



## Application for Licence Amendment

### Part V Division 3 of the *Environmental Protection Act 1986*

---

<b>Licence Number</b>	L8676/2012/1
<b>Licence Holder</b>	AngloGold Ashanti Australia Limited
<b>ACN</b>	008 737 424
<b>File Number</b>	2012/002666-3
<b>Premises</b>	Tropicana Gold Mine Part of mining tenement M39/1096 PLUMRIDGE LAKES WA 6431 As defined by the coordinates in Schedule 1 of the licence
<b>Date of Report</b>	17 July 2020
<b>Proposed Decision</b>	Revised licence granted

**A/MANAGER, RESOURCE INDUSTRIES  
REGULATORY SERVICES**

*An officer delegated by the CEO under section 20 of the EP Act*

## Table of Contents

<b>1. Decision summary</b>	<b>3</b>
<b>2. Scope of assessment</b>	<b>3</b>
2.1 Regulatory framework	3
2.2 Application summary	3
2.2.1 Replacement of groundwater monitoring bores	3
2.2.2 Change to timeframes for construction compliance documents	6
<b>3. Consultation</b>	<b>8</b>
<b>4. Conclusion</b>	<b>8</b>
4.1 Summary of amendments	8
<b>References</b>	<b>8</b>
<b>Appendix 1: Application validation summary</b>	<b>9</b>

Table 1: Proposed changes to groundwater monitoring bores in L8676/2012/1	4
---	---

Table 2: Consultation	8
-----------------------	---

Table 3: Summary of licence amendments	8
--	---

Figure 1: Proposed waste landform expansion to impact existing monitoring bore TSFMB009S/D	5
---	---

Figure 2: Proposed waste rock placement for TSF integrated waste landform that will Impact TSFMB003S/D and TSFMB004S/D	5
---	---

Figure 3: Proposed Ambient Groundwater Monitoring Locations – new bores circled	6
---	---

Figure 4: Relevant sections of condition 1.3.11 in the existing licence	6
---	---

Figure 5: Condition 4.2.3 in the existing licence	7
---	---

## 1. Decision summary

Licence L8676/2012/1 is held by AngloGold Ashanti Australia Limited (Licence Holder) for the Tropicana Gold Mine (the Premises), located on part of mining tenement M39/1096. The Licence Holder has applied for amendments to L8676/2012/1, which the Delegated Officer has determined to be administrative in nature therefore do not alter the risk environmental risk profile of the Premises, providing that activities, emissions and receptors as stated in existing approvals remain unchanged.

This Amendment Report documents the amendments made pursuant to section 59 and 59(B) of the *Environmental Protection Act 1986* (EP Act).

The decision report for the Existing Licence will remain on the department's website for future reference and will act as a record of the department's decision making.

## 2. Scope of assessment

### 2.1 Regulatory framework

In completing the assessment documented in this Amendment Report, the department has considered and given due regard to its Regulatory Framework and relevant policy documents which are available at <https://www.der.wa.gov.au>.

### 2.2 Application summary

On 2 June 2020, the Licence Holder submitted an application to the department to amend Licence L8676/2012/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments are being sought:

- moving 3 pairs of groundwater monitoring bores (monitoring TSF seepage) further from the TSF due to landform expansion; and
- change of licence wording regarding construction compliance reporting timeframes for future TSF raises.

This amendment details changes of monitoring and reporting relating to Category 5 activities, but there is no change to the assessed throughput of the category. No changes to the aspects of the existing Licence relating to Category 12, 52, 54, 64 or 73 have been requested by the Licence Holder. The Delegated Officer considers that the intent of the existing conditions is preserved, so the amendments are administrative and there is no change in the environmental risk profile of the premises.

Tropicana Gold Mine is subject to Ministerial Statement 839. The amendments proposed would not require any changes to the ministerial statement.

#### 2.2.1 Replacement of groundwater monitoring bores

The Licence Holder operates the existing TSF at Tropicana as an integrated waste landform, whereby the outer slopes of the existing TSF are encapsulated by bulk mine waste, thus providing additional buttressing and opportunities for progressive rehabilitation during life of mine. This is approved by DMIRS (Mining Proposal REGID 53515) under the *Mining Act 1978* and does not require approval (other than clearing, which is administered by DMIRS) under Part V of the *Environmental Protection Act 1986* as waste rock storage does not relate to a prescribed premises activity, and there is no change to the footprint or operation of the TSF.

