



Referral of a Proposal to the Environmental Protection Authority under Section 38 of the *Environmental Protection Act 1986*.

PURPOSE OF THIS FORM

Section 38 of the *Environmental Protection Act 1986* (EP Act) makes provision for the referral to the Environmental Protection Authority (EPA) of a proposal (significant proposals, strategic proposals and proposals under an assessed scheme) by a proponent, a decision making authority (DMA), or any other person.

The purpose of this form is to ensure that EPA has sufficient information about a proposal to make a decision about the nature of the proposal and whether or not the proposal should be assessed under Part IV of the EP Act. Information provided in the referral form must be brief (no more than 30 pages), sharp and succinct to achieve the purposes of this form.

This form does not prevent the referrer from providing a supplementary referral report. Should a referrer choose to submit a supplementary referral report please ensure the following.

- i. Information is short, sharp and succinct.
- ii. Attachments are below eight megabytes (8 MB) as they will be published on the EPA's website (exemptions apply) for public comment. To minimise file size, "flatten" maps and optimise pdf files.
- iii. Cross-references are provided in the referral form to the appropriate section/s in the supplementary referral report.

This form is to be used for all proposals¹ which can be referred to the EPA under section 38 of the EP Act; i.e. referrals from: **proponents** of proposals (significant proposals, strategic proposals, derived proposals, proposals under an assessed scheme); **DMAs** (significant proposals); and **third parties** (significant proposals).

This form is divided into several sections, including; Referral requirements and Declaration; Part A - Information of the proposal and proponent; and Part B Environmental Factors. Guidance on successfully completing this form is provided throughout the form and is also available in the EPA's *Environmental Assessment Guideline for Referral of a Proposal under s38 of the EP Act (EAG 16)*.

Send completed forms to

Office of the Environmental Protection Authority
Locked Bag 10, East Perth WA 6892

or

Email: Registrar@epa.wa.gov.au

Enquiries

Office of the Environmental Protection Authority
Locked Bag 10, East Perth WA 6892

Telephone: 6145 0800

Fax: 6145 0895

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Website: www.epa.wa.gov.au

¹ Please note that this form consolidates and replaces the following forms: *Referral of a Proposal by the Proponent to the EPA under section 38(1) of the EP Act*; *Referral of a Proposal by a third party to the EPA under section 38(1) of the EP Act*; and *Referral of a development proposal to the EPA by the decision making authority*.

Referral requirements and Declaration

The following section outlines the referral information required from a proponent, decision making authority and third party.

(a) Proponents

Proponents are expected to complete all sections of the form and provide GIS spatial data to enable the EPA to consider the referral. Spatial GIS data is necessary to inform the EPA's decision.

The EPA expects that a proponent will address Part B of the form as thoroughly as possible to demonstrate whether or not the EPA's objectives for environmental factors can be met.

If insufficient information is provided the EPA will request more information and processing of the referral will commence once the information is provided or the EPA decides to make a precautionary determination on the available information.

Proponent to complete before submitting form	
Completed all the questions in Part A (essential)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Completed all the questions in Part B	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Completed all other applicable questions	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Included Attachment 1 – any additional document(s) the proponent wishes to provide	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Included Attachment 2 – confidential information (if applicable)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Enclosed an electronic copy of all referral information, including spatial data and contextual mapping but clearly separating any confidential information	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Completed the Declaration	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
What is the type of proposal being referred? <i>* a referred proposal seeking to be declared a derived proposal</i>	<input checked="" type="checkbox"/> significant <input type="checkbox"/> strategic <input type="checkbox"/> derived* <input type="checkbox"/> under an assessed scheme
Do you consider the proposal requires formal environmental impact assessment?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
If yes, what level of assessment? <i>API = Assessment of Proponent Information</i> <i>PER = Public Environmental Review</i>	<input type="checkbox"/> API Category A <input type="checkbox"/> API Category B <input checked="" type="checkbox"/> PER

NB: The EPA may apply an Assessment on Proponent Information (API) level of assessment when the proponent has provided sufficient information about:

- the proposal;
- the proposed environmental impacts;
- the proposed management of the environmental impacts; and
- when the proposal is consistent with API criteria outlined in the [Environmental Impact Assessment \(Part IV Division 1 and 2\) Administrative Procedures 2012](#).

If an API A formal level of assessment is considered appropriate, please refer to Environmental Assessment Guideline No. 14 *Preparation for an Assessment on Proponent Information (Category A) Environmental Review Document EAG 14 (EAG14)*.

Declaration

I,.....Jarrad Donald....., (*full name*) declare that I am authorised on behalf of... St Ives Gold Mining Company Pty Ltd (being the person responsible for the proposal) to submit this form and further declare that the information contained in this form is true and not misleading.

Signature			Name (print) Mr Jarrad Donald	
Position	Superintendent: Environment	Organisation	St Ives Gold Mining Company Pty Ltd	
Email	jarrad.donald@goldfields.com.au			
Address	Street No.	Street Name Durkin Road		
	Suburb Kambalda		State WA	Postcode 6442
Date	15/12/2016			

(b)-Decision-making authority

The EPA expects decision-making authorities to complete applicable sections of Part A of the form and provide the proponent an opportunity to provide additional information in Part B of the form where appropriate.

Wherever possible the DMA should obtain relevant spatial information from the proponent and provide this to the EPA with the referral.

DMA to complete before submitting form	
Completed all the questions in Part A (essential)	<input type="checkbox"/> Yes <input type="checkbox"/> No
Provided Part B to the proponent for completion	<input type="checkbox"/> Yes <input type="checkbox"/> No
Completed all other applicable questions	<input type="checkbox"/> Yes <input type="checkbox"/> No
Included Attachment 1 – any supporting information	<input type="checkbox"/> Yes <input type="checkbox"/> No
Enclosed an electronic copy of all referral information, including spatial data and contextual mapping	<input type="checkbox"/> Yes <input type="checkbox"/> No
Completed the below Declaration	<input type="checkbox"/> Yes <input type="checkbox"/> No
Do you consider the proposal requires formal environmental impact assessment?	<input type="checkbox"/> Yes <input type="checkbox"/> No
What is the type of proposal being referred?	<input type="checkbox"/> significant proposal <input type="checkbox"/> significant proposal under an assessed scheme

Declaration

I,, (*full name*) submit this referral to the EPA for consideration of the environmental significance of its impacts.

Signature		Name (print)	
Position		Organisation	
Email			
Address	Street No.	Street Name	
	Suburb	State	Postcode
Date			

(c) Third Party

Third parties are asked to have consideration for the Significance Test outlined in Part A Section 1.5 of this form before referring a significant proposal to the EPA. The EPA will only consider proposals that are likely, if implemented, to have a significant effect on the environment.

