



Environmental Protection Authority

EPA Referral Form

Form for the referral of a proposal to the Environmental Protection Authority under Section 38 of the *Environmental Protection Act 1986*

Referrer information			
Who is referring this proposal?		<input checked="" type="checkbox"/> Proponent <input type="checkbox"/> Decision-making authority <input type="checkbox"/> Community member/third party	
Name Noel Pillay		Signature <i>Noel Pillay</i>	
Position	Vice President of Operations	Organisation	South32 Worsley Alumina Pty Ltd
Email	Noel.Pillay@south32.net		
Address	PO Box 344		
	Collie	WA	6225
Date	5/04/2019		
Does the referrer request that the EPA treat any part of the proposal information in the referral as confidential? <i>Provide confidential information in a separate attachment.</i>		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
Referral declaration for organisations, proponents and decision-making authorities: I, Noel Pillay declare that I am authorised to refer this proposal on behalf of South32 Worsley Alumina Pty Ltd and further declare that the information contained in this form is true and not misleading.			
Part A: Proponent and proposal description			
Proponent information			
Name of the proponent/s (including Trading Name if relevant)		South32 Worsley Alumina Pty Ltd is the agent for the Worsley Joint Venturers (the WJVs), in which the current participants are: <ul style="list-style-type: none"> • South32 Aluminium (RAA) Pty Ltd (ABN 54 095 831 119) - 56%; • South32 Aluminium (Worsley) Pty Ltd (ABN 33 088 336 921) - 30%; • Japan Alumina Associates (Australia) Pty Ltd (ABN 42 008 907 524) - 10%; and • Sojitz Alumina Pty Ltd (ABN 59 009 309 344) - (4%). 	
Australian Company Number(s)	✓	58 008 905 155	

OR Australian Business Number(s) <input type="checkbox"/>	
Contact for the proposal (if different from the referrer) <i>Please include: name, physical address, phone, and email.</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Dennis Lindgren Lead Environment South32 Ltd 108 St Georges Terrace PERTH WA 6000 Ph: 0435 635 941 Email: Dennis.Lindgren@south32.net
Does the proponent have the legal access required for the implementation of all aspects of the proposal? <i>If yes, provide details of legal access authorisations / agreements / tenure.</i> <i>If no, what authorisations / agreements / tenure is required and from whom?</i>	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No The majority of area (94.21%) covered by this Proposal is covered by land/tenure held, owned or managed by the WJVs, including: <ul style="list-style-type: none"> - Mining Lease 258SA (M258SA) granted pursuant to the <i>Alumina Refinery (Worsley) Agreement Act 1973</i> (Worsley State Agreement); - Mining Leases granted pursuant to the <i>Mining Act 1978</i>, specifically: <ul style="list-style-type: none"> • Mining Leases 70/110 to 70/116 and M70/554 held by WJVs and managed by Worsley, and • Mining Leases 70/21 to 70/26, M70/564, M70/799 held by WJVs and managed by Newmont Boddington Gold Pty Ltd (NBG). - Sublease agreements with Alcoa of Australia Ltd give the WJVs the right to access and mine within those areas of ML1SA granted pursuant to <i>Alumina Refinery Agreement Act 1961</i> (Alcoa State Agreement), as approved by the Minister/s responsible for the Alcoa State Agreement, Worsley State Agreement and the <i>Mining Act 1978</i>; - WJV Refinery Crown Land Title LR3080/471, subject to the Crown Lease I150306; - WJV Bauxite Residue Disposal Area Crown Land Titles LR3080/472 to 474, subject to the Crown Lease I154246; and - Multiple parcels of Freehold Land (Private Property) owned by WJVs (WJV Land). In other areas covered by the Proposal where the WJVs do not have current access of, the WJVs will secure tenure or access arrangements before commencing works in those areas.
Proposal type	
What type of proposal is being referred? For a change to an approved proposal please state the Ministerial Statement number/s (MS No./s) of the approved proposal	<input type="checkbox"/> significant – new proposal <input checked="" type="checkbox"/> significant – change to approved proposal (MS 719) <input type="checkbox"/> proposal under an assessed planning scheme <input type="checkbox"/> strategic

