



Application for Licence Amendment

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

Licence Number	L6426/1991/14
Licence Holder	Water Corporation
ACN	28 033 434 917
File Number	DER2013/000866-1
Premises	Esperance Wastewater Treatment Plant Jetty Road CHADWICK WA 6450 Legal description – Lot 500 on Deposited Plan 407029 Part of Reserve 34464 As defined by the Premises maps attached to the Revised Licence
Date of Report	6 April 2023
Proposed Decision	Revised licence granted

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**A/MANAGER WASTE INDUSTRIES
REGULATORY SERVICES**

an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

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1. Decision summary

Licence L6426/1991/14 is held by Water Corporation (Licence Holder) for the Esperance Wastewater Treatment Plant (WWTP) (the Premises), located on Jetty Road, Chadwick.

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 L6426/1991/14 has been granted.

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://dwer.wa.gov.au/regulatory-documents>.

2.2 Application summary

On 11 November 2022, the Licence Holder submitted an application to the department to amend Licence L6426/1991/14 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act).

The Licence Holder has advised that due to access issues, groundwater sampling of a monitoring bore located up-hydraulic gradient of the premises (being bore 08/00) can no longer occur, indicating a potential non-compliance with ongoing Licence conditions. To rectify this, the Licence Holder has installed a new groundwater monitoring bore (being bore 07/22S) in a similar location to bore 08/00, and wishes to incorporate this bore into groundwater monitoring conditions to replace bore 08/00 which can no longer be sampled. The replacement of an upgradient monitoring bore will ensure accurate results continue to be obtained for background groundwater contaminant concentrations.

The Licence Holder has submitted groundwater bore logs for bore 08/00 and the new replacement bore 07/22S which confirm comparable installation and screening depths. Additionally, the Licence Holder has also provided a screening depth and length comparison for bores 08/00 and 07/22S, as outlined in Table 1. This demonstrates that while screen depth has decreased for bore 07/22S, the standing water level is still within the screened section of the bore and is targeting the upper section of the superficial aquifer.

Table 1: Bore screen depth comparison

Bore ID	Ground Level (mAHD)	TOC (mAHD)	Screen (mbtoc)	Screen (mAHD)	Min SWL (mAHD)	Max SWL (mAHD)
08/00	7.88	7.767	4.0 to 10.0	3.8 to -2.2	2.40	2.83
07/22S	8.40	8.789	3.0 to 7.0	5.8 to 1.8	3.29	4.00

Groundwater is known to flow through the premises area in a south-easterly direction, so the location of the replacement bore appears suitable to provide accurate background concentration groundwater samples. The locations of the original (08/00) and replacement (07/22S) bores are depicted across Figures 1 and 2 below.

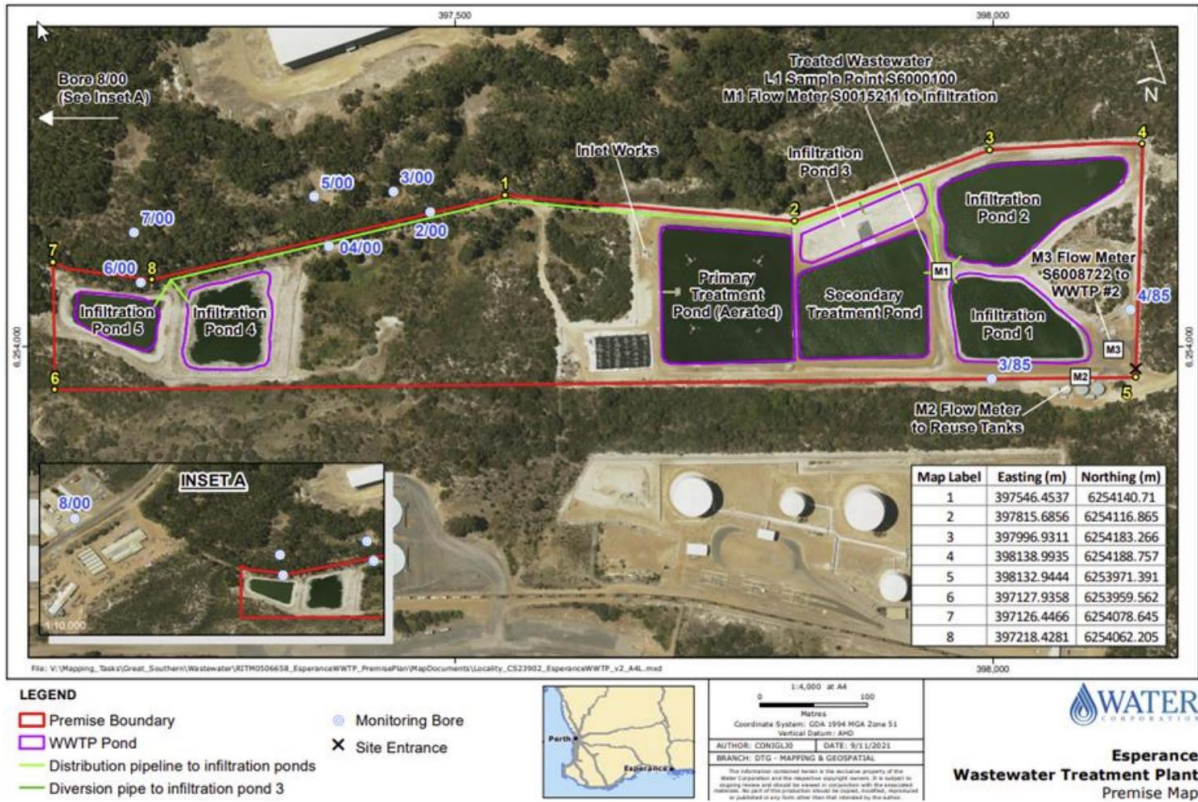


Figure 1: Location of original bore (08/00)

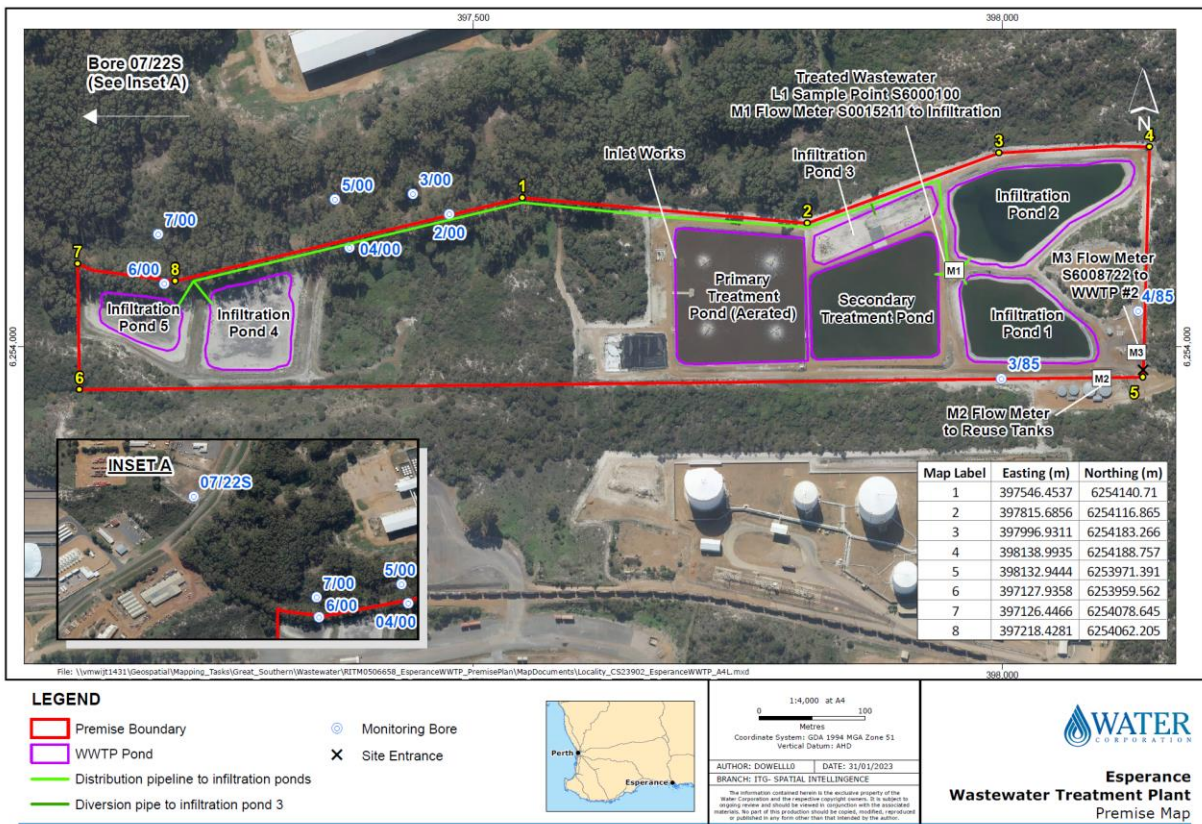


Figure 2: Location of replacement bore (07/22S)

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 *Guideline: Risk assessments* (DWER 2020).

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 2 below.

Table 2 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
Seepage of treated wastewater	Infiltration of treated wastewater from infiltration ponds	Infiltration to land and groundwater	Ponds are lined with compacted in-situ soils. Monitoring program for treated wastewater and ambient groundwater.
Spills of sewage wastes	Failure of containment infrastructure or overtopping of ponds	Direct discharge to land with capacity to infiltrate groundwater	Ponds are managed to prevent overtopping – trapped overflows are maintained on the outlet of ponds to prevent carry over of surface floating matter. Spills are immediately cleaned.

3.1.2 Receptors

In accordance with the *Guideline: Risk assessments* (DWER 2020), 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 3 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 (*Guideline: Environmental siting* (DWER 2020)).

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

Human receptors	Distance from prescribed activity
Residential property	400m south of the Premises boundary
The town site of Esperance	1.5 km south of the Premises boundary

Environmental receptors	Distance from prescribed activity
Esperance Bay	320m east of the Premises boundary
PDWSA Esperance Water Reserve - Priority Area 3 Public Drinking Water Source	450m to the north of the Premises boundary
TECs/PECs	The Premises is within the buffer zone of the Priority Ecological Community, "Proteaceae dominated kwongan shrublands of the southeast coastal floristic province of Western Australia" (Priority 3).
Proclaimed Groundwater Area – RIWI 1914 Groundwater found 2 – 10 mbgl at the premises.	The premises is located within the Esperance Groundwater Area