Third parties are to provide sufficient information to clearly identify the significant proposal, the proponent, and their reasons for referring the proposal. This can be done by completing as much of Part A of the form as possible, taking into consideration the information available. Third parties may wish to fill in Part B of the form to advance their own views of the significance of the environmental impacts and the need for EPA assessment.

In most cases the EPA will seek additional information from the proponent. This will be to confirm or amend the identity of the proponent, the proposal, and to allow the proponent opportunity to provide its views on the significance of the environmental impacts and the need for EPA assessment.

Third Party to complete before submitting form	
Complete all applicable questions in Part A and B	<input type="checkbox"/> Yes <input type="checkbox"/> No
Completed the Declaration	<input type="checkbox"/> Yes <input type="checkbox"/> No
Do you consider the proposal requires formal environmental impact assessment?	<input type="checkbox"/> Yes <input type="checkbox"/> No

Declaration

I,, (*full name*) submit this referral to the EPA for consideration of the environmental significance of its impacts.

Signature		Name (print)		
Email				
Position		Organisation		
Address	Street No.	Street Name		
	Suburb	State	Postcode	
Date				

PART A: Information on the proposal and the proponent

All fields of Part A must be completed by the proponent and/or decision-making authority for this document to be processed as a referral. Third party referrers are only expected to fill in the fields they have information for.

1 PROPONENT AND PROPOSAL DESCRIPTION

1.1 The proponent of the proposal

Proponent and/or DMA to complete	
Name of the proponent	St Ives Gold Mining Company Pty Ltd
Joint Venture parties (if applicable)	
Australian Company Number(s)	105 124 034
Postal Address <i>(Where the proponent is a corporation or an association of persons, whether incorporated or not, the postal address is that of the principal place of business or of the principal office in the State)</i>	St Ives Gold Mine PO Box 359 Kambalda West WA 6442
Key proponent contact for the proposal <i>Please include: name; physical address; phone; and email.</i>	<i>Name:</i> Mr. Jarrad Donald <i>Position:</i> Superintendent: Environment <i>Address:</i> St Ives Gold Mine Durkin Road Kambalda WA 6442 <i>Phone:</i> (08) 9088 1823 <i>Email:</i> jarrad.donald@goldfields.com.au
Consultant for the proposal (if applicable) <i>Please include: name; physical address; phone; and email.</i>	<i>Consultant:</i> Talis Consultants Pty Ltd <i>Name:</i> Andrew Mack <i>Address:</i> Level 1 660 Newcastle Street Leederville WA 6007 <i>Phone:</i> (08) 6557 5213 <i>Email:</i> andrew.mack@talisconsultants.com.au

1.2 Proposal

Proposal is defined under the EP Act to mean a “project, plan, programme policy, operation, undertaking or development or change of land use, or amendment of any of the foregoing, but does not include scheme”. Before completing this section please refer to [Environmental Protection Bulletin 17 – Strategic and derived proposals \(EPB 17\)](#) and [Environmental Assessment Guideline for Defining the Key Characteristics of a proposal \(EAG 1\)](#).

Proponent and/or DMA to complete	
Title of the proposal	Beyond 2018 Operational Project
What project phase is the proposal at?	<input checked="" type="checkbox"/> Scoping <input type="checkbox"/> Feasibility <input type="checkbox"/> Detailed design <input type="checkbox"/> Other _____
Proposal type <i>More than one proposal type can be identified, however for filtering purposes it is recommended that only the primary proposal type is identified.</i>	<input type="checkbox"/> Power/Energy Generation <input type="checkbox"/> Hydrocarbon Based – coal <input type="checkbox"/> Hydrocarbon Based – gas <input type="checkbox"/> Waste to energy <input type="checkbox"/> Renewable – wind

Proponent and/or DMA to complete

- Renewable – wave
- Renewable – solar
- Renewable – geothermal

Mineral / Resource Extraction

- Exploration – seismic
- Exploration – geotechnical
- Development

Oil and Gas Development

- Exploration
- Onshore – seismic
- Onshore – geotechnical
- Onshore – development
- Offshore – seismic
- Offshore – geotechnical
- Offshore – development

Industrial Development

- Processing
- Manufacturing
- Beneficiation

Land Use and Development

- Residential – subdivision
- Residential – development
- Commercial – subdivision
- Commercial – development
- Industrial – subdivision
- Industrial – development
- Agricultural – subdivision
- Agricultural – development
- Tourism

Linear Infrastructure

- Rail
- Road
- Power Transmission
- Water Distribution
- Gas Distribution
- Pipelines

Water Resource Development

- Desalination
- Surface or Groundwater
- Drainage
- Pipelines
- Managed Aquifer Recharge

Marine Developments

- Port
- Jetties
- Marina

Proponent and/or DMA to complete	
	<input type="checkbox"/> Canal <input type="checkbox"/> Aquaculture <input type="checkbox"/> Dredging <i>If other, please state below:</i> <input type="checkbox"/> Other _____
Proponent and/or DMA to complete	
Description of the proposal – describe the key characteristics of the proposal in accordance with EAG 1 .	<p>The primary objective of the Beyond 2018 Project (B2018 Project) is to ensure the continuation of the St Ives Gold Mine beyond 2018. The B2018 Project will require an expansion outside of the existing MS879 approved disturbance footprint (2,061 ha) to facilitate mining for a ten year period (i.e. to 2028). This continuation of the operations should not require a change to the current mining or processing methods. Notwithstanding this, alternate methods for cost effective and safe mining are always under consideration and in the event that a substantive change is desired that would alter the impacts of the B2018 Project, this will be discussed with relevant regulators at the time.</p> <p>The B2018 Project comprises a number of indicative development envelopes. The study area and these envelopes are provided in Figure 2 in the attached supporting document. Further footprint definition within these indicative development envelopes is in progress with a suite of surveys and investigations having been instigated to inform this process.</p> <p>SIGM proposes a delineated approach that would include both terrestrial and lake-based tenure with a set disturbance limit based on location. The maximum proposed disturbance is 5,000 ha which consists of the following:</p> <ul style="list-style-type: none"> • Lake based disturbance up to 200ha per year over a ten year period with a total maximum of 2,000 ha; and • Land based disturbance up to 300ha per year over a ten year period with a total maximum of 3,000 ha. <p>These limits are seen as the upper thresholds for disturbance and may be reduced as studies are completed and where areas of particular environmental value are identified and determined to warrant protection through avoidance.</p>