For a derived proposal please state the Ministerial Statement number (MS No.) of the associated strategic proposal	<input type="checkbox"/> derived (Strategic MS No.: _____)
For a significant proposal: <ul style="list-style-type: none"> Why do you consider the proposal may have a significant effect on the environment and warrant referral to the EPA? 	Expansion of existing mining envelope to extend mining activities into existing and new areas at the Boddington Bauxite Mine, realignment and development of the Bauxite Transport Corridor with optionality for road and conveyor transport, and activities within the Refinery Lease Area for contingency bauxite mining (if and when required). The Proposal involves the expansion of the existing mining envelope from 22,102 ha to 27,796 ha and requires additional clearing within the Refinery Lease Area boundary.
For a proposal under an assessed planning scheme, provide the following details: <ul style="list-style-type: none"> Scheme name and number For the Responsible Authority: <ul style="list-style-type: none"> What new environmental issues are raised by the proposal that were not assessed during the assessment of the planning scheme? How does the proposal not comply with the assessed scheme and/or the environmental conditions in the assessed planning scheme? 	N/A
Proposal description	
Title of the proposal	Worsley Mine Expansion
Name of the Local Government Authority in which the proposal is located.	Shire of Boddington Shire of Collie Shire of Harvey
Location: a) street address, lot number, suburb, and nearest road intersection; or b) if remote the nearest town and distance and direction from that town to the proposal site.	Boddington Bauxite Mine – Pinjarra Williams Road, Marradong WA 6390 Worsley Alumina Refinery – Gastaldo Road, Worsley WA 6225
Proposal description – including the key characteristics of the proposal <i>Provide as an attachment to the form</i>	This is included within the appended <i>Worsley Mining Expansion (Revised Proposal) – Referral Supporting Document March 2019 (Supporting Document)</i> .
Have you provided electronic spatial data, maps and figure in the appropriate format? <i>Refer to instructions at the front of the form</i>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Spatial data has been provided for the following primary Proposal elements: <ul style="list-style-type: none"> Proposed Worsley Mining Development Envelope (WMDE) boundary Pre-existing Approval Area Proposed Contingency Bauxite Mining Envelope (CBME)

	<ul style="list-style-type: none"> • Proposed Bauxite Transport Corridor (BTC) • Existing Conveyor and Transport Infrastructure • Refinery Crown Lease <p>For the areas relevant to other minor Proposal elements (including exploration, and mine infrastructure) please refer to section 2.1 of the supporting document.</p>
What is the current land use on the property, and the extent (area in hectares) of the property?	<p>The WMDE and the Bauxite Transport Corridor cover private property and Crown Land. Crown Land includes <i>part of</i> the Marradong and Saddleback Timber Reserves. The DBCA manages the Timber Reserves for timber production, recreation and biodiversity conservation. The WMDE also includes <i>part of</i> a State managed Forest Products Commission plantation of <i>Eucalyptus saligna</i>. The Bibbulmun walking trail is located within, and to the northern extent of the WMDE and under the existing Overland Bauxite Conveyor.</p> <p>The CBME is located within the Refinery Crown Lease, which is an existing Crown Lease and is used for the purpose of refining and associated activities.</p> <p>The existing conveyor associated infrastructure and Boddington Bauxite Mine are used for transport and mining purposes respectively.</p> <p>The WMDE covers an area of 27,796 ha over varying land uses. The Bauxite Transport Corridor referral area covers 4,146 ha (including 3,332 ha which is overlapped with the WMDE).</p> <p>The CBME referral area within the Refinery Crown Lease comprises 747 ha, and the Refinery Crown Lease covers 2,500 ha.</p> <p>The existing conveyor covers 236 ha.</p>
Have you had pre-referral discussions with the EPA at DWER Services? If so, quote the reference number and/or the DWER contact.	<p>Yes, the following pre-referral discussions were conducted:</p> <ol style="list-style-type: none"> 1. Tuesday 11 December 2018, with Nyomi Bowers. 2. Tuesday 12 February 2019 with Nyomi Bowers, Rohan Mascarenhas and Department of the Environment and Energy <p>No reference number has been provided to date.</p>
Part B: Environmental impacts	
Environmental factors	
What are the likely significant environmental factors for this proposal?	<ul style="list-style-type: none"> <input type="checkbox"/> Benthic Communities and Habitat <input type="checkbox"/> Coastal Processes <input type="checkbox"/> Marine Environmental Quality <input type="checkbox"/> Marine Fauna <input checked="" type="checkbox"/> Flora and Vegetation <input type="checkbox"/> Landforms

	<input type="checkbox"/> Subterranean Fauna <input checked="" type="checkbox"/> Terrestrial Environmental Quality <input checked="" type="checkbox"/> Terrestrial Fauna <input checked="" type="checkbox"/> Inland Waters <input checked="" type="checkbox"/> Air Quality <input checked="" type="checkbox"/> Social Surroundings <input type="checkbox"/> Human Health	
<p>For each of the environmental factors identified above, complete the following table, or provide the information in a supplementary report</p> <p>A supplementary report has been attached titled, <i>Worsley Mining Expansion (Revised Proposal) – Referral Supporting Document March 2019 (Supporting Document)</i>.</p>		
Potential environmental impacts		
1	EPA Factor	Refer to <i>(Supporting Document)</i> .
2	EPA policy and guidance - What have you considered and how have you applied them in relation to this factor?	Refer to <i>(Supporting Document)</i> .
3	Consultation – Outline the outcomes of consultation in relation to the potential environmental impacts	Refer to <i>(Supporting Document)</i> .
4	Receiving environment – Describe the current condition of the receiving environment in relation to this factor.	Refer to <i>(Supporting Document)</i> .
5	Proposal activities – Describe the proposal activities that have the potential to impact the environment	Refer to <i>(Supporting Document)</i> .
6	Mitigation – Describe the measures proposed to manage and mitigate the potential environmental impacts.	Refer to <i>(Supporting Document)</i> .
7	Impacts – Assess the impacts of the proposal and review the residual impacts against the EPA objective.	Refer to <i>(Supporting Document)</i> .
8	Assumptions - Describe any assumptions critical to your assessment e.g. particular mitigation measures or regulatory conditions.	Refer to <i>(Supporting Document)</i> .

Part C: Other approvals and regulation

State and Local Government approvals

Is rezoning of any land required before the proposal can be implemented?

☐ Yes

☒ No

If yes, please provide details.

If this proposal has been referred by a decision-making authority, what approval(s) are required from you?

N/A

Please identify other approvals required for the proposal

Proposal activities e.g. clearing, dewatering, mining, processing, dredging	Land tenure/access	Type of approval	Legislation regulating the activity
<p>S41A(3) <i>Minor and preliminary works</i> comprising:</p> <ul style="list-style-type: none"> Minor geotechnical investigations for road transport corridors Construction of a bridge over Lower Hotham Road to enable ongoing mining activity Power line decommissioning, realignment and re-instatement of power supply to existing users to avoid mining and ore transport activity. 	<ul style="list-style-type: none"> Private Property Unallocated Crown Land Crown Reserves including road reserves State Forest 	<p>Native Vegetation Clearing Permit for minor clearing</p> <p>Bed and Banks (s17.)</p> <p>Regulation 4 Lawful Authority to do an act (Access from DBCA)</p> <p>Western Power decommission, design and install consent to meet Legislated Occupational Safety and Health requirements</p>	<p><i>EP Act 1986 – Part V</i></p> <p><i>Rights in Water and Irrigation Act 1914 (WA)</i></p> <p><i>Conservation and Land Management Regulations 2002</i></p> <p><i>Occupational Safety and Health Regulations 1996</i></p>
S18 Notice	<ul style="list-style-type: none"> M258SA ML1SA Subleases (fore disturbance to a registered Aboriginal Heritage site) 	Consent to use the land	<i>Aboriginal Heritage Act 1972</i>
Exploration – ongoing	<ul style="list-style-type: none"> Mining Act Tenure M258SA ML1SA Subleases 	<p>Programme of Works</p> <p>10 Year Plan</p>	<p><i>Mining Act 1978</i></p> <p><i>Alumina Refinery (Worsley) Agreement Act 1973</i></p>