However, the waste rock storage will result in the decommissioning of three pairs of groundwater monitoring bores (six bores in total), which are listed as compliance monitoring bores in Table 3.2.1 of Licence L8676/2012/1. These are listed in Table 1. The purpose of

these bores is to monitor groundwater quality and standing water level, to assess seepage from the Tropicana paddock TSF.

All monitoring bores listed on the Licence are installed as paired deep and shallow monitoring locations which enable monitoring of groundwater response to TSF operations in both the shallow unconfined aquifer hosted in the transported sedimentary layers and the deeper, confined to semi-confined aquifer hosted in the lower saprolite/saprocks zone. The upper saprolite acts as an aquitard separating the two groundwater flow regimes.

Each pair of removed monitoring bores will be replaced with an equivalent paired set of deep and shallow monitoring bores in down-hydraulic gradient of the existing locations and within similar geologies. The locations will be outside the anticipated waste landform footprint. There is some native vegetation located between the TSF and proposed bores that could be receptors in the event of groundwater mounding. However these areas are already impacted by mining activities, and mostly located within the rock storage footprint for which clearing approval has been obtained. Hence it is anticipated that the intent of each monitoring location in monitoring impacts to vegetation will be preserved.

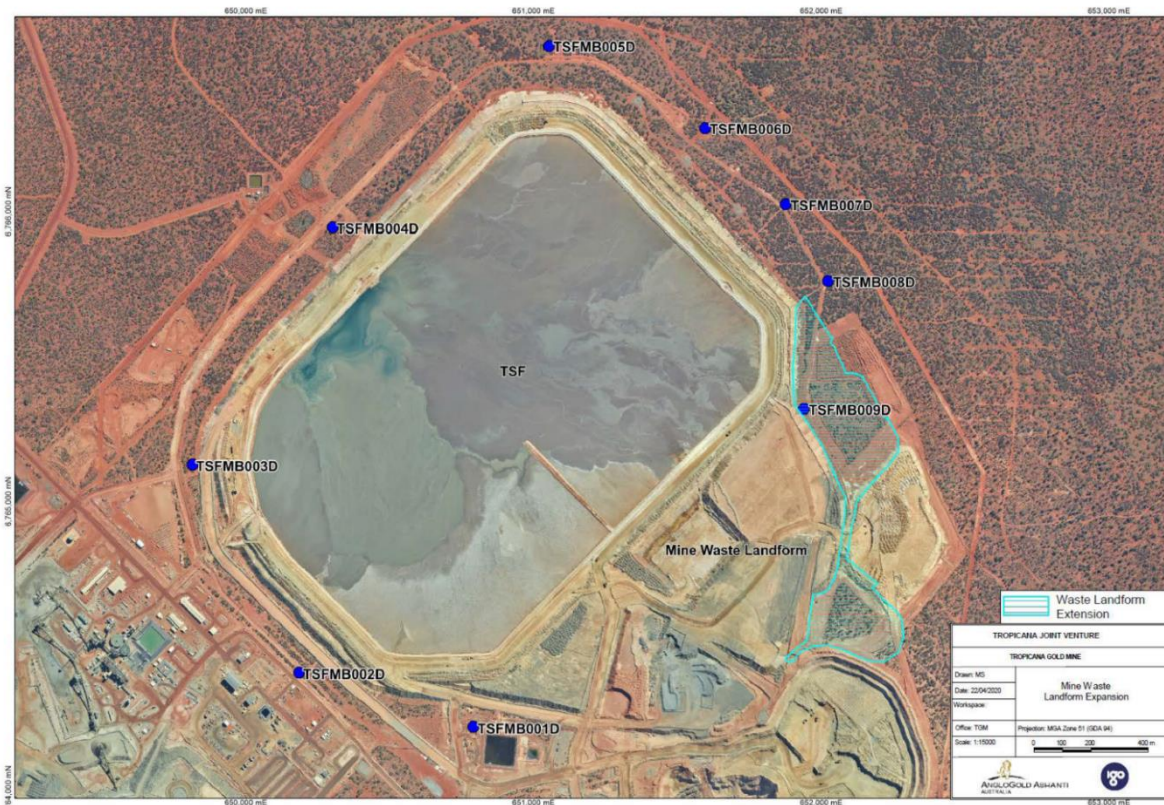
The changes proposed are summarised in Table 1.

