8 Mtpa (dry)	No change	Up to 18.8 Mtpa (dry)
Crushing Facilities	N/A	4 primary crushing facilities 2 secondary crushing facilities	No change (Emissions regulated under Part V of the EP Act)	4 primary crushing facilities 2 secondary crushing facilities
Water Use	N/A	500 ML/a	400 ML/a increase	900 ML/a
Water Source	N/A	Groundwater and surface water in	No change	Groundwater and surface water in the vicinity of mining areas

[1] Current authorised extent is 3.75 Mtpa of CO_2-e. Implementation of the GHG Management Plan, and related reduction targets, will reduce net emissions over the Revised Proposal as condition of new Ministerial Statement.

Element	Location	Existing Authorised Extent	Proposed Change (This Proposal)	Proposed Authorised Extent (Revised Proposal)
		the vicinity of mining areas		
Bauxite Transport				
Existing Overland Bauxite Conveyor (Mine to Refinery)	Figure 2-1#		No change [2]	Figure 2-1a
Bauxite Transport Corridor (BTC) Connecting mining areas in the BBM	Figure 2-1#	N/A	Conventional idler type conveyors and/or truck transport within the BTC (within a 4,146 ha corridor, of which 3,332 ha overlaps the WMDE)	Conventional idler type conveyors and/or truck transport within the BTC (4,146 ha)
Bauxite Transport to Service Extended Mining Areas	N/A	Conventional idler-type conveyors and/or truck transport	No change	Conventional idler-type conveyors and/or truck transport
Clearing of Native Vegetation	N/A *[Refer to figure attachment 1 of this application]*	N/A	Up to **130 ha** clearing of native vegetation within the BTC	**130 ha** clearing of native vegetation within the BTC
Water Source	N/A	N/A	Local groundwater sources	Local groundwater sources
Refinery				
Refinery Lease Area (RLA)	Figure 1-3#	2,500 ha	No change	2,500 ha
Contingency Bauxite Mining Envelope (CBME)	Figure 1-3# *[Refer to figure attachment 1 of this application]*	N/A	Up to **244** ha [3] of native vegetation clearing for the purpose of contingency bauxite mining (including residue storage) within the CBME (747 ha), which occurs within the Refinery Lease Area (RLA).	Up to **244** ha [4] of native vegetation clearing for the purpose of contingency bauxite mining (including residue storage) within the CBME (747 ha), which occurs within the Refinery Lease Area (RLA).

[2] Overland Bauxite Conveyor is existing infrastructure that is currently approved and will continue to operate as part of this Revised Proposal.

[3] Incorporating the change to proposal under Section 43A of the EP Act, endorsed by the EPA on 6 January 2020

[4] Incorporating the change to proposal under Section 43A of the EP Act, endorsed by the EPA on 6 January 2020

Element	Location	Existing Authorised Extent	Proposed Change (This Proposal)	Proposed Authorised Extent (Revised Proposal)
Clearing within Wellington National Park		Clearing of up to 8 ha for Wellington Dam Pipeline	No change	Clearing of up to 8 ha for Wellington Dam Pipeline
Clearing for Maintenance	N/A	66.6 ha native vegetation clearing approved (available for maintenance activities within the RLA)	An additional 5 ha of disturbance (for a water containment dam and access track), all of which is native vegetation clearing	71.6 ha disturbance and native vegetation clearing for maintenance
Water Use	N/A	Surface water allocation for the RLA	No significant water requirement	Surface water allocation for the RLA
Water Source	N/A	Freshwater Lake and approved third party sources	No change	Freshwater Lake and approved third party sources
Bauxite stockpiles		1.92 Mt approximately	No change	1.92 Mt approximately
Deposition rate, footprint and location		18.5 Mtpa (wet) (no change to footprint of BRDA)	18.5 Mtpa (dry)	18.5 Mtpa (dry)
Digestion process area emissions control	N/A	Regenerative thermal oxidiser	No change	Regenerative thermal oxidiser
Calciners – fuel Particulate emissions control	N/A	Natural gas Electrostatic precipitators on five calciners, baghouse system on one calciner	No change	Natural gas Electrostatic precipitators on five calciners, baghouse system on one calciner
Liquor burner Emission control	N/A	Baghouse, regenerative thermal oxidiser and wet scrubber	No change	Baghouse, regenerative thermal oxidiser and wet scrubber
Power and Steam Raising Facilities				
Gas fired cogeneration – capacity	N/A	120 MW	No change [5]	120 MW

[5] The gas fired cogeneration plant has been recently upgraded, with two new D type gas fired Package Boilers as replacement to the two, now decommissioned, Nebraska Package A type Boilers. This has the same modular footprint and output capacity of steam, no material net change in profile. This is noted for cross-alignment with the contemporary DWER licence (L4504/1981/17) authorising use of the new boilers.