Part C: Other approvals and regulation

State and Local Government approvals

Mining	<ul style="list-style-type: none"> • Mining Leases • M258SA • ML1SA Subleases • Mineral to Owner Private Property 	<p>Mining Proposal</p> <p>10 Year Plan</p> <p>Development Approval in areas of freehold title where most mineral rights are conveyed to the owner of the land (Minerals to Owner freehold land), local planning schemes and other relevant laws.</p>	<p><i>Mining Act 1978</i></p> <p><i>Alumina Refinery (Worsley) Agreement Act 1973</i></p> <p><i>Development Act 2005 and relevant Local Government laws & processes.</i></p>
Continuing activities		Part V Licences	<i>Environmental Protection Act 1986</i>
Water extraction	<ul style="list-style-type: none"> • Surrounding operations 	<p>Water usage at the Refinery for contingency bauxite mining will be managed under existing surface water licences issued under the Rights in Water and Irrigation Act 1914 and no changes to licence conditions are required. Currently groundwater abstracted at the BBM is within groundwater areas not proclaimed under Rights in Water and Irrigation Act 1914 and subsequently have not been required to be licenced.</p>	<i>Rights in Water and Irrigation Act 1914</i>

Part C: Other approvals and regulation

State and Local Government approvals

Construction	<ul style="list-style-type: none"> • Mining Act Tenure • M258SA • ML1SA Subleases • Mineral to Owner Private Property (which includes private property, Crown Reserves, including road reserves and State Forest/Timber Reserves) • Crown leases • Unallocated Crown Land • M258SA • ML1SA Subleases 	Building and Development Freehold title where most mineral rights are conveyed to the owner of the land (Minerals to Owner freehold land), and local planning schemes and other relevant laws Ministerial Consent Mining Proposals 10 Year Plan	<i>Building Act 2011</i> <i>Planning and Development Act 2005</i> <i>Local Planning Schemes</i> <i>Land Administration Act 1997</i> <i>Mining Act 1978</i> <i>Alumina Refinery (Worsley) Agreement Act 1973</i>
--------------	--	---	--

Any additional approvals required.

Commonwealth Government approvals

Does the proposal involve an action that may be or is a controlled action under the <i>Environment Protection and Biodiversity Conservation Act 1999</i> (EPBC Act)?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Has the proposed action been referred? If yes, when was it referred and what is the reference number (EPBC No.)?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No Date: _____ EPBC No.: _____ <i>Please note that an EPBC referral will be submitted to the DoEE for this Revised Proposal close to the time of this submission.</i>
If referred, has a decision been made on whether the proposed action is a controlled action? If 'yes', check the appropriate box and provide the decision in an attachment.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> Decision – controlled action <input type="checkbox"/> Decision – not a controlled action
If the proposal is determined to be a controlled action, do you request that this proposal be assessed under the bilateral agreement or as an accredited assessment?	<input type="checkbox"/> Yes - Bilateral <input type="checkbox"/> No <input checked="" type="checkbox"/> Yes - Accredited

Part C: Other approvals and regulation

State and Local Government approvals

Is approval required from other Commonwealth Government/s for any part of the proposal?

If yes, describe.

☐ Yes

☒ No

Approval: