



Application for Licence Amendment

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

Licence Number	L8667/2012/1
Licence Holder	Yilgarn Iron Pty Ltd
ACN	626 035 078
File Number	2012/005038-2~2
Premises	Windarling Range Mine Operations Part Mining Lease M77/1001, M77/999, M77/1038, M77/1039, M77/1000, M77/1257, M77/1258, M77/1259 and L77/235 MOUNT JACKSON, 6426 As depicted in Schedule 1.
Date of Report	28 August 2020
Decision	Granted

Lauren Fox
A/MANAGER-RESOURCE INDUSTRIES
INDUSTRY REGULATION

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

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1. Decision summary

Licence L8667/2012/1 is held by Yilgarn Iron Pty Ltd (Licence Holder) for the Windarling Range Mine Operations (the Premises), located at mining tenements M77/1001, M77/999, M77/1038, M77/1039, M77/1000, M77/1257, M77/1258, M77/1259 and L77/235.

This Amendment Report documents the assessment of potential risks to the environment and public health from proposed changes to the emissions and discharges during the operation of the Premises. As a result of this assessment, Revised Licence L8667/2012/1 has been granted.

This revised licence includes amendments to category 6 activities associated with dewatering (applicant initiated) as well as an administrative amendment (DWER initiated) to consolidate two amendment notices issued in 2017 and 2019. Included within category 6 amendments are addition of two new mine pits, the Claw and Altair pits, for dewatering, inclusion of W3 as an emission point and approval of dewatering infrastructure construction (section 2.2). DWER initiated amendments are summarised in section 2.4.

The Revised Licence issued as a result of this amendment consolidates and supersedes the existing Licence previously granted in relation to the Premises. The Revised Licence has been granted in a new format with existing conditions being transferred, but not reassessed, to the new format.

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 3 June 2020, the Licence Holder submitted an application to the department to amend Licence L8667/2012/1 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act). The following amendments for category 6, mine dewatering, are being sought:

- Add two new mine pits, the Claw and Altair pits, to the licence for dewatering;
- Installation of a water transfer pipeline between Deception Turkeys nest and Windarling W2 water storage pit to allow two way transfer of water resources; and
- Allow for the two way transfer of water between W2 to W3 pits and include W3 pit as a secondary emission point for water storage.

No changes to design or production capacity for Category 6 are proposed. This amendment is limited only for changes to Category 6 activities from Licence and those administrative changes detailed below in Section 2.4. No changes to the aspects of the existing Licence relating to Categories 12 (screening), 54 (sewage facility) or 64 (putrescible landfill) have been requested by the Licence Holder.

2.3 Part IV of the EP Act

On 24 September 2014 the Minister for the Environment issued Statement No. 982 (MS982) Environmental Protection Authority (EPA) assessment no. 2011, under Section 46 (Part IV) of the EP Act that the Yilgarn Operations may be implemented at the Windarling Range, Mt Jackson Range and Deception Deposits located in the shires of Menzies and Yilgarn.

The EPA assessment and Ministerial Statement focused on biodiversity issues, particularly the

conservation of significant flora species *Calytrix viscida* (Myrtle) which is endemic to the Deception Deposit and Mt Jackson Range. The EPA assessment included consideration of the potential impacts to flora species and significant vegetation communities.

2.4 Consolidation of Licence

As part of this amendment package the department has consolidated the licence by incorporating changes made under the Amendment Notices as summarised in Table 1.

Table 1: Licences consolidated in this amendment

Instrument	Issued	Summary of approval
L8667/2012/1	5/01/2017	Amendment notice 1: to authorise the dewatering of W10 Pit to W2 Pit
L8667/2012/1	05/08/2019	Amendment notice 2: to allow extension of Windarling Range operations to include Deception deposit dewatering and landfill activities.

The obligations of the Licence Holder have not changed in consolidating the licence. The department has not undertaken any additional risk assessment of the Premises related to previous Amendment Notices.

In consolidating the licence, the CEO has:

- updated the format and appearance of the Licence;
- deleted the redundant AACR form set out in schedule 1 of the previous licence and advised the Licensee to obtain the form from the department's website;
- revised licence condition numbers, removed any redundant conditions and realigned condition numbers for numerical consistency; and
- corrected clerical mistakes and unintentional errors.

The full consolidation of licence conditions as they relate to this Revised Licence are detailed in Section 5.1. Previously issued Amendment Notices will remain on the department's website for future reference and will act as a record of the department's decision making.