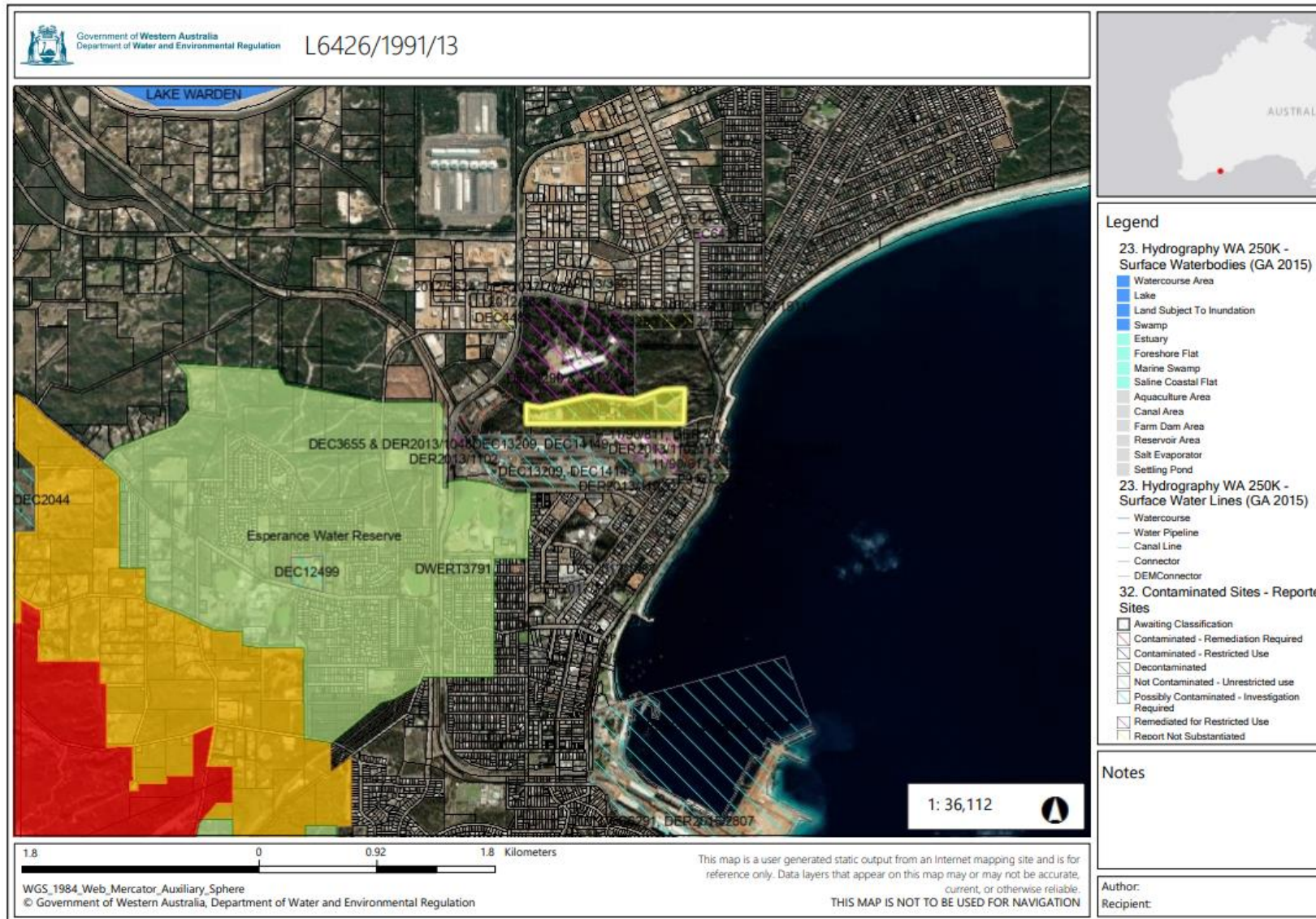


Figure 3: Overview of Premises location

Licence: L6426/1991/14

IR-T15 Amendment report template v3.0 (May 2021)

3.2 Risk ratings

Risk ratings have been assessed in accordance with the *Guideline: Risk Assessments* (DWER 2020) 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 4.

The Revised Licence L6426/1991/14 that accompanies this Amendment Report authorises emissions associated with the operation of the Premises.

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 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				
Operation of the Wastewater Treatment Plant	Seepage of treated wastewater	Infiltration to land and groundwater	Underlying groundwater	Refer to Section 5.1	C = Moderate L = Almost certain High Risk	Y		N/A – the replacement of the groundwater monitoring bore has not altered the risk rating associated with the operation of the WWTP
	Spills of sewage wastes	Direct discharge to land with capacity to infiltrate groundwater	Underlying groundwater	Refer to Section 5.1	C = Moderate L = Unlikely Medium Risk	Y	Conditions 4,	

Note 1: Consequence ratings, likelihood ratings and risk descriptions are detailed in the *Guideline: Risk assessments* (DWER 2020).

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 5 provides a summary of the consultation undertaken by the department.

Table 5: Consultation

Consultation method	Comments received	Department response
Shire of Esperance advised of proposal (20 January 2023)	No comments received.	N/A
Licence Holder was provided with draft amendment (20 March 2023)	Modified Table 8 has the upstream bore labelled 7/21S when it should be 7/22S as per the new schematic provided.	7/12S was the original label given for the upstream bore at the commencement of the application. However, to reflect the labelling in the schematic and ensure consistency, the Delegated Officer has updated reference to the upstream bore from 7/21S to 7/22S throughout the Licence and this amendment report.
	<p><i>In response to DWER request for information during the draft comment period:</i></p> <p>Replacement of aerator works have been completed. Please refer to the attached compliance document and DWER acknowledgement of correspondence from 9th December 2021.</p>	<p>The Delegated Officer has conducted a compliance review of the Compliance Document submitted for the Aerator Installation on 9 December 2021.</p> <p>The Delegated Officer considers that all requirements within the works conditions of the Licence (conditions 12 – 15) have been complied with. As such, conditions 12 – 15 will be removed from the revised Licence, as there are no further requirements under these conditions for the Licence Holder.</p> <p>The removal of these conditions will act to increase the readability of the Licence.</p>

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 6 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
12 -15 (Previous Licence)	Removal of conditions – confirmation of compliance with works outlined under conditions has been demonstrated by the Licence Holder.
20 Table 8	Deletion of redundant bore 8/00. Insertion of replacement bore 7/22S
N/A Schedule 1: Maps	Replacement of Figure 1: Prescribed premises boundary, layout of the premises and location of monitoring points with updated map incorporating location of replacement bore.

References

1. Department of Environment Regulation (DER) 2015, *Guidance Statement: Setting Conditions*, Perth, Western Australia.
2. Department of Water and Environmental Regulation (DWER) 2020, *Guideline: Environmental Siting*, Perth, Western Australia.
3. DWER 2020, *Guideline: Risk Assessments*, Perth, Western Australia.

Appendix 1: Application validation summary

SECTION 1: APPLICATION SUMMARY (as updated from validation checklist)			
Application type			
Amendment to licence	<input checked="" type="checkbox"/>	Current licence number:	L6426/1991/14
		Relevant works approval number:	N/A <input checked="" type="checkbox"/>
Date application received	11 November 2022		
Applicant and Premises details			
Applicant name/s (full legal name/s)	Water Corporation		
Premises name	Esperance Wastewater Treatment Plant		
Premises location	Jetty Road CHADWICK WA 6450		
Local Government Authority	Shire of Esperance		
Application documents			
HPCM file reference number:	DER2013/000866		
Key application documents (additional to application form):	Attachment 2 - Updated Figure 1 for Schedule 1 of the Licence Attachment 3B – Bore 7-22s Attachment 3B – Bore 8-00		
Scope of application/assessment			
Summary of proposed activities or changes to existing operations.	Amendment to replace upgradient groundwater monitoring bore with a new bore due to access issues.		
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 54: Sewage facility	2,637 m3/day	No change.	
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 checked="" 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 type="checkbox"/> No <input checked="" type="checkbox"/>	Ministerial statement No: 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 checked="" type="checkbox"/>	Not required for amendment – has been demonstrated through previous approvals.
Has the applicant obtained all relevant planning approvals?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	Public works – approval not required from LGA.
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 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 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 type="checkbox"/> No <input checked="" type="checkbox"/>	Application reference No: Licence/permit No: Licence / permit not required.
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: Esperance Groundwater Area Type: Proclaimed Groundwater Area Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Regional office: South Coast
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes <input type="checkbox"/> No <input type="checkbox"/>	Name: N/A Priority: 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 checked="" type="checkbox"/>
Is the Premises subject to any other Acts or subsidiary regulations (e.g. <i>Dangerous Goods Safety Act 2004</i> , <i>Environmental Protection (Controlled Waste) Regulations 2004</i> , <i>State Agreement Act xxxx</i>)	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	<i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i>
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 checked="" type="checkbox"/> No <input type="checkbox"/>	Classification: possibly contaminated – investigation required (PC-IR) Date of classification: 8 March 2019