Proponent and/or DMA to complete	
	<p>The proposed disturbance results in up to 7,061 ha of total disturbance which consists of 4,061 ha of lake disturbance and 3,000 ha of land disturbance.</p> <p>It is not expected that the annual dewatering volumes will change from the current approved value of 30 GL per annum although further studies will confirm this.</p>
Timeframe in which the proposal is to occur (including start and finish dates where applicable).	Tentatively due to commence in 2019 and conclude in 2028.
Details of any staging of the proposal.	The disturbance will occur over a period of 10 years in accordance with the normal sequential approach to mining.
What is the current land use on the property, and the extent (area in hectares) of the property?	A mix of exploration, freehold, prospecting, general purpose, miscellaneous and mining tenements covering an area of approximately 143,585 hectares. All of which are held by St Ives with the exception of one tenement which is yet to be acquired.
<p>Have pre-referral discussions taken place with the OEPA?</p> <p>If yes, please provide the case number. If a case number was not provided, please state the date of the meeting and names of attendees.</p>	<p>Yes, St Ives and Talis have met with representative of the OEPA on three occasions, no case number was provided. Details of the meetings as follows:</p> <ul style="list-style-type: none"> • 28 July 2016 (incl. P. Tapsell) – Introduction of project and general discussions re. process moving forward; • 27 September 2016 (incl. P. Tapsell & C. Stanley) – Project update and general discussions to ensure alignment; and • 29 November (incl. C. Stanley & C. Hanush) – Discussion of referral.
DMA (Responsible Authority) to complete	
<p>For a proposal under an assessed scheme (as defined in section 3 of the EP Act, applicable only to the proponent and DMA) provide details (in an attachment) as to whether:</p> <ul style="list-style-type: none"> • <i>The environmental issues raised by the proposal were assessed in any assessment of the assessed scheme.</i> • <i>The proposal complies with the assessed scheme and any environmental conditions in the assessed scheme.</i> 	

1.3 Strategic / derived proposals

Complete this section if the proposal being referred is a strategic proposal or you are seeking the proposal to be declared a derived proposal. Note: Only a proponent may refer a strategic proposal and seek a proposal to be declared a derived proposal.

Proponent to complete	
Is this referred proposal a strategic proposal?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
Are you seeking that this proposal be declared a derived proposal?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
If you are seeking that this proposal be declared a derived proposal, what is the Ministerial Statement number (MS #) of the associated strategic proposal?	MS #: _____ N/A

1.4 Location

Proponents and DMAs must provide spatial data. Please refer to [EAG 1](#) for more detail.

Proponent, DMA and Third Party to complete	
Name of the Local Government Authority in which the proposal is located.	Shire or Coolgardie
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.	The B2018 Project is located on and adjacent to Lake Lefroy, approximately 20km southeast of Kambalda in Western Australia (refer to Figure 1 in the attached supporting document).
Have maps and figures been included with the referral (consistent with EAG 1 where appropriate)? <i>The types of maps and figures which need to be provided (depending on the nature of the proposal) include:</i> <ul style="list-style-type: none"> maps showing the regional location and context of the proposal; and figures illustrating the proposal elements. 	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No Refer to figures in the attached supporting document and associated spatial data.
Proponent and DMA to complete	
Have electronic copies of spatial data been included with the referral? NB: Electronic spatial (GIS or CAD) data, geo-referenced and conforming to the following parameters: <ul style="list-style-type: none"> GIS: polygons representing all activities and named; CAD: simple closed polygons representing all activities and named; datum: GDA94; projection: Geographic (latitude/longitude) or Map Grid of Australia (MGA); format: ESRI geodatabase or shapefile, MapInfo Interchange Format, Microstation or AutoCAD.. 	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

1.5 Significance test and environmental factors

Proponent, DMA and Third Party to complete
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Proponent, DMA and Third Party to complete	
What are the likely significant environmental factors for this proposal?	<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 type="checkbox"/> Terrestrial Environmental Quality <input checked="" type="checkbox"/> Terrestrial Fauna <input checked="" type="checkbox"/> Hydrological Processes <input checked="" type="checkbox"/> Inland Waters Environmental Quality <input type="checkbox"/> Air Quality & Atmospheric Gases <input type="checkbox"/> Amenity <input type="checkbox"/> Heritage <input type="checkbox"/> Human Health <input type="checkbox"/> Offsets <input checked="" type="checkbox"/> Rehabilitation and Decommissioning
Having regard to the Significance Test (refer to Section 7 of the EIA Administrative Procedures 2012) in what ways do you consider the proposal may have a significant effect on the environment and warrant referral to the EPA?	<p>Given the suite of existing statutory processes regulated by various Decision Making Authorities (DMAs) and the likely impacts associated with the B2018 Project, a preliminary assessment of the risks suggests that there are no impacts that are unacceptable or cannot readily be managed appropriately via existing regulatory mechanisms and internal SIGM controls.</p> <p>Notwithstanding this, the factors identified above are further considered in Section 4.3 in the supporting document as well as in Part B of this referral form.</p>

1.6 Confidential information

All information will be made publically available unless authorised for exemption under the EP Act or subject to the Freedom of Information Act 1992.

Proponent to complete	
Does the proponent request that the EPA treat any part of the referral information as confidential?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No
<i>Ensure all confidential information is provided in a separate attachment in hard copy.</i>	

2 REGULATORY CONSIDERATIONS

This section applies to the Local, State and Commonwealth regulatory considerations for the referred proposal.

2.1 Government approvals

2.1.1 State or Local Government approvals

DMA to complete	
What approval(s) is (are) required from you as a decision-making authority?	
Is rezoning of any land required before the proposal can be implemented? If yes, please provide details.	<input type="checkbox"/> Yes <input type="checkbox"/> No

2.1.2 Regulation of aspects of the proposal

Complete the following to the extent possible.

Proponent to complete	
<p>Do you have legal access required for the implementation of all aspects of the proposal?</p> <p><i>If yes, provide details of legal access authorisations / agreements / tenure.</i></p> <p><i>If no, what authorisations / agreements / tenure is required and from whom?</i></p>	<p><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No</p> <p>Any exploration tenure requiring conversion to a mining lease will be converted to mining tenure under the Mining Act, when required.</p>

Outline both the existing approvals and approvals that will be / are being sought as a part of this proposal.