**Table 1: Proposed changes to groundwater monitoring bores in L8676/2012/1**

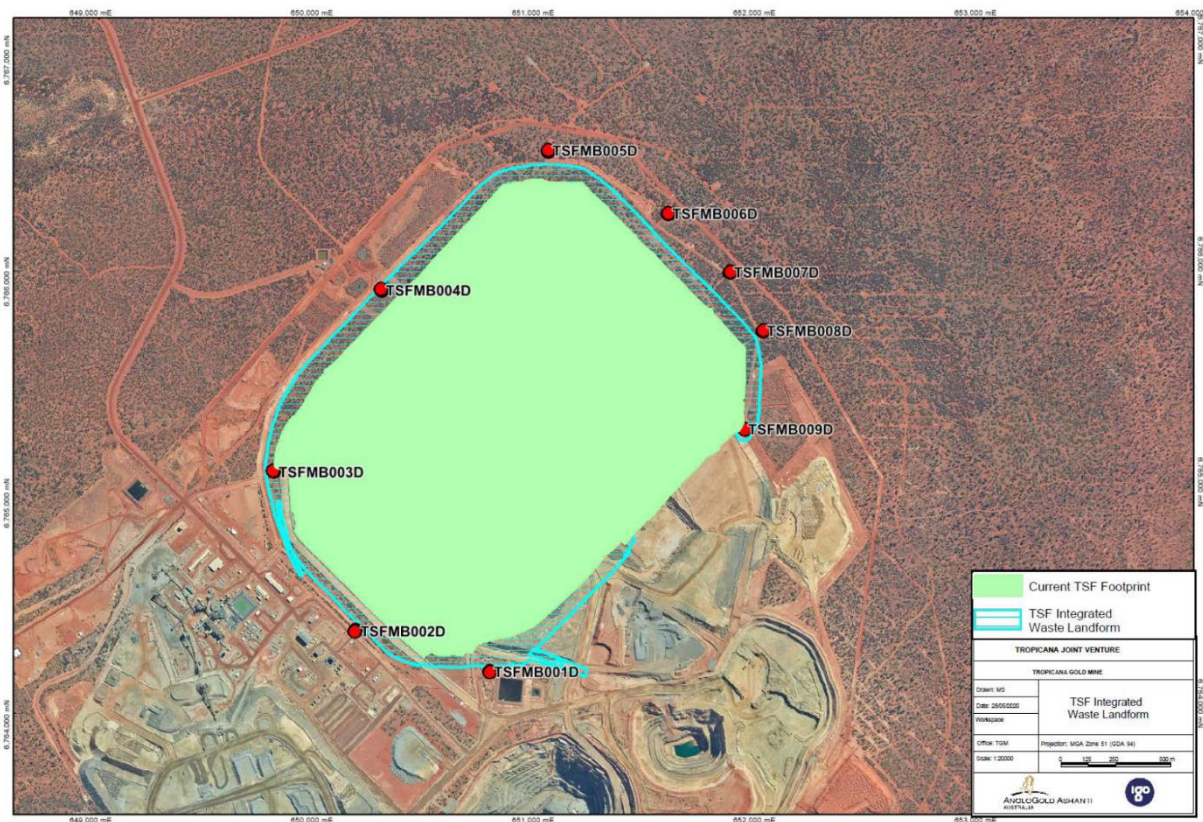
Existing Monitoring Bore Pair (Remove from Licence)	Proposed Monitoring Bore Pair (Add to Licence)	Approximate Location Relative to Original Bores
TSFMB003S and TSFMB003D	TSFMB075S and TSFMB075D	250 m west
TSFMB004S and TSFMB004D	TSFMB076S and TSFMB076D	430 m north
TSFMB009S and TSFMB009D	TSFMB077S and TSFMB077D	330 m east-north-east

Figure 1 shows the proposed expansion area that will impact existing monitoring bore TSFMB009S/D, while Figure 2 shows the buttressing that will impact TSFMB003S/D and TSFMB004S/D. Figure 3 shows the remaining and proposed new monitoring bore locations. The new bores are circled in green. The Delegated Officer considers that these are acceptable alternate seepage monitoring locations.