3. Risk assessment

The department assesses the risks of emissions from prescribed premises and identifies the potential source, pathway and impact to receptors in accordance with the *Guidance Statement: Risk Assessments* (DER 2017).

To establish a Risk Event there must be an emission, a receptor which may be exposed to that emission through an identified actual or likely pathway, and a potential adverse effect to the receptor from exposure to that emission.

3.1 Source-pathways and receptors

3.1.1 Emissions and controls

The key emissions and associated actual or likely pathway during premises operation which have been considered in this Amendment Report are detailed in Table 3 below. Table 3 also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

Table 2: Licence Holder controls

Emission	Sources	Potential pathways	Proposed controls
Dust (during construction – of short time duration)	Installation of pumps and pipework Earthworks to form v-drain to contain pipeline Drilling and installation of dewatering bore	Air/windborne pathway causing dust impact to vegetation	Current condition 1.2.12 indicates dust suppression to protect vegetation. No other controls proposed to prevent dust during construction.
Brackish water (TDS 22,000-24,000mg/L for 2019 AER)	Dewatering into W3 pit	Impacts to water table causing adverse effect on root vegetation zones	Current licence controls include 2.2.1, 3.2.1, 3.2.2 and 3.2.3 for dewatering into the current W2 pit. No new controls proposed outside of current licence controls.
Brackish water (TDS 22,000-24,000mg/L for 2019 AER)	Dewatering of Claw and Altair pits: new pipelines and dewatering infrastructure	Discharges of brackish water through leaks, pipeline rupture or failure causing damage to vegetation.	Current licence includes construction requirements for pipelines (1.2.11, 4.2.5 and 4.2.6) Proposed new controls for transfer pipeline include: <ul style="list-style-type: none"> fitting the pipeline with a leak detection system utilizing telemetry alert operational staff to pipeline leaks or failures; pipeline to be visually inspected daily; installation of v-drain will contain any discharge until staff are alerted via leak detection system to shutdown and undertake the necessary repairs.

3.1.2 Receptors

In accordance with the *Guidance Statement: Risk Assessment* (DER 2017), the Delegated Officer has excluded employees, visitors and contractors of the Licence Holder’s from its assessment. Protection of these parties often involves different exposure risks and prevention strategies, and is provided for under other state legislation.

Table 4 below provides a summary of potential human and environmental receptors that may be impacted as a result of activities upon or emission and discharges from the prescribed premises (*Guidance Statement: Environmental Siting* [DER 2016]).

Threatened and/or priority flora and fauna are present within the prescribed premises boundary. These are addressed within ministerial statement MS982 which requires the applicant to implement a Flora and Vegetation Management Plan and a Fauna Management Plan. Therefore, these receptors have not been reassessed under Part V of the EP Act for this application.

Table 3: Sensitive human and environmental receptors and distance from prescribed activity

Environmental receptors	Distance from prescribed activity
Avon River Hydrographic catchment	Windarling Range and deception deposit are located in the Avon River Catchment.
Remnant native vegetation (habitat for threatened	Directly north and east of deception deposit

fauna species)	
Other	
Native title claim	Marlinyu Ghoorlie – this was addressed under a federal court claim (under section 18 of the Aboriginal Heritage Act) and will not be considered further as part of this amendment.

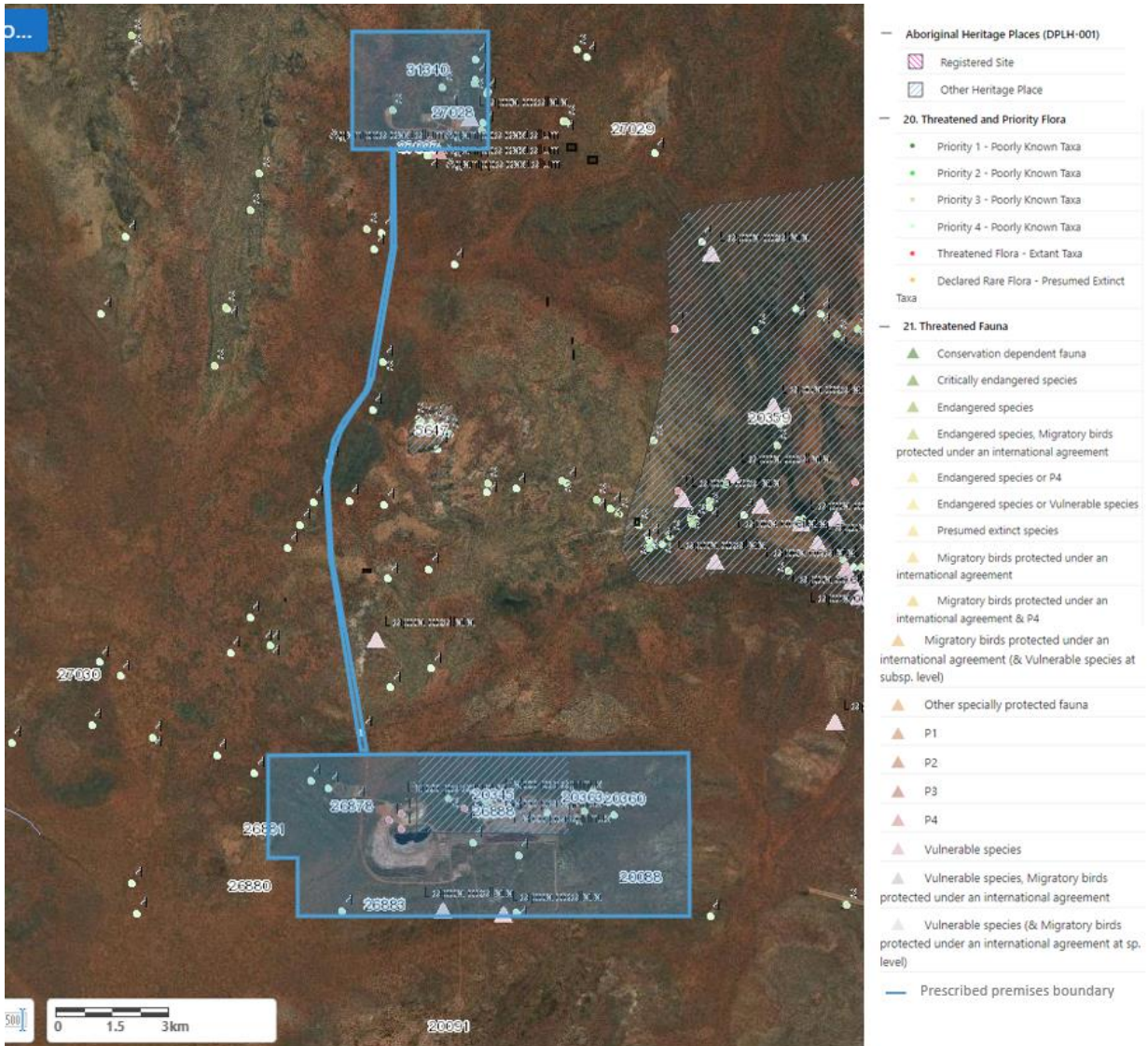


Figure 1: Distance to sensitive receptors

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guidance Statement: Risk Assessments* (DER 2017) for those emission sources which are proposed to change and takes into account potential source-pathway and receptor linkages as identified in Section 3.1. Where linkages are incomplete they have not been considered further in the risk assessment.

Where the Licence Holder has proposed mitigation measures/controls (as detailed in Section 3.1), these have been considered when determining the final risk rating. Where the Delegated Officer considers the Licence Holder's proposed controls to be critical to maintaining an acceptable level of risk, these will be incorporated into the licence as regulatory controls.

Additional regulatory controls may be imposed where the Licence Holder's controls are not deemed sufficient. Where this is the case the need for additional controls will be documented and justified in Table 5. The Revised Licence L8667/2012/1 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises i.e. category 6, 12, 54 and 64 activities.

The conditions in the Revised Licence have been determined in accordance with *Guidance Statement: Setting Conditions* (DER 2015).