Proponent to complete			
Aspects* of the proposal	Type of approval	Legislation regulating this activity	Which State agency /entity regulate this activity?
Existing Approvals (may be used, revised and/or superseded in the future)			
Processing or beneficiation of metallic ore	Environmental Licence (L8485/2010/2)	<i>Environmental Protection Act 1986</i>	Department of Environment Regulation
Mine dewatering	Environmental Licence (L8485/2010/2)	<i>Environmental Protection Act 1986</i>	Department of Environment Regulation
Vat or in situ leaching of metal	Environmental Licence (L8485/2010/2)	<i>Environmental Protection Act 1986</i>	Department of Environment Regulation
Sewage facility	Environmental Licence (L8485/2010/2)	<i>Environmental Protection Act 1986</i>	Department of Environment Regulation
Class II or III putrescible landfill facility	Environmental Licence (L8485/2010/2)	<i>Environmental Protection Act 1986</i>	Department of Environment Regulation
Groundwater Abstraction	Licences to take water (Section 5C): GWL62505 and GWL171060	<i>Rights in Water and Irrigation Act 1914</i>	Department of Water
Gold Mine Developments on Lake Lefroy	Ministerial Statement (MS879)	<i>Environmental Protection Act 1986</i>	Environmental Protection Authority
Future Approvals (may be sought in the future)			
Gold Mine Development	Ministerial Statement	<i>Environmental Protection Act 1986</i>	Environmental Protection Authority
Gold Mine Development	Mining Proposal/s and similar instruments	<i>Mining Act 1978</i>	Department of Mines and Petroleum
Gold Mine Development	Section 18 application	<i>Aboriginal Heritage Act 1972</i>	Department of Aboriginal Affairs

*e.g. mining, processing, dredging

2.1.3 Commonwealth Government Environment Protection and Biodiversity Conservation Act 1999 approvals

Refer to the [assessment bilateral agreement](#) between the Commonwealth of Australia and the State of Western Australia for assistance on this section.

Proponent to complete	
1. 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 type="checkbox"/> Yes <input checked="" type="checkbox"/> No <i>If no continue to Part A section 2.1.4.</i>
2. What is the status of the decision on whether or not the action is a controlled action?	<input type="checkbox"/> Proposal not yet referred <input type="checkbox"/> Proposal referred, awaiting decision <input type="checkbox"/> Assessed – controlled action <input type="checkbox"/> Assessed – not a controlled action
3. If the action has been referred, when was it referred and what is the reference number (Ref #)?	Date: _____ Ref #: _____
4. If the action has been assessed, provide the decision in an attachment. Has an attachment been provided?	<input type="checkbox"/> Yes <input type="checkbox"/> No
5. Do you request this proposal to be assessed under the bilateral agreement?	<input type="checkbox"/> Yes <input type="checkbox"/> No

Complete the following to the extent possible for the Public Comment of EPBC Act referral documentation.

Proponent to complete	
6. Have you invited the public to comment on your referral documentation?	<input type="checkbox"/> Yes <input type="checkbox"/> No
7. How was the invitation published?	<input type="checkbox"/> newspaper <input type="checkbox"/> website
8. Did the invitation include all of the following?	
(a) brief description of the action	<input type="checkbox"/> Yes <input type="checkbox"/> No
(b) the name of the action	<input type="checkbox"/> Yes <input type="checkbox"/> No
(c) the name of the proponent	<input type="checkbox"/> Yes <input type="checkbox"/> No
(d) the location of the action	<input type="checkbox"/> Yes <input type="checkbox"/> No
(e) the matters of national environmental significance that will be or are likely to be significantly impacted	<input type="checkbox"/> Yes <input type="checkbox"/> No
(f) how the relevant documents may be obtained	<input type="checkbox"/> Yes <input type="checkbox"/> No
(g) the deadline for public comments	<input type="checkbox"/> Yes <input type="checkbox"/> No

Proponent to complete	
(h) available for public comment for 14 calendar days	<input type="checkbox"/> Yes <input type="checkbox"/> No
(i) the likely impacts on matters of national environmental significance	<input type="checkbox"/> Yes <input type="checkbox"/> No
(j) any feasible alternatives to the proposed action	<input type="checkbox"/> Yes <input type="checkbox"/> No
(k) possible mitigation measures	<input type="checkbox"/> Yes <input type="checkbox"/> No
9. Were any submissions received during the public comment period?	<input type="checkbox"/> Yes <input type="checkbox"/> No
10. Have public submissions been addressed? If yes provide attachment.	<input type="checkbox"/> Yes <input type="checkbox"/> No

2.1.4 Other Commonwealth Government Approvals

Proponent, DMA and Third Party to complete			
Is approval required from other Commonwealth Government/s for any part of the proposal?		<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	
<i>If yes, please complete the table below.</i>			
Agency / Authority	Approval required	Application lodged?	Agency / Local Authority contact(s) for proposal
		<input type="checkbox"/> Yes <input type="checkbox"/> No	
		<input type="checkbox"/> Yes <input type="checkbox"/> No	

3. SUPPORTING INFORMATION

Please attach copies of any relevant information on the proposal, supporting evidence and / or existing environmental surveys, studies or monitoring information undertaken and list the documents below.

Proponent, DMA and Third Party to complete			
(1)	The Beyond 2018 Project – EPA Referral Supporting Document	Talis Consultants Pty Ltd.	Referral Form (this form) supporting document.
(2)	The Beyond 2018 Project Spatial Data	Talis Consultants Pty Ltd.	Spatial data used to generate the figures included in the above supporting document.

PART B: ENVIRONMENTAL FACTORS

The purpose of Part B is to assist the EPA to determine the significance of the likely environmental impacts of the proposal in accordance with the EPA's *Environmental Assessment Guideline for Environmental factors and objectives* (EAG 8) and *Environmental Assessment Guideline for Application of a significant framework in the EIA process* (EAG 9). Referrers completing Part B should refer closely to EAG 8 and EAG 9.

The EPA has prepared [Referral of a Proposal under s38 of the EP Act EAG No.16 - Appendix A](#) (Appendix A) to assist in identifying factors and completing the below table. Further guidance can be found in the guidance and policy documents cited in Appendix A under each factor.

How to complete Part B

For each environmental factor, that is likely to be significantly impacted by the implementation of the proposal, make a copy of the table below and insert a summary of the relevant information relating to the proposal. The table can be broken down into more than one table per factor, if the need arises. For example the hydrological processes factor can be presented in two separate tables, one for surface water and one for groundwater, or similarly one for construction and one for operations.

For complex proposals a supplementary referral report can be provided in addition to the referral form. If this option is chosen the table must still be completed (summaries are acceptable) to assist the Office of the EPA with statistical reporting and filtering proposals for processing.

Proponents expecting an API level of assessment must provide information in accordance with the EPA's *Environmental Assessment Guideline for Preparation of an API-A environmental review document* (EAG 14).

For each of the significant environmental factors, complete the following table (Questions 1 – 10).

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
1	Factor, as defined in <u>EAG 8</u>	Flora and Vegetation
2	EPA Objective, as defined in <u>EAG 8</u>	To maintain representation, diversity, viability and ecological function at the species, population and community level.

