



Application for Licence Amendment

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

Licence Number	L5972/1992/14
Licence Holder	Water Corporation
File Number	DER2014/001681-1
Premises	Bunbury Water Resource Recovery Facility Access via Ocean Drive DALYELLUP WA 6230 Being Part Lot 5262 on Plan 183085 As defined by the Premises map attached to the Revised Licence
Date of Report	31 May 2022
Decision	Revised licence granted

Stephen Checker
Manager, Waste Industries

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

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1. Decision summary

Licence L5972/1992/14 is held by Water Corporation (Licence Holder) for the Bunbury Water Resource Recovery Facility (the Premises), located at Lot 5262 Ocean Drive, Dalyellup.

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 L5972/1992/14 has been granted.

The Revised Licence issued as a result of this amendment 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://dwer.wa.gov.au/regulatory-documents>.

2.2 Application summary

On 30 September 2021, the Licence Holder submitted an application to the department to amend Licence L5972/1992/14 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act).

Aqwest is planning to construct a Recycled Water Treatment Plant on land adjacent to the Premises. The Aqwest Recycled Water Treatment Plant will source treated wastewater from the Premises and treat it to a quality that is suitable for various reuse applications throughout Bunbury.

This amendment seeks to make changes to the Licence to allow for the construction and operation of Aqwest's Recycled Water Treatment Plant. Specifically, the Premises boundary is to be amended to remove the land that will contain the Aqwest infrastructure and to reflect the changes to the process that will result from the operation of Aqwest's Recycled Water Treatment Plant.

The process changes that will occur due to the operation of Aqwest's Recycled Water Treatment Plant are:

- The transfer of treated wastewater from the balancing ponds to Aqwest's Recycled Water Treatment Plant via a pump station;
- The acceptance of liquid waste from Aqwest's Recycled Water Treatment Plant via a waste return main; and
- The acceptance of recycled water via the header tank return main.

The liquid waste proposed to be accepted from Aqwest will include:

- Solids-laden backwash from the coarse screen filter;
- Membrane filtration concentration, backwash and Clean in Place discharge;
- Operator room waste (sink, toilet etc.); and
- Overflow from the reaction tank.

This amendment will not introduce any new emissions or discharges to land.

Figure 1 below provides an overview of the proposed inputs and outputs of the Premises.

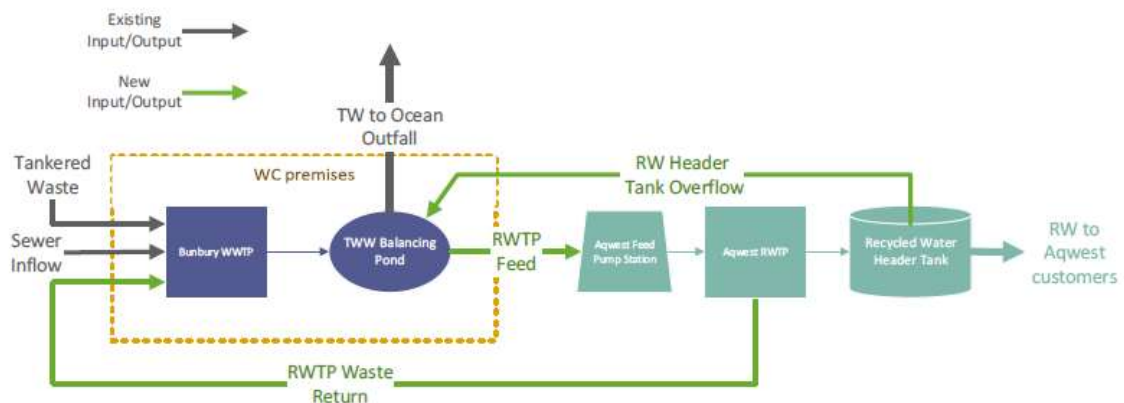


Figure 1. Overview of inputs and outputs of the Premises

2.3 Part IV of the EP Act

The *Ocean outlet for treated wastewater, Bunbury wastewater treatment plant* is subject to Ministerial Statement 572 (MS 572). While not part of the assessed proposal, the EPA supported the reuse of treated recycled water in Report 1021.

MS 572 relates to the construction and operation of an ocean outlet for treated wastewater. The construction aspects described in MS 572 relate to lining of existing lagoons at the Bunbury Wastewater Treatment Plant, and a pipeline leading from the storage lagoons to the outlet pipeline, for the disposal of treated wastewater at the ocean outlet.

The proposal has been constructed and the conditions require the proponent to manage the discharge of effluent at the ocean outlet (not the storage lagoons or at the Bunbury Wastewater Treatment Plant).