Element	Location	Existing Authorised Extent	Proposed Change (This Proposal)	Proposed Authorised Extent (Revised Proposal)
Gas fired cogeneration (alternative) – capacity	N/A	120 MW	No change[10]	120 MW
Coal fired facility – capacity Particulate emission control	N/A	110 MW (electrical) Electrostatic precipitators on three boilers	No change	110 MW (electrical) Electrostatic precipitators on three boilers
Coal fired boiler – normal capacity Emission control	N/A	Two circulating fluidized bed multifuel co-generation boilers 100 MW (electrical) 400 MW (thermal) Limestone injection and baghouse filters	No change	Two circulating fluidized bed multifuel co-generation boilers 100 MW (electrical) 400 MW (thermal) Limestone injection and baghouse filters
Air Emissions				
Sulphur dioxide (SO_2) from coal fired facilities	N/A	Up to 13,370 tpa from combustion, liquor burner and calciner sources	Proposed to remain part of the proposal but be solely regulated under Part V of the EP Act	
Nitrogen oxides (NO_x) from combustion, liquor burner and calciner sources	N/A	Up to 6,890 tpa	Proposed to remain part of the proposal but be solely regulated under Part V of the EP Act	
Particulates (PM_{10}) from combustion, liquor burner and calciner sources	N/A	Up to 520 tpa	Proposed to remain part of the proposal but be solely regulated under Part V of the EP Act	
Carbon monoxide (CO) from combustion, liquor burner and calciner sources	N/A	Up to 1,350 tpa	Proposed to remain part of the proposal but be solely regulated under Part V of the EP Act	
Total volatile organic	N/A	Up to 300 tpa	Proposed to remain part of the proposal but be solely regulated under Part V of the EP Act	

Element	Location	Existing Authorised Extent	Proposed Change (This Proposal)	Proposed Authorised Extent (Revised Proposal)
compounds (VOCs) from all sources				
Construction and Support Facilities				
Temporary construction facilities including mobile offices and ablutions, laydown areas and field maintenance facilities		N/A	Clearing of up to 20 ha of native vegetation (included within the indicative WMDE mining footprint) for temporary construction and support facilities located within the WMDE. Facilities will be located on pre-disturbed areas where possible.	Clearing of up to 20 ha of native vegetation (included within the indicative WMDE mining footprint) for temporary construction and support facilities located within the WMDE. Facilities will be located on pre-disturbed areas where possible.
Water Use	Unrestricted	N/A	Temporary water supply of approximately 580 ML/annum from local water sources for the duration of the construction period.[6]	Temporary water supply of approximately 580 ML/annum from local water sources for the duration of the construction period.

[#] Figures provided within the Environmental Review Document

[6] This relates to 580 ML/a during the construction period in the ESD.

Attachment 4 - Vegetation Complex Vegetation Communities and Fauna Habitat

Table 1 Extent of Vegetation Clearing within the Regional Vegetation Complexes of the South-west Forest Region of WA – s43A Comparison

Vegetation Complex	Pre-European Extent (ha)	Current Extent (ha)	Pre-European Extent Remaining (%)	Current Extent Remaining within DBCA Managed Land (%)	Previously Proposed Clearing (ha)^				Previously Proposed to be Cleared as a Percent (%)	Proposed Clearing (ha)	Proposed Clearing (%)	Reduction in clearing as a result of the change (%)
					WMDE	BTC	CBME[∞]	PAA				
Cooke	36,779.3	30,304.2	82.4%	62.6%	565.1	0.0	0.0	565.1	1.86%	528.5	1.74%	6.5%
Coolakin	163,991.7	64,204.7	39.2%	20.1%	499.9	25.1	0.0	525.0	0.82%	469.9	0.73%	10.5%
Dwellingup 4	132,415.6	115,661.5	87.3%	70.1%	2895.3	48.2	0.0	2943.5	2.54%	2238.2	1.93%	24.0%
Michibin*	168,040.1	42,996.1	25.6%	5.1%	378.9	66.5	0.0	445.4	1.04%	431.4	1.00%	3.1%
Pindalup	167,151.0	128,358.2	76.8%	60.1%	774.3	21.3	0.0	795.6	0.62%	344.8	0.27%	56.7%
Swamp	53,658.2	40,613.0	75.7%	64.2%	68.6	20.6	0.0	89.2	0.22%	37.8	0.09%	57.7%
Williams	28,984.0	7,516.5	25.9%	0.3%	4.2	16.2	0.0	20.4	0.27%	4.0	0.05%	80.8%
Yalanbee 5	126,609.8	83,829.1	66.2%	38.8%	752.8	0.0	0.0	752.8	0.90%	648.7	0.77%	13.8%
Yalanbee 6	197,849.0	92,080.9	46.5%	21.1%	377.0	12.7	0.0	389.8	0.42%	388.8	0.42%	0.3%
Dwellingup 1	208,490.9	181,038.8	86.8%	82.3%	0.0	0.0	140.1	140.1	0.08%	140.1	0.08%	0.0%
Murray 1	68,695.2	52,296.0	76.1%	64.7%	0.0	0.0	105.8	105.8	0.20%	105.8	0.20%	0.0%
Yarragil 1	80,203.0	64,927.1	81.0%	73.6%	0.0		3.0	3.0	0.00%	3.0	0.00%	0.0%
Total					**6,317**	**211**	**249**	**6,777**	**-**	**5,341**		
Total loss of regional vegetation complex within PAA minus Pre-existing Approval Area clearing[+]					**5,375**	**211**	**249**	**5,835**	**-**	**4,399**		25%

^ The IDF is used as an assessment tool for defining potential impacts and the maximum disturbance allowance within the corresponding Development Envelopes.