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
3	<p>Guidance - what established policies, guidelines, and standards apply to this factor in relation to the proposal?</p>	<p>The following guidance documentation applies to the management of this factor with regard to the proposal:</p> <ul style="list-style-type: none"> • EPA Guidance Statement 51 - Terrestrial Flora and Vegetation Surveys for Environmental Impact Assessment in Western Australia; • EPA Guidance Statement 6 - Rehabilitation of Terrestrial Ecosystems; • EPA Position Statement 2 - Environmental Protection of Native Vegetation in WA; • EPA Position Statement 3 - Terrestrial Biological Surveys as an Element of Biodiversity Protection; and • EPA & Department of Parks and Wildlife Technical Guide - Terrestrial Flora and Vegetation Surveys for Environmental Impact Assessment.
4	<p>Consultation - outline the need for consultation and the outcomes of any consultation in relation to the potential environmental impacts, including:</p> <ul style="list-style-type: none"> • <i>anticipated level of public interest in the impact;</i> • <i>consultation with regulatory agencies;</i> <i>and</i> • <i>consultation with community.</i> 	<p>A suite of stakeholder consultation has taken place prior to the submission of this referral, detail of which can be seen in Appendix A of the attached supporting document. At the time of writing no stakeholders have raised any queries or concerns regarding the proposal.</p> <p>SIGM commits to undertaking ongoing consultation with key stakeholders regarding terrestrial fauna, potential impacts and the proposed mitigation thereof within the study area.</p>
5	<p>Baseline information - describe the relevant characteristics of the receiving environment.</p> <p><i>This may include: regional context; known environmental values, current quality, sensitivity to impact, and current level of cumulative impacts.</i></p>	<p>Relevant baseline and existing environment information can be seen in Section 3.4 of the attached supporting document.</p>

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
6	<p>Impact assessment - describe the potential impact/s that may occur to the environmental factor as a result of implementing the proposal.</p>	<p>Implementation of the B2018 Project has the potential to result in clearing of up to 3,000 ha of native vegetation. The rest of the development envelopes are situated within un-vegetated parts of Lake Lefroy which is devoid of any vegetation. The extent of the impact to flora and vegetation will be determined based on the further survey work to be undertaken.</p> <p>SIGM has a long history of operations within the study area and has a track record of appropriate management of the potential detrimental impacts to flora and vegetation. Notwithstanding this, SIGM has engaged specialist consultants to conduct a flora and vegetation survey over the study area to ensure that all potential impacts from the B2018 Project are understood and appropriately mitigated.</p>
7	<p>Mitigation measures - what measures are proposed to mitigate the potential environmental impacts? The following should be addressed:</p> <ul style="list-style-type: none"> • <i>Avoidance - avoiding the adverse environmental impact altogether;</i> • <i>Minimisation - limiting the degree or magnitude of the adverse impact;</i> • <i>Rehabilitate – restoring the maximum environmental value that is reasonably practicable; and</i> • <i>Offsets – actions that provide environmental benefits to counterbalance significant residual environmental impacts or risks of a project or activity.</i> 	<p>SIGM currently implements an Environmental Management System (EMS) which contains the following standard for the management of flora and vegetation:</p> <ul style="list-style-type: none"> • Flora and Fauna Management Standard (SIG-ENV-STD004) – provides a standard for the management of rare, endangered and vulnerable flora and fauna species. <p>As detailed above, further flora and vegetation survey work and assessment is scheduled to be undertaken and will be used to identify and define effective mitigation measures which may supplement the existing measures currently implemented by SIGM.</p>

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
8	<p>Residual impacts – review the residual impacts against the EPA objectives.</p> <p><i>It is understood that the extent of any significant residual impacts may be hard to quantify at the referral stage. Referrers are asked to provide, as far as practicable, a discussion on the likely residual impacts and form a conclusion on whether the EPA’s objective for this factor would be met if residual impacts remain. This will require:</i></p> <ul style="list-style-type: none"> • <i>quantifying the predicted impacts (extent, duration, etc.) acknowledging any uncertainty in predictions;</i> • <i>putting the impacts into a regional or local context, incorporating knowable cumulative impacts; and</i> • <i>comparison against any established environmental policies, guidelines, and standards.</i> 	<p>Further refinement of the B2018 Project design and associated investigations is required in order to fully ascertain the likelihood and longevity of impact resultant from the proposal.</p> <p>It is however expected that such impacts can be avoided and/or managed appropriately to minimise the potential for any unacceptable residual impacts to occur.</p>
9	<p>EPA’s Objective – from your perspective and based on your review, which option applies to the proposal in relation to this factor? Refer to <u>EAG 9</u></p>	<p><input type="checkbox"/> <i>meets the EPA’s objective</i></p> <p><input checked="" type="checkbox"/> <i>may meet the EPA’s objective</i></p> <p><input type="checkbox"/> <i>is unlikely to meet the EPA’s objective</i></p>
10	<p>Describe any assumptions critical to your conclusion (in Question 9). e.g. <i>particular mitigation measures or regulatory conditions.</i></p>	<p>The above section relies on the assumption that additional surveys and studies are required and will be undertaken.</p>

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
1	Factor, as defined in <u>EAG 8</u>	Terrestrial Fauna
2	EPA Objective, as defined in <u>EAG 8</u>	To maintain representation, diversity, viability and ecological function at the species, population and assemblage level.

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
3	<p>Guidance - what established policies, guidelines, and standards apply to this factor in relation to the proposal?</p>	<p>The following guidance documentation applies to the management of this factor with regard to the proposal:</p> <ul style="list-style-type: none"> • EPA Guidance Statement 20 - Sampling of Short Range Endemic Invertebrate Fauna for Environmental Impact Assessment in Western Australia; • EPA Guidance Statement 56 - Terrestrial Fauna Surveys for Environmental Impact Assessment in Western Australia; • EPA Position Statement 3 - Terrestrial Biological Surveys as an Element of Biodiversity Protection; and • EPA & DEC Technical Guide - Terrestrial Vertebrate Fauna Surveys for Environmental Impact Assessment.
4	<p>Consultation - outline the need for consultation and the outcomes of any consultation in relation to the potential environmental impacts, including:</p> <ul style="list-style-type: none"> • <i>anticipated level of public interest in the impact;</i> • <i>consultation with regulatory agencies; and</i> • <i>consultation with community.</i> 	<p>A suite of stakeholder consultation has taken place prior to the submission of this referral, detail of which can be seen in Appendix A of the attached supporting document. At the time of writing no stakeholders have raised any queries or concerns regarding the proposal.</p> <p>SIGM commits to undertaking ongoing consultation with key stakeholders regarding terrestrial fauna, potential impacts and the proposed mitigation thereof within the study area.</p>
5	<p>Baseline information - describe the relevant characteristics of the receiving environment.</p> <p><i>This may include: regional context; known environmental values, current quality, sensitivity to impact, and current level of cumulative impacts.</i></p>	<p>Relevant baseline and existing environment information can be seen in Section 3.5 of the attached supporting document.</p>