Table 4. Risk assessment of potential emissions and discharges from the Premises during construction and operation

Risk Event					Risk rating ¹ C = consequence L = likelihood	Licence Holder's controls sufficient?	Conditions ² of licence	Justification for additional regulatory controls
Source/Activities	Potential emission	Potential pathways and impact	Receptors	Licence Holder's controls				
Construction								
Dust generated during installation of pumps and pipework, earthworks to form v-drain to contain pipeline and drilling and installation of dewatering bore.	Dust	Air/windborne pathway causing dust impact to vegetation	Remnant native vegetation (habitat for threatened fauna species)	Refer to Section 3.1	C = Slight L = Unlikely Medium	N	Current condition 1.2.12 modified to include dust suppression to prevent dust deposition on vegetation.	Additional controls added to protect vegetation from dust deposition.
Operation								
Dewatering into W3 pit	Brackish water (TDS 22,000-24,000mg/L for 2019 AER)	Impacts to water table causing adverse effect on root vegetation zones.	Remnant native vegetation (habitat for threatened fauna species)	Refer to Section 3.1	C = Moderate L = possible Medium	N	Conditions 2.2.1, 3.2.1, 3.2.2 and 3.2.3 require amending for inclusion of W3 pit.	Licence does not currently include controls to protect vegetation associated with dewatering into W3 pit.
Dewatering of Claw and Altair pits: new pipelines and dewatering infrastructure	Brackish water (TDS 22,000-24,000mg/L for 2019 AER)	Discharges of brackish water through leaks, pipeline rupture or failure causing damage to vegetation.	Remnant native vegetation (habitat for threatened fauna species)	Refer to Section 3.1	C = major L = rare Medium	N	Condition 1.2.11, table 1.2.7 requires amending for inclusion of new water transfer pipeline and inclusion of applicant proposed controls on the licence as regulatory controls. Existing conditions 4.2.5 and 4.2.6 require audit compliance and reporting to DWER on items of infrastructure in condition 1.2.11, table 1.2.7.	New infrastructure to be included and applicant proposed controls to be included on the licence as regulatory controls.

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guidance Statement: Risk Assessments* (DER 2017).

Note 2: Proposed Licence Holder's controls are depicted by standard text. **Bold and underline text** depicts additional regulatory controls imposed by department.

4. Consultation

Table 6 provides a summary of the consultation undertaken by the department.

Table 5: Consultation

Consultation method	Comments received	Department response
Shire of Menzies - request for comment (17/7/2020)	N/A	N/A
Shire of Yilgarn – request for comment (17/7/20)	N/A	N/A
Licence Holder was provided with draft amendment on 6/8/20	Refer to Appendix 1	Refer to Appendix 1

5. 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.

5.1 Summary of amendments

Table 7 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 6: Summary of licence amendments

Condition no.	Proposed amendments
1.2.11	Amendment to include construction requirements for Claw and Altair pits dewatering infrastructure (pipelines).
2.2.1	Amendment to include W3 as an emission point for dewatering
3.2.1, 3.2.2 and 3.2.3	Amendment to include monitoring of emissions associated with dewatering to W3

Table 7: Consolidation of licence conditions in this amendment

Existing condition	Condition summary	Revised licence condition	Conversion notes
N/A	Expiry Date: 02 December 2023	Expiry Date: 09 December 2027	Amendment to expiry date (29/04/2016)
N/A	Premises details	N/A	Mining tenements added: M77/1257, M77/1258, M77/1259 and L77/235
N/A	Prescribed Premises Category table	N/A	Revised to current licensing format.

Existing condition	Condition summary	Revised licence condition	Conversion notes
1.1.1 1.1.2	Interpretation and definitions	N/A	Revised CEO correspondence address to reflect current details.
1.2.8	Dewatering effluent	N/A	Inclusion of discharge point L3.
1.2.11 1.2.12	Premises operation	N/A	Added in as per amendment notice 2.
2.2.1	Emissions to groundwater	N/A	Revised to include W4 as an emission point and include L3 instead. Revised to remove W1 and W3 as sources of emission and includes deception mine pit instead.
2.3.1	Emissions to land	N/A	Revised to include overflow to unlined evaporation dam (L3)
4.2.5 and 4.2.6	Reporting	N/A	Added in as per amendment notice 2.
Schedule 1: Maps	Premises map Map of Emission points Landfill area map Category 6 activities	Schedule 1: Maps	Updated maps as per amendment notice 2.
Schedule 2 Reporting & notifications	Annual Audit Compliance Report Form N1 Notification	N/A	Redundant attachment. Deleted from Licence Forms accessed at www.dwer.wa.gov.au

References

1. Department of Environment Regulation (DER) 2016, *Guidance Statement: Environmental Siting*, Perth, Western Australia.
2. DER 2017, *Guidance Statement: Risk Assessments*, Perth, Western Australia.
3. DER 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
4. Mineral Resources, 2020, Licence Amendment Supporting Information (DWER file number A1899753)