[+] 942 ha of approved clearing allocation remains within the Pre-existing Approval Area, specifically within the WMDE IDF. This Revised Proposal does not seek re-approval to clear the existing clearing allocation. Therefore, 942 ha has been removed from the residual clearing impact calculations.

[∞] The CBME assessment includes the 5ha of maintenance clearing within the RLA

* All heaths and granite rock outcrops where they occur in areas of remnant vegetation within the Michibin Complex will not be cleared as they are Protected Areas, as per the Worsley Alumina Protected Areas Plan.

Table 2 Extent of Vegetation Clearing within the Site-vegetation Types – s43A Comparison

Site-veg Type	Description	Conservation or Locally Significant	Extent within the Wider Mapped Areas (WMA) (ha)	Extent within the PAA	Previously proposed clearing (ha)^				Extent of the WMA previously proposed to be cleared (%)	Proposed clearing (ha)	Extent of the WMA proposed to be cleared (%)	Reduction in clearing as a result of the change (%)
					WMDE	BTC	CBME[∞]	PAA				
A^	Tall shrubland of *Melaleuca lateritia, Hakea varia, Melaleuca viminea* and *Melaleuca incana* subsp. *Incana* on clay-loams in seasonally wet valley floors	✓	625.9	130.1	32.6	7	0	39.6	6%	23.6	4%	40%
A1*	Mixed tall shrubland of *Melaleuca viminea, Melaleuca lateritia, Taxandria linearifolia, Astartea scoparia* over *Baumea juncea* and *Lepidosperma tetraquetrum* with occasional patches of *Banksia littoralis* and *Melaleuca rhaphiophylla* over low herbs on seasonally waterlogged clays and clay loams on valley floors	x	45.5	2.9	0	0	0	0	0%	0.0	0%	
A2*	Low open woodland of *Melaleuca rhaphiophylla* over *Astartea scoparia* and low herbs on seasonally waterlogged clays and clay loams in seasonally wet valley floors	x	8.9	1.7	0	0	0	0	0%	0.0	0%	
AC^*	Open woodland of *Eucalyptus wandoo* and *Eucalyptus rudis* over *Juncus pallidus, Astartea scoparia, Taxandria linearifolia* and *Lepidosperma tetraquetrum* over herbs on clay loams in seasonally wet valley floors	✓	58.5	34.2	0	0	0	0	0%	0.0	0%	
AD*	Low open woodland of *Eucalyptus rudis* and *Eucalyptus marginata* over *Banksia littoralis*, *Hakea prostrata* and *Pericalymma ellipticum* over low shrubs and herbs on leached sands over sandy-gravel on lower slopes	x	14	5.6	0	0	0	0	0%	0.0	0%	
AX^*	Open woodland of *Eucalyptus rudis* over *Acacia saligna, Melaleuca incana* subsp. *incana* and *Hypocalymma angustifolium* on clay-loams on valley floors	✓	516.9	224.7	14.6	11.3	0	25.9	5%	11.5	2%	56%

Site-veg Type	Description	Conservation or Locally Significant	Extent within the Wider Mapped Areas (WMA) (ha)	Extent within the PAA	Previously proposed clearing (ha)^				Extent of the WMA previously proposed to be cleared (%)	Proposed clearing (ha)	Extent of the WMA proposed to be cleared (%)	Reduction in clearing as a result of the change (%)
					WMDE	BTC	CBME[∞]	PAA				
AY^*	Open woodland of *Eucalyptus rudis* and *Eucalyptus wandoo* over *Acacia saligna, Hakea prostrata* and *Hypocalymma angustifolium* on clay-loams on valley floors.	✓	907.7	434.3	149	15.3	0	164.3	18%	67.5	7%	59%
AY/D*	Mosaic of site-vegetation types AY and D	x	5.4	5.3	0	1.3	0	1.3	24%	0.9	17%	29%
B*	Open woodland of *Eucalyptus marginata* and *Corymbia calophylla* over *Mesomelaena tetragona, Adenanthos obovatus* and *Babingtonia camphorosmae* on lower sandier soils on fringes of swamps and valley floors	x	6.2	0.5	0	0	0	0	0%	0.0	0%	
CQ	Open forest of *Eucalyptus marginata – Corymbia calophylla – Eucalyptus patens* on lower slopes with mixed understorey species, including *Trymalium floribundum, Agonis linearifolia* and *Astartea scoparia* along the edges of the deeper incised valleys near the creek-lines	x	12.1	9.6	0	0	0	0	0%	0.0	0%	
CW	Woodland to open forest of *Eucalyptus patens – Eucalyptus megacarpa – Corymbia calophylla – Banksia littoralis* with dense *Taxandria linearifolia* and *Astartea scoparia* in understorey on creek-lines and watercourses	x	32.6	17.9	0	0	9.8	9.8	30%	9.8	30%	0%
D*	Open forest of *Corymbia calophylla* and *Eucalyptus marginata* over *Hakea lissocarpha, Macrozamia riedlei, Acacia alata, Babingtonia camphorosmae, Hypocalymma angustifolium* and *Phyllanthus calycinus* on clay-loams on lower slopes	x	976	400.7	164.2	34.2	0	198.4	20%	139.6	14%	30%
DG^*	Open forest of *Corymbia calophylla* and *Eucalyptus marginata* over *Hakea lissocarpha, Macrozamia riedlei, Pericalymma ellipticum, Grevillea bipinnatifida, Allocasuarina humilis, Acacia alata, Babingtonia camphorosmae, Hypocalymma angustifolium*	✓	51.7	8.7	1.5	0.6	0	2.1	4%	1.5	3%	26%