The proposed Recycled Wastewater Treatment Plant premises would not be subject to the requirements of MS 572.

MS 572 does not cover the treatment processes and existing pipe work at the Bunbury Wastewater Treatment Plant or from the plant to the storage lagoons. MS 572 is in relation to the discharge quality at the ocean outlet. The existing licence manages water quality at the Bunbury Wastewater Treatment Plant to be consistent with requirements for discharge at the ocean outlet. Noting that the recycling of wastewater was not part of, or related to the proposal in MS 572; and based on the understanding that the quality of water discharged to the ocean will still be maintained as per requirements in MS 572, this application is not expected to constitute a change/amendment to the original proposal.

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 construction of the waste return main and the operation of the premises which have been considered in this Amendment Report are detailed in Table 1 below.

Table also details the proposed control measures the Licence Holder has proposed to assist in controlling these emissions, where necessary.

Table 1: Licence Holder controls

Emission	Sources	Potential pathways	Proposed controls
Dust	Earthworks and movement of machinery	Air/windborne pathway	Dust suppression measures (e.g. water carts)
Noise	Operation of heavy machinery	Air/windborne pathway	Construction will be carried out during the day and will be undertaken in accordance with the <i>Environmental Protection (Noise) Regulations 1997</i> .
Odour	Waterwater spills	Air/windborne pathway	Pipeline will be sealed and regularly maintained
Treated wastewater	Spills due to failure of pipework	Direct discharge to ground/soil Seepage groundwater	Pipeline will be buried to avoid being damaged
Returned liquid waste from Aqwest's premises	Spills due to failure of pipework	Direct discharge to ground/soil Seepage groundwater	

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 2 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 2: Sensitive human and environmental receptors and distance from prescribed activity

Human receptors	Distance from prescribed activity
Suburb of Dalyellup	Approximately 350 m south east of the Premises
Suburb of Usher	Approximately 650 m north east of the Premises
Environmental receptors	Distance from prescribed activity
Underlying groundwater (non-potable purposes)	<p>Depth to groundwater is unknown, however it is expected to be shallow as the Premises is located on the coast line.</p> <p>Inferred regional groundwater flow is east to west, discharging to the Indian Ocean.</p> <p>Salinity of 1000-1500 mg/L which is considered Brackish, and useful for irrigation of certain crops only, useful for stock.</p>
Indian Ocean	Approximately 50 m west of the Premises boundary
Surface Water Areas proclaimed under the <i>Rights in Water and Irrigation Act 1914</i>	None within 10km of the Premises
Groundwater Areas proclaimed under the <i>Rights in Water and Irrigation Act 1914</i>	Premises located within the Bunbury Groundwater Area
Bunbury Water Reserve, Public Drinking Water Source Area (P3)	Premises located within designated area
Protection zones for Public Drinking Water Source Areas	Bunbury Water Reserve, wellhead protection zone located approximately 25 m east of the Premises.
Threatened Ecological Communities	<p>Tuart Woodlands and Forests of the Swan Coastal Plain mapped within the north eastern boundary of the Premises, and approximately 200 m east.</p> <p>Banksia Dominated Woodlands of the Swan Coastal Plain IBRA Region mapped approximately 100 m east of the Premises.</p>
Fauna	Multiple sightings of critically endangered fauna identified within 500 m of the Premises boundary.

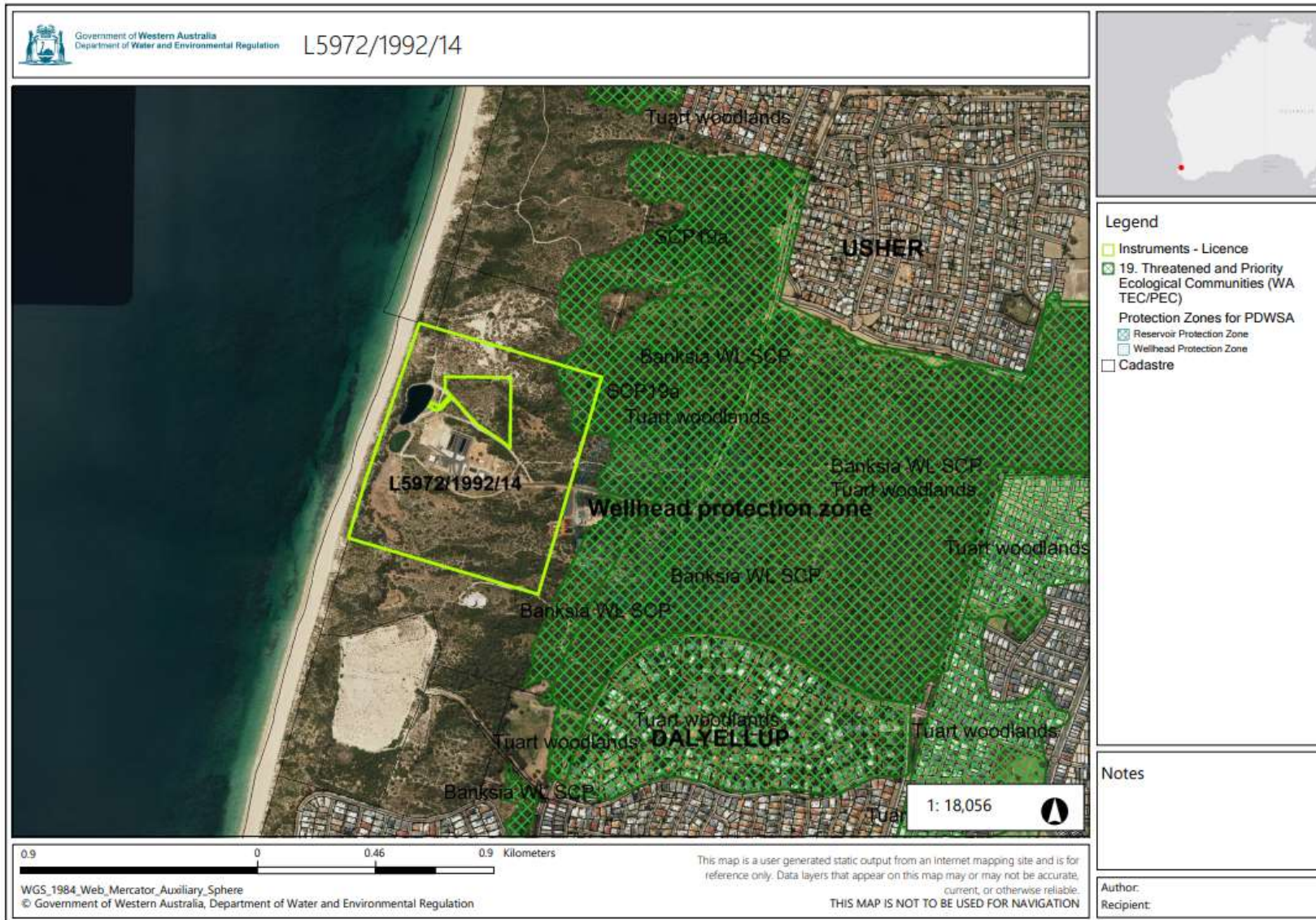


Figure 2: Sensitive receptors

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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 3.

The Revised Licence L5972/1992/14 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 3. 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								
Construction of the return waste pipeline including ground disturbance and vehicle movements.	Dust	Air/windborne pathway causing impacts to health and amenity	Residences surrounding the premises with the closest being 350 m south east.	Refer to Section 3.1	C = Minor L = Rare Low Risk	Y	N/A	N/A
	Noise			Refer to Section 3.1	C = Minor L = Rare Low Risk	Y	N/A	N/A
Operation								
Operation of the return waste pipeline and processing of returned waste	Noise	Air/windborne pathway causing impacts to health and amenity	Residences surrounding the premises with the closest being 350 m south east.	Refer to Section 3.1	C = Minor L = Rare Low Risk	Y	N/A	N/A
	Odour	Air/windborne pathway causing impacts to health and amenity	Residences surrounding the premises with the closest being 350 m south east.	Refer to Section 3.1	C = Minor L = Rare Low Risk	Y	N/A	N/A
	Wastewater	Direct discharge Overland flow Seepage to groundwater	Indian Ocean 200m west On-site soils Shallow Groundwater	Refer to Section 3.1	C = Moderate L = Unlikely Medium Risk	Y	Condition 1, ,2 and 3	N/A

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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				
			Threatened Ecological Communities					

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

Table 4: Consultation

Consultation method	Comments received	Department response
Local Government Authority advised of proposal on 22 March 2022.	No comments received	N/A
Applicant was provided with draft documents on 2 May 2022.	In a letter dated 24 May 2022 the licence holder requested to change the due date of the annual environmental report from 1 September every year to 1 October.	The department notes this request and has updated the licence accordingly.