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
6	<p>Impact assessment - describe the potential impact/s that may occur to the environmental factor as a result of implementing the proposal.</p>	<p>Implementation of the B2018 Project has the potential to result in clearing of up to 3,000 ha of native vegetation which is potentially suitable fauna habitat for conservation significant species. The development of lake based operations and disturbance of up to 2,000 ha on the lake playa could affect fauna that use the Lake itself. The extent of the impact on terrestrial fauna will be determined based on the further survey work to be undertaken.</p> <p>SIGM has a long history of operations within the study area and has a track record of appropriate management of the potential detrimental impacts to fauna. Notwithstanding this, SIGM has engaged specialist consultants to conduct a fauna survey over the study area to ensure that all potential impacts from the B2018 Project are understood and appropriately mitigated.</p>
7	<p>Mitigation measures - what measures are proposed to mitigate the potential environmental impacts? The following should be addressed:</p> <ul style="list-style-type: none"> • <i>Avoidance - avoiding the adverse environmental impact altogether;</i> • <i>Minimisation - limiting the degree or magnitude of the adverse impact;</i> • <i>Rehabilitate – restoring the maximum environmental value that is reasonably practicable; and</i> • <i>Offsets – actions that provide environmental benefits to counterbalance significant residual environmental impacts or risks of a project or activity.</i> 	<p>SIGM currently implements an Environmental Management System (EMS) which contains the following standard for the management of fauna:</p> <ul style="list-style-type: none"> • Flora and Fauna Management Standard (SIG-ENV-STD004) – provides a standard for the management of rare, endangered and vulnerable flora and fauna species. <p>As detailed above, further fauna survey work and assessment is scheduled to be undertaken and will be used to identify and define effective mitigation measures which may supplement the existing measures currently implemented by SIGM.</p>

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
8	<p>Residual impacts – review the residual impacts against the EPA objectives.</p> <p><i>It is understood that the extent of any significant residual impacts may be hard to quantify at the referral stage. Referrers are asked to provide, as far as practicable, a discussion on the likely residual impacts and form a conclusion on whether the EPA’s objective for this factor would be met if residual impacts remain. This will require:</i></p> <ul style="list-style-type: none"> • <i>quantifying the predicted impacts (extent, duration, etc.) acknowledging any uncertainty in predictions;</i> • <i>putting the impacts into a regional or local context, incorporating knowable cumulative impacts; and</i> • <i>comparison against any established environmental policies, guidelines, and standards.</i> 	<p>Further refinement of the B2018 Project design and associated investigations are required in order to fully ascertain the likelihood and longevity of impact resultant from the proposal.</p> <p>It is however expected that such impacts can be avoided and/or managed appropriately to minimise the potential for any unacceptable residual impacts to occur.</p>
9	<p>EPA’s Objective – from your perspective and based on your review, which option applies to the proposal in relation to this factor? Refer to <u>EAG 9</u></p>	<p><input type="checkbox"/> <i>meets the EPA’s objective</i></p> <p><input checked="" type="checkbox"/> <i>may meet the EPA’s objective</i></p> <p><input type="checkbox"/> <i>is unlikely to meet the EPA’s objective</i></p>
10	<p>Describe any assumptions critical to your conclusion (in Question 9). e.g. <i>particular mitigation measures or regulatory conditions.</i></p>	<p>The above section relies on the assumption that additional surveys and studies are required and will be undertaken.</p>

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
1	Factor, as defined in <u>EAG 8</u>	Hydrological Processes
2	EPA Objective, as defined in <u>EAG 8</u>	To maintain the hydrological regimes of groundwater and surface water so that existing and potential uses, including ecosystem maintenance, are protected.
3	Guidance - what established policies, guidelines, and standards apply to this factor in relation to the proposal?	<p>The following existing guidance documentation applies to the management of this factor with regard to the proposal:</p> <ul style="list-style-type: none"> • DoW - Operational policy no. 1.02 - Policy on water conservation/efficiency plans, 2009; • DoW - Operational policy no. 5.12 - Hydrogeological reporting associated with a groundwater well licence, 2009; and • DoW - Western Australian water in mining guidelines, May 2013.
4	<p>Consultation - outline the need for consultation and the outcomes of any consultation in relation to the potential environmental impacts, including:</p> <ul style="list-style-type: none"> • <i>anticipated level of public interest in the impact;</i> • <i>consultation with regulatory agencies;</i> <i>and</i> • <i>consultation with community.</i> 	<p>A suite of stakeholder consultation has taken place prior to the submission of this referral, detail of which can be seen in Appendix A of the attached supporting document. At the time of writing no stakeholders have raised any queries or concerns regarding the proposal.</p> <p>SIGM commits to undertaking ongoing consultation with key stakeholders regarding hydrological processes, potential impacts and the proposed mitigation thereof within the study area.</p>
5	<p>Baseline information - describe the relevant characteristics of the receiving environment.</p> <p><i>This may include: regional context; known environmental values, current quality, sensitivity to impact, and current level of cumulative impacts.</i></p>	Relevant baseline and existing environment information can be seen in Section 3.6 and 3.7 of the attached supporting document.

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
6	Impact assessment - describe the potential impact/s that may occur to the environmental factor as a result of implementing the proposal.	<p>Implementation of the B2018 Project has the potential to result in changes in hydrological and hydrogeological regimes both in land and on the lake. Due to the location of the operations, SIGM is required to dewater the mines to maintain safe and dry conditions. Hydrogeological impact assessment is currently being undertaken to determine the anticipated dewatering discharge volume. The potential impacts of dewatering discharge on Lake Lefroy include inundation of the riparian zone and changes in the water and sediment quality. Additional infrastructure may also impact movement of the surface water on land and lake surface.</p> <p>SIGM has a long history of mine dewatering within the St Ives tenements with mine dewater discharge onto the lake surface. Notwithstanding this, SIGM has engaged specialist consultants to conduct a hydrological and hydrogeological impact assessment of the proposal on the study area.</p>

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.

<p>7</p>	<p>Mitigation measures - what measures are proposed to mitigate the potential environmental impacts? The following should be addressed:</p> <ul style="list-style-type: none"> • <i>Avoidance - avoiding the adverse environmental impact altogether;</i> • <i>Minimisation - limiting the degree or magnitude of the adverse impact;</i> • <i>Rehabilitate – restoring the maximum environmental value that is reasonably practicable; and</i> • <i>Offsets – actions that provide environmental benefits to counterbalance significant residual environmental impacts or risks of a project or activity.</i> 	<p>SIGM currently implements an Environmental Management System (EMS) which contains the following standards and procedures for the management of hydrogeology:</p> <ul style="list-style-type: none"> • Water Monitoring Procedure (SIG-ENV-PR036) – provides a detailed procedure for monitoring on site; and • Water Management Standard (SIG-ENV-STD-013) – outlines the process for water management including the monitoring of discharge water, settlement of sediments, control of discharge and reporting of activities. <p>St Ives is managed under a groundwater abstraction licence (GWL62505(9)), a key management tool of which is the operating strategy that supports this licence. The requirements under this groundwater abstraction licence provide a range of legal obligations to be reported to the DoW including:</p> <ul style="list-style-type: none"> • Abstraction data; • Standing water level data; • Water quality data; and • An annual review of dewatering operations and the impact of abstraction on the regional hydrology. <p>SIGM acknowledge that the B2018 Project is likely to require an amendment to this licence to incorporate additional tenements as well as potentially increase the existing abstraction limit.</p> <p>As detailed above, further hydrological assessments are scheduled to be undertaken and will be used to identify and define effective mitigation measures. Notwithstanding this, the existing reporting requirements and management measures are considered to be versatile and as such are able to provide a high level of assurance that hydrogeology will be appropriately managed in the study area.</p>
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Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
8	<p>Residual impacts – review the residual impacts against the EPA objectives.</p> <p><i>It is understood that the extent of any significant residual impacts may be hard to quantify at the referral stage. Referrers are asked to provide, as far as practicable, a discussion on the likely residual impacts and form a conclusion on whether the EPA’s objective for this factor would be met if residual impacts remain. This will require:</i></p> <ul style="list-style-type: none"> • <i>quantifying the predicted impacts (extent, duration, etc.) acknowledging any uncertainty in predictions;</i> • <i>putting the impacts into a regional or local context, incorporating knowable cumulative impacts; and</i> • <i>comparison against any established environmental policies, guidelines, and standards.</i> 	<p>Further refinement of the B2018 Project design and associated investigations are required in order to fully ascertain the likelihood and longevity of impact resultant from the proposal.</p> <p>It is however expected that such impacts can be avoided and/or managed appropriately to minimise the potential for any unacceptable residual impacts to occur.</p>
9	<p>EPA’s Objective – from your perspective and based on your review, which option applies to the proposal in relation to this factor? Refer to <u>EAG 9</u></p>	<p><input type="checkbox"/> <i>meets the EPA’s objective</i></p> <p><input checked="" type="checkbox"/> <i>may meet the EPA’s objective</i></p> <p><input type="checkbox"/> <i>is unlikely to meet the EPA’s objective</i></p>
10	<p>Describe any assumptions critical to your conclusion (in Question 9). <i>e.g. particular mitigation measures or regulatory conditions.</i></p>	<p>The above section relies on the assumption that additional surveys and studies are required and will be undertaken.</p>

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
1	Factor, as defined in <u>EAG 8</u>	Inland Water Environmental Quality
2	EPA Objective, as defined in <u>EAG 8</u>	To maintain the quality of groundwater and surface water, sediment and biota so that the environmental values, both ecological and social, are protected.
3	Guidance - what established policies, guidelines, and standards apply to this factor in relation to the proposal?	<p>The following existing guidance documentation applies to the management of this factor with regard to the proposal:</p> <ul style="list-style-type: none"> • EPA Position Statement 4 - Environmental Protection of Wetlands; • DER - Identification and investigation of acid sulfate soils and acidic landscapes, Revised June 2015; • DoW - Western Australian water in mining guideline, Report No 12, 2013; • DoW - WQPN 15: Extractive industries near sensitive water resources; • DoW - WQPN 44: Roads near sensitive water resources; • DoW - WQPN 51: Industrial wastewater management and disposal; • DoW - WQPN 52: Stormwater management at industrial sites; • DoW - WQPN 81: Tracks and trails near sensitive water resources; and • DoW - WQPN 83: Infrastructure corridors near sensitive water resources.
4	<p>Consultation - outline the need for consultation and the outcomes of any consultation in relation to the potential environmental impacts, including:</p> <ul style="list-style-type: none"> • <i>anticipated level of public interest in the impact;</i> • <i>consultation with regulatory agencies; and</i> • <i>consultation with community.</i> 	<p>A suite of stakeholder consultation has taken place prior to the submission of this referral, detail of which can be seen in Appendix A. At the time of writing no stakeholders have raised any queries or concerns regarding the proposal.</p> <p>SIGM commits to undertaking ongoing consultation with key stakeholder regarding inland water quality, potential impacts and the proposed mitigation thereof within the study area.</p>
5	<p>Baseline information - describe the relevant characteristics of the receiving environment.</p> <p><i>This may include: regional context; known environmental values, current quality, sensitivity to impact, and current level of cumulative impacts.</i></p>	<p>Relevant baseline and existing environment information can be seen in Section 3.6 in the attached supporting document.</p>

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
6	<p>Impact assessment - describe the potential impact/s that may occur to the environmental factor as a result of implementing the proposal.</p>	<p>Implementation of the B2018 Project has the potential to result in changes in surface water and sediment quality as a result of dewatering discharge. The extent of the impact will be determined based on the further survey work and hydrogeological and hydrological impact assessment currently being undertaken.</p> <p>SIGM has a long history of operations in the study area and minimal impacts to inland waters have been observed to date. Notwithstanding this, the full extent of the potential impacts on inland water quality from the B2018 Project is not fully understood at the time of writing.</p>
7	<p>Mitigation measures - what measures are proposed to mitigate the potential environmental impacts? The following should be addressed:</p> <ul style="list-style-type: none"> • <i>Avoidance - avoiding the adverse environmental impact altogether;</i> • <i>Minimisation - limiting the degree or magnitude of the adverse impact;</i> • <i>Rehabilitate – restoring the maximum environmental value that is reasonably practicable; and</i> • <i>Offsets – actions that provide environmental benefits to counterbalance significant residual environmental impacts or risks of a project or activity.</i> 	<p>To this effect, SIGM has engaged specialist consultants to conduct hydrological and salt lake ecological impact assessments of the proposal on the study area. The subsequent reports will be utilised to determine the mitigation measures required to be implemented to ensure that the impact to inland water quality is as low as reasonably practicable.</p>