Site-veg Type	Description	Conservation or Locally Significant	Extent within the Wider Mapped Areas (WMA) (ha)	Extent within the PAA	Previously proposed clearing (ha)^				Extent of the WMA previously proposed to be cleared (%)	Proposed clearing (ha)	Extent of the WMA proposed to be cleared (%)	Reduction in clearing as a result of the change (%)
					WMDE	BTC	CBME[∞]	PAA				
	and *Phyllanthus calycinus* on clay-loams on lower slopes with localised patches of outcropping											
G1^	Mosaic of open heath of Proteaceae – Myrtaceae spp. With emergent patches of *Eucalyptus drummondii* on shallow soils on slopes	✓	194.5	73.9	2.1	2.5	0	4.6	2%	2.5	1%	46%
G2^	Mosaic of open woodland of *Allocasuarina huegeliana* and closed heath of *Proteaceae* and *Myrtaceae* spp. To lithic complex on exposed or shallow granite outcrops	✓	186.9	7.6	1.9	0	0	1.9	1%	1.9	1%	-1%
G3^	Open heath of *Banksia squarrosa* subsp. *squarrosa, Hakea incrassata, Hakea undulata, Petrophile heterophylla* and *Petrophile serruriae* on shallow soils over granite outcrops on slopes with occasional emergent *Eucalyptus drummondii*	✓	137.6	75.5	13.2	0	0	13.2	10%	1.7	1%	87%
G4^	Open scrub and tall shrubland of *Hakea trifurcata* and *Hakea undulata* with admixtures of mallee species including *Eucalyptus latens* and *Eucalyptus aspersa* on clay to clay-loam soils over outcrops on slopes	✓	15.7	14.1	3.4	0	0	3.4	22%	1.4	9%	60%
H	Open forest to woodland of *Eucalyptus marginata* and *Corymbia calophylla* over *Petrophile striata, Daviesia decurrens* and *Daviesia longifolia* on sandy-gravel soils of slopes and less undulating hills	x	5422.6	1,812.5	902.7	18.8	0	921.5	17%	627.4	12%	32%
H1	Open forest to woodland of *Eucalyptus marginata* and *Corymbia calophylla* with occasional admixtures of *Banksia grandis* and *Persoonia longifolia* over *Acacia celastrifolia, Daviesia preissii, Leucopogon capitellatus* and *Styphelia*	x	212.4	138.2	70.1	0	0	70.1	33%	61.5	29%	12%

Site-veg Type	Description	Conservation or Locally Significant	Extent within the Wider Mapped Areas (WMA) (ha)	Extent within the PAA	Previously proposed clearing (ha)^				Extent of the WMA previously proposed to be cleared (%)	Proposed clearing (ha)	Extent of the WMA proposed to be cleared (%)	Reduction in clearing as a result of the change (%)
					WMDE	BTC	CBME[∞]	PAA				
	tenuiflora on gravel and sandy-gravel soils of slopes and less undulating hills											
H2	Open forest to woodland of *Eucalyptus marginata* and *Corymbia calophylla* over *Petrophile striata, Lepidosperma squamatum, Styphelia tenuiflora, Daviesia preissii*, and *Daviesia decurrens. Grevillea bipinnatifida, Allocasuarina humilis* and *Hakea undulata* on shallower sandy-gravel soils over granites or secondary laterisation areas on slopes and less undulating hills	x	1045.5	581.7	318.8	0	0	318.8	30%	288.4	28%	10%
HG^	Open woodland of *Eucalyptus patens* with some *Eucalyptus wandoo* over *Xanthorrhoea preissii, Macrozamia riedlei, Trymalium ledifolium, Acacia saligna* and *Hakea prostrata* on clay and clay loam soils on lower slopes	✓	150.2	51	25.5	0	0	25.5	17%	25.0	17%	2%
L*	Open woodland of *Eucalyptus wandoo* over *Trymalium ledifolium, Macrozamia riedlei* and *Hakea lissocarpha* on clay loams with some gravel on mid to upper slopes and ridges	✓	264.4	32.9	10.9	7.7	0	18.6	7%	8.1	3%	57%
M	Woodland to open woodland of *Eucalyptus accedens, Eucalyptus wandoo, Eucalyptus marginata, Corymbia calophylla* over *Hakea lissocarpha, Macrozamia riedlei, Banksia squarrosa* subsp. *squarrosa, Hypocalymma angustifolium, Babingtonia camphorosmae, Grevillea bipinnatifida* and *Allocasuarina humilis* on clay-loams over shallow granites on mid to upper slopes	x	4139.7	1,669.0	557.6	31.8	0	589.4	14%	395.7	10%	33%

Site-veg Type	Description	Conservation or Locally Significant	Extent within the Wider Mapped Areas (WMA) (ha)	Extent within the PAA	Previously proposed clearing (ha)^				Extent of the WMA previously proposed to be cleared (%)	Proposed clearing (ha)	Extent of the WMA proposed to be cleared (%)	Reduction in clearing as a result of the change (%)
					WMDE	BTC	CBME[∞]	PAA				
M2^	Open woodland of *Eucalyptus wandoo* over *Trymalium ledifolium*, *Macrozamia riedlei*, *Pericalymma ellipticum*, *Hypocalymma angustifolium*, *Grevillea bipinnatifida*, *Allocasuarina humilis* and *Hakea lissocarpha* on clay-loams over shallow granite on mid to upper slopes and ridges	✓	544.2	45.4	16.3	0	0	16.3	3%	3.6	1%	78%
MG^	Open forest of *Eucalyptus marginata* and *Allocasuarina fraseriana* with admixtures of *Corymbia calophylla* and *Banksia grandis* over *Lasiopetalum cardiophyllum*(P4), *Lasiopetalum floribundum*, *Lechenaultia biloba* and *Ptilotus drummondii* var. *drummondii* on sandy gravels on slopes and ridges	✓	501.2	220.5	39.3	0.1	0	39.4	8%	31.7	6%	20%
P	Open forest of *Eucalyptus marginata* and *Allocasuarina fraseriana* with admixtures of *Corymbia calophylla* and *Banksia grandis* over *Lasiopetalum cardiophyllum*(P4), *Lasiopetalum floribundum*, *Lechenaultia biloba* and *Ptilotus drummondii* var. *drummondii* on sandy gravels on slopes and ridges	x	1879.5	1,480.3	921.8	23.4	0	945.2	50%	917.4	49%	3%
PS	Open forest of *Allocasuarina fraseriana, Eucalyptus marginata, Corymbia calophylla* and *Banksia grandis* over *Adenanthos barbiger, Leucopogon capitellatus* on gravels and sandy gravels on slopes and ridges	x	2545.2	1,272.9	1,111.1	9.5	0	1120.6	44%	884.2	35%	21%
PW*	Open forest of *Allocasuarina fraseriana, Eucalyptus marginata, Corymbia calophylla*, and *Banksia grandis* with scattered understorey, including *Adenanthos barbiger, Leucopogon capitellatus* and *Hypocalymma angustifolium* on seasonally moister and sandy gravels on slopes	x	12.9	2.5	0	0.1	0	0.1	1%	0.0	0%	98%
Q	Open Forest of *Eucalyptus marginata – Corymbia calophylla – Eucalyptus patens* with mixed understorey species, including *Trymalium floribundum*, *Acacia extensa* and *Phyllanthus calycinus* on loam soils on lower slopes	x	66.3	64.9	0	0	13.6	13.6	21%	13.6	21%	0%

Site-veg Type	Description	Conservation or Locally Significant	Extent within the Wider Mapped Areas (WMA) (ha)	Extent within the PAA	Previously proposed clearing (ha)^				Extent of the WMA previously proposed to be cleared (%)	Proposed clearing (ha)	Extent of the WMA proposed to be cleared (%)	Reduction in clearing as a result of the change (%)
					WMDE	BTC	CBME[∞]	PAA				
R	Open woodland of *Eucalyptus marginata* and *Corymbia calophylla* over *Trymaliumledifolium*, *Phyllanthus calycinus* and *Hypocalymma angustifolium* on sandy-gravels associated with nearby shallow outcropping	x	28	1.3	0.5	0	0	0.5	2%	0.5	2%	4%
S	Open forest of *Eucalyptus marginata* and *Corymbia calophylla* with admixtures of *Allocasuarina fraseriana, Banksia grandis* and *Persoonia longifolia* over *Acacia celastrifolia, Hovea chorizemifolia, Daviesia preissii, Leucopogon capitellatus* and *Styphelia tenuiflora* on sandy-gravels on slopes and ridges	x	3651.5	1,748.4	972.5	25.8	59.3	1057.6	29%	917.1	25%	13%
SP	Open forest of *Eucalyptus marginata, Corymbia calophylla* and *Allocasuarina fraseriana* with admixtures of *Banksia grandis* over *Lasiopetalumcardiophyllum, Acacia celastrifolia, Styphelia tenuiflora, Daviesia decurrens* and *Trymaliumledifolium* on sandy-gravel to gravel soils on slopes and ridges	x	1373	96.3	71.2	1.2	0	72.4	5%	69.0	5%	5%
ST	Open forest of *Eucalyptus marginata* and *Corymbia calophylla* with admixtures of *Allocasuarina fraseriana, Persoonia longifolia* and *Banksia grandis* over *Stylidiumdichotomum, Acacia urophylla, Acacia celastrifolia, Leucopogon verticillatus, Clematis pubescens* and *Leucopogon capitellatus* on sandy loam gravel soils on slopes and ridges	x	877.1	608.2	248.2	1.2	123.7	373.1	43%	357.0	41%	4%
SW*	Open forest of *Eucalyptus marginata* and *Corymbia calophylla* over *Hypocalymma angustifolium, Babingtonia camphorosmae, Acacia celastrifolia, Hovea chorizemifolia, Daviesia preissii, Leucopogon capitellatus* and *Styphelia tenuiflora* on seasonally moister sandy-gravels on slopes	x	143.1	26.9	0.5	0	12.9	13.4	9%	12.9	9%	4%
T	Open forest of *Eucalyptus marginata – Corymbia calophylla* with scattered understorey, including *Leucopogon verticillatus, Pteridiumesculentum, Clematis pubescens* and *Bossiaea*	x	17.3	14	0	0	11.9	11.9	69%	11.9	69%	0%

Site-veg Type	Description	Conservation or Locally Significant	Extent within the Wider Mapped Areas (WMA) (ha)	Extent within the PAA	Previously proposed clearing (ha)^				Extent of the WMA previously proposed to be cleared (%)	Proposed clearing (ha)	Extent of the WMA proposed to be cleared (%)	Reduction in clearing as a result of the change (%)
					WMDE	BTC	CBME[∞]	PAA				
	aquifolium subsp. *aquifolium* on sandy loam gravelly soils on slopes and ridges											
TS	Open forest of *Eucalyptus marginata – Corymbia calophylla – Banksia grandis* with scattered understorey, including *Leucopogon verticillatus, Pteridium esculentum, Clematis pubescens* and *Bossiaea aquifolium* subsp. *aquifolium* on sandy-loam gravelly to gravelly soils	x	72	68.9	0	0	17.6	17.6	24%	17.6	24%	0%
W	Open forest of *Corymbia calophylla, Eucalyptus marginata* and *Eucalyptus patens* over *Hakea lissocarpha, Hypocalymma angustifolium, Acacia extensa* and *Synaphea petiolaris* on loam soils on lower slopes	x	48.2	0.8	0	0	0	0	0%	0.0	0%	
Y^*	Open woodland of *Eucalyptus wandoo* over *Gompholobium marginatum, Acacia nervosa, Babingtonia camphorosmae, Hypocalymma angustifolium, Macrozamia riedlei, Phyllanthus calycinus* and *Gastrolobium calycinum* on clay and clay-loam soils on lower slopes	P	2052.8	720.6	183.9	5.5	0	189.4	9%	68.8	3%	64%
YG^*	Open woodland of *Eucalyptus wandoo* over *Gompholobium marginatum, Acacia nervosa, Babingtonia camphorosmae, Hypocalymma angustifolium, Macrozamia riedlei, Pericalymma ellipticum, Grevillea bipinnatifida, Allocasuarina humilis, Phyllanthus calycinus* and *Gastrolobium calycinum* on clay and clay-loam soils with localised outcropping on lower slopes	✓	456.4	31.2	3.1	0.1	0	3.2	1%	0.5	0%	84%
Z	Open forest of *Eucalyptus marginata* and *Corymbia calophylla* over *Macrozamia riedlei, Xanthorrhoea preissii, Hakea lissocarpha* and *Phyllanthus calycinus* on sandy-loam to sandy-loam gravel soils on slopes	x	1374.9	844.4	480.2	13.9	0	494.1	36%	367.4	27%	26%

Site-veg Type	Description	Conservation or Locally Significant	Extent within the Wider Mapped Areas (WMA) (ha)	Extent within the PAA	Previously proposed clearing (ha)^				Extent of the WMA previously proposed to be cleared (%)	Proposed clearing (ha)	Extent of the WMA proposed to be cleared (%)	Reduction in clearing as a result of the change (%)
					WMDE	BTC	CBME[∞]	PAA				
CL	Cleared	x		2,899.2	0.8	0	0	0.8		0.8		
CL – Ag	Cleared agricultural areas	x		6,559.5	1,897.6	164.9	0	2,062.4		2062.4		
CL – Other	Cleared other areas (e.g. BGM)	x		3,249.10	0.1	0.4	0.03	0.5		0.5		
Dam	Dam	x		63.4	0	0	0	0		0.0		
PL	Plantations	x		229	87.2	0.4	0	87.6		87.6		
PL – Ag	Plantations on agricultural areas	x		185.4	0	0	0	0		0.0		
Rehab	Rehabilitation	x		3,163.6	598.4	11.2	7	616.6		623.6		
Rehab – Ag	Rehabilitation on agricultural areas	x		26.9	0.2	0	0	0.2	1%	0.2		
Total area				**29,356**	**8,901**	**388**	**255**	**9,545**	**33%**	**8,116**		
Total area of remnant native vegetation			**30,675**	**12,980**	**6,317**	**211**	**249**	**6,777**	**22%**	**5,341**	17%	
Total loss of native remnant vegetation minus Pre-existing Approval Area clearing+					**5,375**	**211**	**249**	**5,835**	**45%**	**4,339**	14%	25%

* Indicates the site-vegetation type is considered a potential GDE.

^ The IDF is used as an assessment tool for defining potential impacts and the maximum disturbance allowance within the corresponding Development Envelopes

[∞] The CBME assessment includes the 5ha of maintenance clearing within the RLA

[#] The G1 and G3 site-vegetation types are considered representative of the Priority 1 PEC – Mount Saddleback Heath Communities while the PEC is known to occur in the IDF, the Worsley Alumina Protected Areas Plan will ensure there will be no clearing of this community.

[+] 942 ha of approved clearing allocation remains within the Pre-existing Approval Area, specifically within the WMDE IDF. This Revised Proposal does not seek re-approval to clear the existing clearing allocation. Therefore, 942 ha has been removed from the residual clearing impact calculations.

Table 3 Fauna Habitat within the PAA Affected by Clearing – s43A Comparison

Fauna Habitat	Fauna Habitat Code	Extent within the PAA (ha)	Extent in wider mapped area (ha)	Previously Proposed clearing within the IDF (ha)				Previously Proposed clearing % of the WMA	Proposed clearing (ha)	Proposed clearing (%) of the WMA	Reduction in clearing as a result of the proposed change (%)
				WMDE	BTC	CBME[∞]	PAA				
Blackbutt woodlands on lower slopes	BB	126.1	425.6	10.9	7.7	23.5	42.1	10%	31.5	7%	25%
Mosaic of marri/jarrah on lower slopes and flooded gum riparian communities	FD	5.3	5.3	0	1.3	0	1.3	25%	0.9	17%	29%
Flooded gum woodlands riparian community	FG	698	1509.8	163.6	25.9	0	189.5	13%	79.0	5%	58%
Jarrah/marri valley floors/swamps	JS	0.5	6.2	0	0	0	0	0%	-	0%	0%
Melaleuca shrublands on seasonally wet valley floors	MS	132.9	671.3	32.6	7	0	39.6	6%	23.6	4%	40%
Flooded gum/Melaleuca shrublands on seasonally wet valley floors	MW	1.7	8.9	0	0	0	0	0%	-	0%	0%
Marri/jarrah on lower slopes	DL	437.1	1185.8	166.2	35.6	12.9	214.6	18%	154.0	13%	28%
Jarrah/marri/Allocasuarina (sheoak) woodlands on slopes and ridges	JC	5,208.6	10,339.4	3,325.00	61	183.1	3,569.1	35%	3,144.7	30%	12%
Jarrah/marri woodlands on slopes	JM	3,512.0	8,334.9	1,797.8	32.7	29.5	1,859.9	22%	1,399.7	17%	25%
Low Eucalyptus woodland over low shrubs	ML	14.1	21.6	3.4	0	0	3.4	16%	1.4	6%	60%
Wandoo woodlands	WO	2,686.6	7,694.3	800.2	37.4	0	837.6	11%	500.2	7%	40%
Heaths including perched heaths	PH	157.1	519	17.1	2.5	0	19.6	4%	6.1	1%	69%
Rehabilitation	RE	3,190.5	3,499.0	598.5	11.2	7	616.8	18%	605.2	17%	2%
Plantations	PL	414.4	4,775	87.2	0.4	0	87.6	2%	85.9	2%	2%
Dam	Dam	63.4	67	0	0	0	0	0%	-	0%	0%
Cleared lands	CL	12,708	17,672.00	1,898.40	165.2	0	2,063.60	12%	2,050.4	12%	1%
Total area		**29,356**	**56,735**	**8,901**	**388**	**255**	**9,545**	**17%**	**8,082**	**14%**	**15%**
Total area of native fauna habitat		**12,980**	**30,722**	**6,317**	**211**	**249**	**6,777**	**22%**	**5,341**	**17%**	**21%**
Total loss of native fauna habitat minus Pre-existing Approval Area clearing[+]				**5,375**	**211**	**249**	**5,835**	**19%**	**4,399**	**14%**	**25%**

[+] 942 ha of approved clearing allocation remains within the Pre-existing Approval Area, specifically within the WMDE IDF. This Revised Proposal does not seek re-approval to clear the existing clearing allocation. Therefore, 942 ha has been removed from the residual clearing impact calculations.