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

Table 5: Summary of licence amendments

Existing condition	Condition summary	Revised licence condition	Amendment notes
Premises details	Bunbury No. 2 Wastewater Treatment Plant	Bunbury Water Resource Recovery Facility	Premises name changed at the request of the Licence Holder.
N/A	Prescribed Premises Category table	N/A	Revised to current licensing format.
1.1.1 1.1.2	Interpretation and definitions	N/A	Redundant condition. Revised to current licensing format.
1.1.3	Australian or other standard	N/A	Redundant condition. Revised to current licensing format.
N/A	Infrastructure and equipment	1	New condition to allow for the construction of the waste return main
N/A	Compliance reporting	2 and 3	New conditions
1.2.1	Waste acceptance	4	New numbering. Table 2 amended to add in waste returned from Aqwest's premises

Existing condition	Condition summary	Revised licence condition	Amendment notes
1.2.2 – 4.1.2	N/A	5 - 18	New numbering
4.1.3	Complaints	19	Revised to current standard condition wording
4.2.1 – 4.2.2	Reporting	20 - 21	New numbering
N/A	Schedule 1, Maps	N/A	Premises map updated
N/A	Schedule 2: Premises boundary	N/A	Coordinates added for Premises boundary

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										
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 / Critical Containment Infrastructure 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:	L5972/1992/14							
		Relevant works approval number:		N/A	<input type="checkbox"/>					
Registration	<input type="checkbox"/>	Current works approval number:		None	<input type="checkbox"/>					
Date application received	30 September 2021									
Applicant and Premises details										
Applicant name/s (full legal name/s)	Water Corporation									
Premises name	Existing name: Bunbury No. 2 Wastewater Treatment Plant To be amended to: Bunbury Water Resource Recovery Facility									
Premises location	Existing Premises: Lot 5262 on Plan 183085 To be amended to: Part of Lot 5262 on Plan 183085 Access via Ocean Drive, Dalyellup WA 6230									
Local Government Authority	Shire of Capel									
Application documents										
HPCM file reference number:	DWERDT509554									
Key application documents (additional to application form):	Supporting information document, which includes a description of proposed activities (construction and commissioning – <i>but states in section 4.2 of the application form that no commissioning will be undertaken</i> , operation); emissions, discharges and waste; administrative changes to the licence; and maps.									
Scope of application/assessment										

Summary of proposed activities or changes to existing operations.	<p><u>Licence amendment</u></p> <p>The Water Corporation proposes to make changes to licence L5972 to allow Aqwest to construct a Recycled Water Treatment Plant (RWTP) on land adjacent to the Water Corporation's Bunbury WWTP.</p> <p>The Aqwest RWTP will source treated wastewater from the Bunbury WWTP and treat it to a quality that is suitable for various reuse applications throughout Bunbury.</p> <p>The prescribed premises boundary is to be amended to remove the land that will contain Aqwest infrastructure.</p>
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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 54: sewage facility	Assessed - 15,000 m ³ per day	Water Corporation is requesting no change to operating capacities or throughput
Category 61: liquid waste facility	Assessed – 5000 tonnes per annual period	Water Corporation is requesting no change to operating capacities or throughput

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 checked="" 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: MS 572 EPA Report No: 1021 MS 572 commits WC to a number of environmental management plans. It also states that WC has made a clear commitment to the community of Bunbury to maximise reuse of wastewater and minimise disposal of treated wastewater to the ocean.
Has the proposal been referred and/or assessed under the EPBC Act?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Applicant answered no to this question. May have happened at the same time as Part IV approval.
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 type="checkbox"/> Expiry: Other evidence <input checked="" type="checkbox"/> Public authority that has care, control, or management of the land.

		Expiry: N/A
Has the applicant obtained all relevant planning approvals?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	If N/A explain why? Application form does not explain, but presumably because Aqwest is responsible for building the recycled water treatment plant.
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 type="checkbox"/> No <input checked="" type="checkbox"/>	Application reference No: N/A Licence/permit No: N/A 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: Bunbury Groundwater Area Amendment does not propose to change emissions or discharges from the WWTP premises to the environment. Type: N/A Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Regional office: N/A
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	Name: Bunbury Water Reserve, Country Areas Water Supply Act Priority: P3 Are the proposed activities/ landuse compatible with the PDWSA (refer to WQPN 25)? Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/> Compatible landuse with conditions 13 (not within a wellhead protection zone), 22 (bundling required), 24 (storage of hazardous substances), 28 (EP Act assessment required).

<p>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>)</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	
<p>Is the Premises within an Environmental Protection Policy (EPP) Area?</p>	<p>Yes <input checked="" type="checkbox"/> No <input checked="" type="checkbox"/></p>	
<p>Is the Premises subject to any EPP requirements?</p>	<p>Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	
<p>Is the Premises a known or suspected contaminated site under the <i>Contaminated Sites Act 2003</i>?</p>	<p>Yes <input checked="" type="checkbox"/> No <input type="checkbox"/></p>	<p>Classification: Possibly contaminated – investigation required (PC-IR) CSS Site ID 102 Date of classification: Sep 14, 2017, updated 16 December 2020</p>