Appendix 1: Summary of Licence Holder's comments on risk assessment and draft conditions

Condition	Summary of Licence Holder's comment	Department's response
N/A	Replace mistake in Licence History table L2 with correct W2	Error corrected
N/A	Replace text in introduction which reads "Yilgarn Iron have been approved to develop the Windarling Range W7 Deposit" to " The Previous Licence Holder (Cliffs) was approved..."	Text replaced
N/A	Replace text in introduction which read "...amendment allows the discharge of dewater from W10 Pit to W2 Pit should Yilgarn Iron decide to Mine below the water table" to "...amendment allows the discharge of dewater from W10 Pit to W2 Pit should the current licence holder Yilgarn Iron decide to Mine below the water table"	Text replaced
1.2.11	Grammatical correct to remove "and" from "depicted in Schedule 1 plan titled "Deception Deposit, Licence 8667 and Cateogry 6 Prescribed Activity Locations"	Error corrected
1.2.11	Insert that construction shall also be completed in accordance with "Windarling and Deception Mine Operations Licence L8667 Supporting Information" dated 3 June 2020.	Text inserted
1.2.11	Text corrected to refer HDPE lined turkeys nest construction requirements to refer to Attachment 3A pg 80-81 and for the clay lined dam to refer to Attachment 8 Golder Report	Text corrected
1.2.11	Text referring to Claw and Altair dewatering infrastructure corrected to refer to pages 15-17 (as opposed to pages 16 and 17).	Text corrected

Appendix 2: 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:	L8667/2012/1	
		Relevant works approval number:		N/A <input type="checkbox"/>
Registration	<input type="checkbox"/>	Current works approval number:		None <input type="checkbox"/>
Date application received	3/6/20 (received by the Department)			
Applicant and Premises details				
Applicant name/s (full legal name/s)	Yilgarn Iron Pty Ltd (MRL)			
Premises name	Windarling Range and Deception Mine Operations			
Premises location	Part mining leases M77/1001, M77/999, M77/1038, M77/1039, M77/1000, M77/1257, M77/1258 and M77/1259 and L77/235			
Local Government Authority	Shire of Yilgarn and Shire of Menzies			
Application documents				
HPCM file reference number:	A1899753			
Key application documents (additional to application form):	Modelling of Pit Dewatering Report (Rockwater 2020)			
Scope of application/assessment				

Summary of proposed activities or changes to existing operations.	<p>Licence amendment (category 6 – dewatering)</p> <ol style="list-style-type: none"> 1. Seeks to add two new mine pits, the Claw and Altair pits to the licence for dewatering. 2. Installation of a water transfer pipeline between Deception Turkeys nest and Windarling W2 water storage pit to allow two way transfer of water resources. 3. Allow for the two way transfer of water between W2 to W3 pits and include W3 Pit as a secondary emission point for water storage.
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Category number/s (activities that cause the premises to become prescribed premises)

Table 1: Prescribed premises categories

Prescribed premises category and description	Assessed production or design capacity	Proposed changes to the production or design capacity (amendments only)
Category 6 – Mine dewatering: premises on which water is extracted and discharged into the environmental to allow mining of ore.	3,420,000	No changes to production or design capacity proposed (dewatering location and infrastructure amendments proposed)
Category 54 – Sewage facility premises	100 cubic metres or more per day	210 cubic metres per day
Category 64 – Class I or II putrescible landfill site	20 tonnes or more per year	500 tonnes per year

Legislative context and other approvals

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: MS982 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 checked="" type="checkbox"/> No <input type="checkbox"/>	Certificate of title <input type="checkbox"/> General lease <input type="checkbox"/> Expiry: Mining lease / tenement <input checked="" 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?

Has the applicant applied for, or have an existing EP Act clearing permit in relation to this proposal?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	CPS No: 7733
Has the applicant applied for, or have an existing CAWS Act licence in relation to this proposal?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Application reference No: N/A Licence/permit No: N/A They have an existing CAW groundwater licence 203937
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: GWL 154459
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the EP Act)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Name: Goldfields groundwater area Type: Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Regional office: Goldfields groundwater area
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: P1 / P2 / P3 / N/A Are the proposed activities/ landuse compatible with the PDWSA (refer to WQPN 25)? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input 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 Aboriginal Heritage Act 1972
Is the Premises within an Environmental Protection Policy (EPP) Area?	Yes <input type="checkbox"/> No <input 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"/>	Classification: Date of classification: N/A