[∞] The CBME assessment includes the 5ha of maintenance clearing within the RLA

Attachment 5 – s156A Approved on 16 January 2020

Notification of
VARIATION OF PROPOSAL TO TAKE ACTION under section 156B of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)

Worsley Bauxite Alumina Project Expansion, Boddington, WA (EPBC 2019/8437)

The delegate of the Minister has accepted the variation to the proposal in accordance with section 156B of the EPBC Act

proposed action	To expand and operate the Worsley Bauxite Alumina Project. The project includes the expansion on the existing mine envelope, establishment of a bauxite transport corridor and establishment of a contingency bauxite mine area within Worsley Bauxite Alumina Project area, located 5 km to the south-west of Boddington, WA. [See EPBC Act referral 2019/8437].
Varied proposed action	To expand and operate the Worsley Bauxite Alumina Project. The project includes the expansion on the existing mine envelope, establishment of a bauxite transport corridor and establishment of a contingency bauxite mine area within Worsley Bauxite Alumina Project area, located 5 km to the south-west of Boddington, WA. [See EPBC Act referral 2019/8437 and variation received on 12 December 2019].
designated proponent	South32 Worsley Alumina Pty Ltd ACN 008 905 155
Variation	To reduce the size of the development envelope from 29, 362 ha to 29, 357 ha.
Decision-maker	
Name and position	Chris Videroni Acting Assistant Secretary Environment Approvals Division
Signature	
date of decision	16 January 2020

Attachment 6 - s156A Approved on 17 July 2020

Australian Government
Department of Agriculture, Water and the Environment

Notification of
VARIATION OF PROPOSAL TO TAKE ACTION under section 156B of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)

Worsley Bauxite Alumina Project Expansion, Boddington, WA (EPBC 2019/8437)

The delegate of the Minister has accepted the variation to the proposal in accordance with section 156B of the EPBC Act

proposed action	To expand and operate the Worsley Bauxite Alumina Project. The project includes the expansion on the existing mine envelope, establishment of a bauxite transport corridor and establishment of a contingency bauxite mine area within Worsley Bauxite Alumina Project area, located 5 km to the south-west of Boddington, WA. (See EPBC Act referral 2019/8437).
Varied proposed action	To expand and operate the Worsley Bauxite Alumina Project. The project includes the expansion on the existing mine envelope, establishment of a bauxite transport corridor and establishment of a contingency bauxite mine area within Worsley Bauxite Alumina Project area, located 5 km to the south-west of Boddington, WA. (See EPBC Act referral 2019/8437 and variations submitted to the Department dated 12 December 2019 and 12 June 2020).
designated proponent	South32 Worsley Alumina Pty Ltd ACN 008 905 155
Variation	To remove the 1 ha Lower Hotham Road Bridge area from the 29,357 ha development envelope.

Decision-maker

Name and position	Denis Snowdon Acting Assistant Secretary Environment Approvals Division
Signature	
date of decision	17 July 2020

Attachment 7 - s156A Approved on 28 July 2021

Australian Government
Department of Agriculture, Water and the Environment

Notification of
VARIATION OF PROPOSAL TO TAKE ACTION under section 156B of the *Environment Protection and Biodiversity Conservation Act 1999* (EPBC Act)

Worsley Bauxite Alumina Project Expansion, Boddington, WA (EPBC 2019/8437)

The delegate of the Minister has accepted the variation to the proposal in accordance with section 156B of the EPBC Act

proposed action	To expand and operate the Worsley Bauxite Alumina Project. The project includes the expansion on the existing mine envelope, establishment of a bauxite transport corridor and establishment of a contingency bauxite mine area within Worsley Bauxite Alumina Project area, located 5 km to the south-west of Boddington, WA. (See EPBC Act referral 2019/8437).
Varied proposed action	To expand and operate the Worsley Bauxite Alumina Project. The project includes the expansion on the existing mine envelope, establishment of a bauxite transport corridor and establishment of a contingency bauxite mine area within Worsley Bauxite Alumina Project area, located 5 km to the south-west of Boddington, WA. (See EPBC Act referral 2019/8437 and variations submitted to the Department dated 12 December 2019, 12 June 2020, and 25 June 2021).
designated proponent	South32 Worsley Alumina Pty Ltd ACN 008 905 155
Variation	To vary the scope of works to include an extension to the bauxite residue disposal area, and change the bauxite residue deposition rate from 18.5 Mtpa (wet) to 18.5 Mtpa (dry), located within the contingency bauxite mine envelope.

Decision-maker

Name and position	Kylie Calhoun Assistant Secretary Environment Assessments West (WA, SA, NT) Branch
Signature	
date of decision	28 July 2021