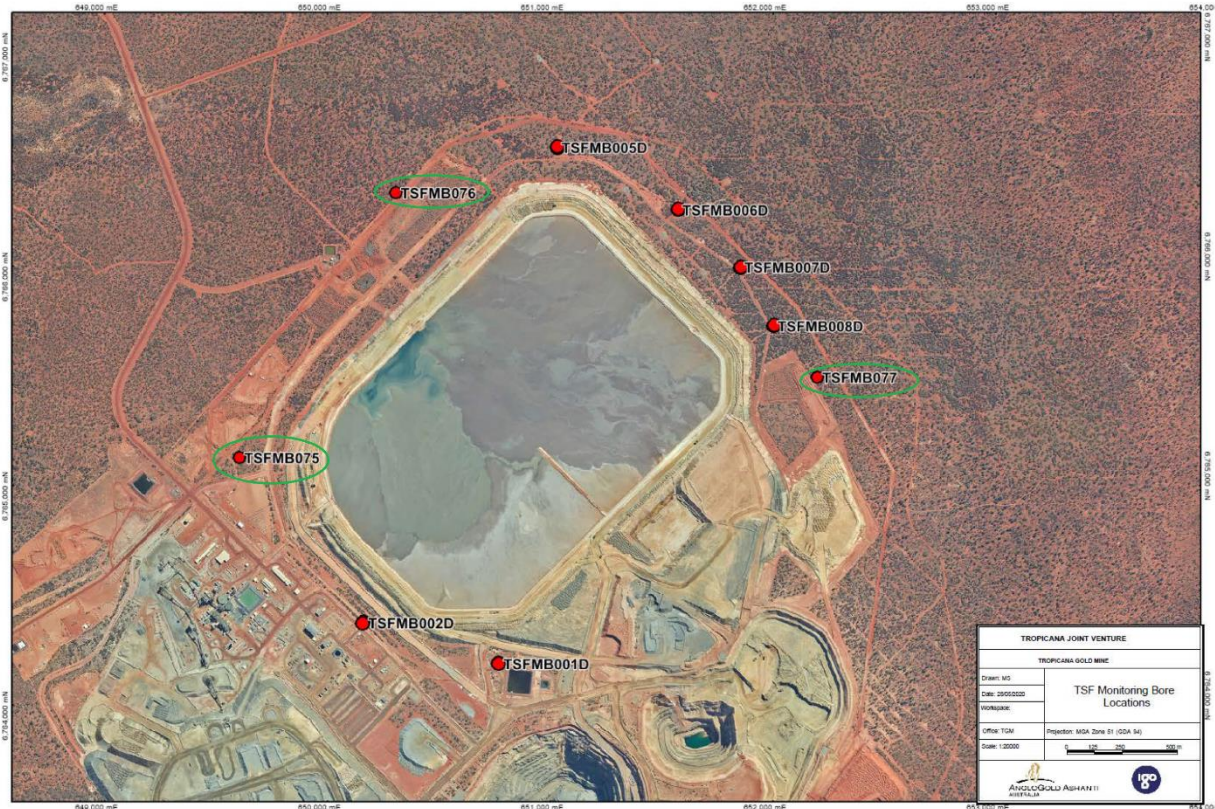
The decommissioned bores will be capped to prevent contamination of aquifers from waste rock or leachate entering the decommissioned bores.



**Figure 1: Proposed waste landform expansion to impact existing monitoring bore TSFMB009S/D**



**Figure 2: Proposed waste rock placement for TSF integrated waste landform that will impact TSFMB003S/D and TSFMB004S/D**



**Figure 3: Proposed Ambient Groundwater Monitoring Locations – new bores circled**

### 2.2.2 Change to timeframes for construction compliance documents

On 26 September 2017, Amendment Notice 1 to Licence L8676/2012/1 (which was amalgamated into the licence instrument on 2 September 2019) approved the raising of the Tropicana TSF from 354m RL to 364m RL embankment height, in 2m increments.

Authorisation is provided in condition 1.3.11 (relevant section reproduced in Figure 4 below) of the existing licence.

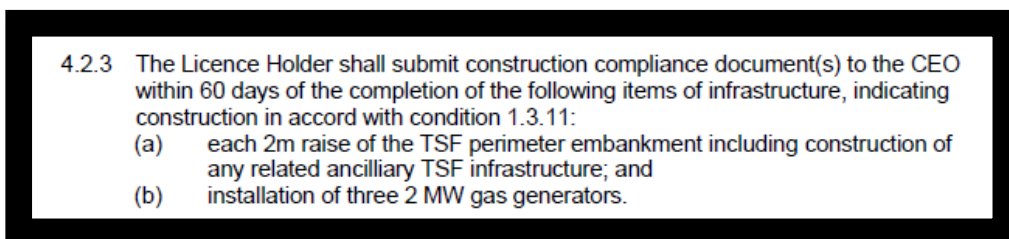
1.3.11 The Licence Holder shall ensure that each item of infrastructure specified in Column 1 of Table 1.3.5 is constructed in accordance with the requirements specified in Column 2 of Table 1.3.5.