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
8	<p>Residual impacts – review the residual impacts against the EPA objectives.</p> <p><i>It is understood that the extent of any significant residual impacts may be hard to quantify at the referral stage. Referrers are asked to provide, as far as practicable, a discussion on the likely residual impacts and form a conclusion on whether the EPA’s objective for this factor would be met if residual impacts remain. This will require:</i></p> <ul style="list-style-type: none"> • <i>quantifying the predicted impacts (extent, duration, etc.) acknowledging any uncertainty in predictions;</i> • <i>putting the impacts into a regional or local context, incorporating knowable cumulative impacts; and</i> • <i>comparison against any established environmental policies, guidelines, and standards.</i> 	<p>As detailed above, further refinement of the B2018 Project design and associated investigations are required in order to fully ascertain the likelihood and longevity of impact resultant from the proposal.</p> <p>It is however expected that such impacts can be avoided and/or managed appropriately to minimise the potential for any unacceptable residual impacts to occur.</p>
9	<p>EPA’s Objective – from your perspective and based on your review, which option applies to the proposal in relation to this factor? Refer to <u>EAG 9</u></p>	<p><input type="checkbox"/> <i>meets the EPA’s objective</i></p> <p><input checked="" type="checkbox"/> <i>may meet the EPA’s objective</i></p> <p><input type="checkbox"/> <i>is unlikely to meet the EPA’s objective</i></p>
10	<p>Describe any assumptions critical to your conclusion (in Question 9). e.g. <i>particular mitigation measures or regulatory conditions.</i></p>	<p>The above section relies on the assumption that additional surveys and studies are required and will be undertaken.</p>

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
1	Factor, as defined in <u>EAG 8</u>	Rehabilitation and Decommissioning
2	EPA Objective, as defined in <u>EAG 8</u>	To ensure that premises are closed, decommissioned and rehabilitated in an ecologically sustainable manner, consistent with agreed outcomes and land uses, and without unacceptable liability to the State.
3	Guidance - what established policies, guidelines, and standards apply to this factor in relation to the proposal?	<p>The following existing guidance documentation applies to the management of this factor with regard to the proposal:</p> <ul style="list-style-type: none"> • DMP / EPA - Joint Guidelines for Preparing Mine Closure Plans, May 2015; • EPA Guidance Statement No. 6 - Rehabilitation of Terrestrial Ecosystems; • Environmental Protection Bulletin 19 - EPA involvement in mine closure; • Strategic Framework for Mine Closure; Australian and New Zealand Minerals and Energy Council and the Minerals Council of Australia (ANZMEC/MCA 2000) - Mine Closure and Completion, Leading Practice Sustainable Development Program for the Mining Industry; • Department of Industry, Tourism and Resources (DITR 2009b) - Mine Rehabilitation, Leading Practice Sustainable Development Program for the Mining Industry; Department of Industry, Tourism and Resources (DITR 2006); • International Council on Mining and Metals (ICMM 2008) - Planning for Integrated Mine Closure: Toolkit; and • Leading Practice Sustainable Development Program for the Mining Industry – Managing Acid and Metalliferous Drainage (DITR 2007).

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
4	<p>Consultation - outline the need for consultation and the outcomes of any consultation in relation to the potential environmental impacts, including:</p> <ul style="list-style-type: none"> • <i>anticipated level of public interest in the impact;</i> • <i>consultation with regulatory agencies; and</i> • <i>consultation with community.</i> 	<p>A suite of stakeholder consultation has taken place prior to the submission of this referral, detail of which can be seen in Appendix A of the attached supporting document. At the time of writing no stakeholders have raised any queries or concerns regarding the proposal.</p> <p>SIGM commits to undertaking ongoing consultation with key stakeholder regarding rehabilitation and decommissioning, potential impacts and the proposed mitigation thereof within the study area.</p>
5	<p>Baseline information - describe the relevant characteristics of the receiving environment.</p> <p><i>This may include: regional context; known environmental values, current quality, sensitivity to impact, and current level of cumulative impacts.</i></p>	<p>SIGM has an existing approved Mine Closure Plan (MCP) for its operations, prepared in accordance with the requirements of EPA MS879 and the Guidelines for Preparing Mine Closure Plans (DMP and EPA, 2011). A revised version of the MCP is in preparation and due for submission in December 2016. The revised version acknowledges many of the gaps identified as part of the 2013 MCP and proposes an improved site-wide strategy for closure.</p> <p>Per discussions between SIGM and the DMP, the B2018 Project will be included in the next iterations of the MCP when the B2018 Project progresses. This approach is considered acceptable to the DMP, given that the B2018 Project is still in its infancy with regard to design and development.</p>
6	<p>Impact assessment - describe the potential impact/s that may occur to the environmental factor as a result of implementing the proposal.</p>	<p>Further refinement of the B2018 Project design and associated investigations are required in order to fully ascertain the impacts and associated with the proposal.</p>
7	<p>Mitigation measures - what measures are proposed to mitigate the potential environmental impacts? The following should be addressed:</p> <ul style="list-style-type: none"> • <i>Avoidance - avoiding the adverse environmental impact altogether;</i> • <i>Minimisation - limiting the degree or magnitude of the adverse impact;</i> • <i>Rehabilitate – restoring the maximum environmental value that is reasonably practicable; and</i> • <i>Offsets – actions that provide environmental benefits to counterbalance significant residual environmental impacts or risks of a project or activity.</i> 	<p>Further refinement of the B2018 Project design and associated investigations are required in order to fully ascertain the mitigation measures required to appropriately manage the environmental impacts associated with the proposal.</p>

Proponent to complete. DMA and Third Party to complete to the best of their knowledge.		
8	<p>Residual impacts – review the residual impacts against the EPA objectives.</p> <p><i>It is understood that the extent of any significant residual impacts may be hard to quantify at the referral stage. Referrers are asked to provide, as far as practicable, a discussion on the likely residual impacts and form a conclusion on whether the EPA’s objective for this factor would be met if residual impacts remain. This will require:</i></p> <ul style="list-style-type: none"> • <i>quantifying the predicted impacts (extent, duration, etc.) acknowledging any uncertainty in predictions;</i> • <i>putting the impacts into a regional or local context, incorporating knowable cumulative impacts; and</i> • <i>comparison against any established environmental policies, guidelines, and standards.</i> 	<p>Further refinement of the B2018 Project design and associated investigations are required in order to fully ascertain the likelihood and longevity of any direct or indirect residual impacts of the proposal.</p>
9	<p>EPA’s Objective – from your perspective and based on your review, which option applies to the proposal in relation to this factor? Refer to <u>EAG 9</u></p>	<p><input type="checkbox"/> <i>meets the EPA’s objective</i></p> <p><input checked="" type="checkbox"/> <i>may meet the EPA’s objective</i></p> <p><input type="checkbox"/> <i>is unlikely to meet the EPA’s objective</i></p>
10	<p>Describe any assumptions critical to your conclusion (in Question 9). e.g. <i>particular mitigation measures or regulatory conditions.</i></p>	<p>The above section relies on the assumption that additional surveys and studies are required and will be undertaken.</p>

In circumstances where there was some uncertainty on the level of significance of a particular factor it is recommended that a brief summary (no longer than 1 - 2 paragraphs) is provided on the steps taken to determine why a factor was not considered to be significant.