Table 1.3.5: Construction Requirements	
Column 1	Column 2
Infrastructure	Requirements
TSF perimeter embankment raises from 354m RL to 364m RL	<ul style="list-style-type: none"> <li>Each raise height 2m</li> <li>Zone A material to be placed on the inner wall of the embankment</li> </ul>

**Figure 4: Relevant sections of condition 1.3.11 in the existing licence**

Condition 4.2.3 (reproduced in Figure 5 below) relates to the timeframes for submission of

construction compliance documents. This refers to construction in accordance with condition 1.3.11.



**Figure 5: Condition 4.2.3 in the existing licence**

In the application for Amendment Notice 1 (AngloGoldAshanti, 2017), the Licence Holder outlined a revised construction methodology for embankment construction, to be used in all future raises. This was assessed in Amendment Notice 1 (DWER, 2017), and it was considered to not change the risk profile of the TSF. However it was still assessed and approved on the understanding of 2m raises.

On 11 March 2020, the licence holder submitted the compliance documents for three, 2m raises to 354, 356 and 358m RL. DWER noted that based on the construction schedule provided in the report, submission was not within 60 days of the completion of the earlier lifts. This was a technical non-compliance with condition 4.2.3 as the three lifts were constructed sequentially as three sub-lifts in a 6m raise project, and documents submitted only after completion of the third lift. There is no potential or actual environmental impact associated with this non-compliance. In this amendment application, the Licence Holder requested a change to the wording of condition 4.2.3 to allow submission for their next 6m raise project (comprising three, 2m lifts) at the end of the project.

The Delegated Officer considers that until compliance documents are received, the crest of the TSF is deemed to be the crest height of the previously constructed lift (for which compliance documents have been submitted). Therefore in accordance with condition 1.3.9, tailings or liquor must not come within 300mm of the top of the previously constructed crest until the compliance documents for the newly constructed lifts are submitted. This was identified as a risk to the Licence Holder of delaying submission until after completion of the 6m raise project. However the Licence Holder stated that raises are completed well ahead of tailings deposition, so the required freeboard can be maintained below the previously constructed lift. Therefore the Delegated Officer considers there is no change in environmental risk in requiring construction compliance documents after each 6m raise, rather than every 2m increment which is operationally impractical.

The following changes are made to the licence:

- Condition 1.3.11 – change ‘Each raise height 2m’ to ‘each sub-raise height 2m, completed in batches of 3 sub-raises totalling 6m’
- Condition 4.2.3 – change ‘each 2m raise’ to ‘each 6m raise’

### 3. Consultation

Table 2 provides a summary of the consultation undertaken by the department.

**Table 2: Consultation**

Consultation method	Comments received	Department response
Application advertised on the department's website (17/6/2020)	None received	N/A
Department of Mines, Industry Regulation and Safety (DMIRS) advised of proposal (17/6/2020)	None received	NA
Licence Holder was provided with draft amendment on 13 July 2020.	<ul style="list-style-type: none"> <li>TSF is already part of an integrated waste landform</li> <li>Yes clearing has been approved for the area between the TSF and the new monitoring bores</li> </ul>	<ul style="list-style-type: none"> <li>Noted. Description corrected.</li> <li>Noted. Assessment finalised.</li> </ul>

### 4. Conclusion

Based on the assessment in this Amendment Report, the Delegated Officer has determined that a Revised Licence will be granted, subject to conditions commensurate with the determined controls and necessary for administration and reporting requirements.

#### 4.1 Summary of amendments

Table 3 provides a summary of the proposed amendments and will act as record of implemented changes. All proposed changes have been incorporated into the Revised Licence as part of the amendment process.

**Table 3: Summary of licence amendments**

Condition no.	Proposed amendments
3.2.1	Delete and add respectively, the monitoring points specified in Table 1 of this document
Schedule 1	'Map of monitoring points' updated to reflect changes made in Table 3.2.1 (condition 3.2.1)
1.3.11	Change 'Each raise height 2m' to 'each sub-raise height 2m, completed in batches of 3 sub-raises totalling 6m'
4.2.3	Change 'each 2m raise' to 'each 6m raise'

### References

1. AngloGoldAshanti 2017, *Licence Amendment Application*, Western Australia (in DWER Document A1498397)
2. DWER 2017, *Amendment Notice 1 to L8676/2012/1*, Western Australia (in DWER Document A1530817)



## Appendix 1: Application validation summary

SECTION 1: APPLICATION SUMMARY					
Application type					
Works approval	<input type="checkbox"/>				
Licence	<input type="checkbox"/>	Relevant works approval number:		None	<input type="checkbox"/>
		Has the works approval been complied with?	Yes <input type="checkbox"/> No <input type="checkbox"/>		
		Has time limited operations under the works approval demonstrated acceptable operations?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>		
		Environmental Compliance Report submitted?	Yes <input type="checkbox"/> No <input type="checkbox"/>		
		Date Report received:			
Renewal	<input type="checkbox"/>	Current licence number:			
Amendment to works approval	<input type="checkbox"/>	Current works approval number:			
Amendment to licence	<input checked="" type="checkbox"/>	Current licence number:	L8676/2012/1		
		Relevant works approval number:		N/A	<input checked="" type="checkbox"/>
Registration	<input type="checkbox"/>	Current works approval number:		None	<input type="checkbox"/>
Date application received	2 June 2020				
Applicant and Premises details					
Applicant name/s (full legal name/s)	AngloGold Ashanti Australia Limited				
Premises name	Tropicana Gold Mine				
Premises location	Part of mining tenement M39/1096 PLUMRIDGE LAKES WA 6431  As defined by the coordinates in Schedule 1  (no change this amendment)				
Local Government Authority	Shire of Menzies				
Application documents					
HPCM file reference number:	A1899243				
Key application documents (additional to application form):	Appendix B – additional information (i) Replacement of Monitoring Bores (including maps)				

	(ii) Submission of Construction Compliance Report for Tailings Storage Facility Embankment Raises	
<b>Scope of application/assessment</b>		
Summary of proposed activities or changes to existing operations.	1. Minor amendment - moving 3 pairs of groundwater monitoring bores (TSF seepage) outwards due to landform expansion. Good info provided. 2. Administrative amendment – change to timing for compliance reports for TSF lifts	
<b>Category number/s (activities that cause the premises to become prescribed premises)</b>		
<b>Table 1: Prescribed premises categories</b>		
Prescribed premises category and description	Assessed production or design capacity	Proposed changes to the production or design capacity
Category 5: Processing or beneficiation of metallic or non-metallic ore	9 000 000 tonnes per annual period	No change to assessed capacity
Category 12 – Screening etc. of material	Not more than 5 000 000 tonnes per annual period	No change to assessed capacity
Category 52 - Electrical power generation	50 MW	No change to assessed capacity
Category 54 – Sewage facility	500 m <sup>3</sup> per day	No change to assessed capacity
Category 64 – Class II putrescible landfill site	Not more than 20 000 tonnes per year	No change to assessed capacity
Category 73 – Bulk storage of chemicals etc.	6 250 m <sup>3</sup>	No change to assessed capacity
<b>Legislative context and other approvals</b>		
Has the applicant referred, or do they intend to refer, their proposal to the EPA under Part IV of the EP Act as a significant proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input type="checkbox"/>
Does the applicant hold any existing Part IV Ministerial Statements relevant to the application?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Ministerial statement No: MS839 EPA Report No:
Has the proposal been referred and/or assessed under the EPBC Act?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Reference No:

Has the applicant demonstrated occupancy (proof of occupier status)?	Yes <input type="checkbox"/> No <input type="checkbox"/> <i>No change to this amendment</i>	Certificate of title <input type="checkbox"/> General lease <input type="checkbox"/> Expiry: Mining lease / tenement <input type="checkbox"/> Expiry: Other evidence <input type="checkbox"/> Expiry:
Has the applicant obtained all relevant planning approvals?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	Approval: Expiry date: If N/A explain why? Mining tenure
Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	CPS No: N/A No clearing is proposed.
Has the applicant applied for, or have an existing CAWS Act clearing licence in relation to this proposal?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Application reference No: N/A Licence/permit No: N/A No clearing is proposed.
Has the applicant applied for, or have an existing RIWI Act licence or permit in relation to this proposal?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Application reference No: Licence/permit No: CAW202527(1)
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Name: Type: Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Regional office:
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Name: N/A Priority: N/A Are the proposed activities/landuse compatible with the PDWSA (refer to <a href="#">WQPN 25</a> )? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
Is the Premises subject to any other Acts or subsidiary regulations (e.g. <i>Dangerous Goods Safety Act 2004, Environmental Protection (Controlled Waste) Regulations 2004, State Agreement Act xxxx</i> )	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Mining Act 1978

Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i> ?	Yes <input type="checkbox"/> No <input type="checkbox"/> Not relevant to this assessment	Classification: Date of classification: