



Application for Licence Amendment

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

Licence Number	L7395/1991/10
Licence Holder	Water Corporation
ACN	28 003 434 917
File Number	SWB2004-03
Premises	Capel Wastewater Treatment Plant Range Road, CAPEL WA 6271 Lot 5613 on Plan 190864; and Lot 1614 on Plan 140135 (As defined in Schedule 1)
Date of Report	29/06/2021
Proposed Decision	Revised licence granted

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MANAGER, WASTE INDUSTRIES
REGULATORY SERVICES
an officer delegated under section 20
of the *Environmental Protection Act 1986* (WA)

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1. Amendment summary

Licence L7395/1991/10 is held by Water Corporation (Licence Holder) for the Capel Wastewater Treatment Plant (WWTP) (the Premises), located at Lot 5613 on Plan 190864 Range Road and Lot 1614 on Plan 140135 Tuart Drive, Capel WA 6271.

The WWTP consists of primary, secondary and tertiary ponds connected in series. A plant upgrade in January 2012 enables treated wastewater to be piped to the Capel Wetlands, consisting of Higgins Lake, Swamphen Lake, Island Lake and Peninsula Lake, located on Lot 1614 on Plan 140135 (Tuart Drive) approximately 2.2 km south-west of the WWTP.

This Amendment Report documents the assessment of potential risks to the environment and public health from the cessation of chlorination during the operation of the Premises. As a result of this assessment, Revised Licence L7395/1991/10 has been granted.

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

2.2 Application summary

On 16 March 2021, the Licence Holder submitted an application to the department to amend Licence L7395/1991/10 under section 59 and 59B of the *Environmental Protection Act 1986* (EP Act).

The following amendment in Table 1 are being sought for a change in operational process to discontinue disinfection by chlorination of treated wastewater before disposal to wetlands.

Chlorination was introduced to meet a requirement from the Department of Health DoH. The application included a copy of recent correspondence from the DoH confirming that classification as a reuse scheme is no longer relevant, and that the DoH has rescinded the requirement for chlorination.

This amendment is limited only to changes to Category 54 activities in the Existing Licence.

Table 1 below outlines the proposed changes to the Existing Licence.

Table 1: Proposed design or throughput capacity changes

Category	Current design throughput capacity	Proposed design throughput capacity	Description of proposed amendment
54 - Sewage facility	320 cubic metres per day	No changes to design capacity throughput	Changes in operational process is sought: <ul style="list-style-type: none">• removal of disinfection process of treated wastewater;• partial removal of chlorination equipment;• update the premises map; and• changes in definitions

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 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
Non-chlorinated treated wastewater	Direct discharge to wetland.	Direct contact by human receptors	The wetlands are closed to public, fenced, locked, monitored by security cameras. Erected warning signage indicating the presence of recycled water.

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 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 (*Guidance Statement: Environmental Siting* (DER 2016)).

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

Human receptors	Distance from prescribed activity
Closest residential receptor	The closest resident is located approximately 900 m northeast. Capel transfer station operates at approximately 600 m northeast of the plant. An ilmenite processing plant is located approximately 500 m southwest of the plant.
Environmental receptors	Distance from prescribed activity

Contaminated Sites	The Premises is surrounded by several parcels of land on the north, east and west which are classified as 'contaminated - remediation required' and council tip site to the northeast is classified as 'contaminated – restricted use'
Capel wetlands consisting of Higgins Lake, Swamphen Lake, Island Lake and Peninsula Lake	Premises lies neighbouring to DBCA Legislated Tenures on South and Southwest.
Threatened Flora	Area for possible threatened flora are located in neighbourhood, the closest at 240 m south-west
Threatened Fauna	Area for possible endangered bird fauna located in neighbouring lot to the east and south.

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 in-complete 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 L7395/1991/10 that accompanies this Amendment Report authorises emission associated with the operation of the Premises i.e. WWTP 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 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				
<i>Operation</i>								
<i>Discharge of non-chlorinated treated wastewater</i>	<i>Treated wastewater containing pathogens</i>	<i>Direct contact to human receptors causing health impacts</i>	<i>Human receptors accessing wetland/discharge area</i>	<i>Refer to Section 3.1</i>	C = Minor L = Rare Low Risk	Y	N/A	<i>The Delegated Officer considers that the licence holder's controls relating to the offsite wetland are sufficient to restrict access mitigate risks of human contact with treated wastewater. As the wetland is outside of the premises boundary, the Licence Holder's controls relating to this area are not able to be adopted as licence conditions.</i>

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 6: Consultation

Consultation method	Comments received	Department response
Condition 7	Condition 3 is about bore sampling and is not relevant for loading calculation	Condition 7 is updated, deleted reference to condition 3.
Schedule 1 Premises Maps	The resolution of the WWTP premises map in the draft is very low as compared to the map which was provided in the application. Can this be improved.?	Revised maps uploaded.

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 7: Summary of licence amendments

Existing condition	Condition summary	Revised licence condition	Conversion notes
Preamble		NA	Explanation about the site category, production and design capacity are retained in premise details table.
Definitions		NA	Definitions moved to the end of the Licence – Table 4
W1	Maintenance of Treatment Ponds	Condition 1	Licence condition retained from previous licence. Standard licence condition
W2	Monitoring Device	Condition 2	Licence condition retained from previous licence. Standard licence condition
W3 (a)	Sampling and Monitoring	Condition 3	Licence condition retained from previous licence. Standard licence condition
W3 (b)	Sampling and Monitoring	Condition 4	Licence condition retained from previous licence. Standard licence condition
W3 (c)	Sampling and Monitoring	Condition 5	Licence condition retained from previous licence. Standard licence condition

W3 (d)	Sampling and Monitoring	Condition 6	Licence condition retained from previous licence. Standard licence condition
W4(a)	Sampling Analysis	NA	Consistent with DWER's licensing protocol, this section was deleted because it did not contain any condition.
W4(b)	NATA Accreditation	NA	Consistent with DWER's licensing protocol, this section was deleted because it did not contain any condition.
W5	Load Calculation	Condition 7	Licence condition retained from previous licence. Standard licence condition
W6(a)	Hazardous Chemical	NA	Consistent with DWER's licensing protocol, this section was deleted because it did not contain any condition.
W6(b)	Premise security	NA	Consistent with DWER's licensing protocol, this section was deleted because it did not contain any condition.
S1(a)	Pond and solids management	Condition 8	Licence condition retained from previous licence. Standard licence condition
S1(b)	Pond and solids management	Condition 9	Licence condition retained from previous licence. Standard licence condition
S1(c)	Disposal of sludge and biosolids	Condition 10	Licence condition retained from previous licence. Standard licence condition
G1	Monitoring and reporting	Condition 11	Licence condition retained from previous licence. Standard licence condition
G2	Annual audit compliance reporting	Condition 12	Licence condition retained from previous licence. Standard licence condition
NA	Complaints	Condition 13	Standard licence condition
NA	Records	Condition 14	Standard licence condition
NA	Records	Condition 15	Standard licence condition
Schedule 1	Premises map	Schedule 1 Figures 1 and 2	Revised Figure 1.
Schedule 2	Reporting and notification forms	Schedule 2	Revised to current licensing format.

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. DWER, June 2019. *Guideline: Industry Regulation Guide to Licensing*. Department of Water and Environmental Regulation, Perth.
5. DWER, June 2019. *Guideline: Decision Making*. Department of Water and Environmental Regulation, Perth.

Appendix 1: Application validation summary

SECTION 1: APPLICATION SUMMARY				
Application type				
Amendment to licence	<input checked="" type="checkbox"/>	Current licence number:	L7395/1991/10	
		Relevant works approval number:	N/A	<input type="checkbox"/>
Date application received	16/03/2021			
Applicant and Premises details				
Applicant name/s (full legal name/s)	Water Corporation 629 Newcastle street, Leederville WA 6007 PO BOX 100, Leederville WA 6902 environment@watercorporation.com.au ACN – 28 033 434 917			
Premises name	Capel Wastewater Treatment Plant			
Premises location	Lot 5613 on Deposited Plan 190864; Volume LR3099, Folio 279 Reserve under management order Lot 1614 on Deposited Plan 140135 Volume 1934; Folio 555			
Local Government Authority	Shire of Capel			
Application documents				
HPCM file reference number:	SWB2004-03			
Key application documents (additional to application form):				
Scope of application/assessment				
Summary of proposed activities or changes to existing operations.	<p>Approval for a change in operational process sought to remove disinfection by chlorination of the treated wastewater (TWW).</p> <p>Currently TWW is disinfected by chlorination before being discharged to artificial wetlands where in disinfection is not a licence condition.</p> <p>Chlorination was introduced to meet a requirement from the Department of Health to limit the bacterial <i>Escherichia coli</i> counts. As the classification as a reuse scheme is no longer relevant, the Department of Health has rescinded the condition requirement.</p> <p>The wetland is close to public access, fenced, locked, monitored by security cameras and has warning signage indicating the presence of recycled water.</p> <p>The combination of these mitigating factors removes the need for bacteriological control and consequently for chlorination.</p>			

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	320 cubic metres per day	No

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 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 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 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 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: 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 type="checkbox"/> No <input checked="" type="checkbox"/>	Name: N/A Type: Proclaimed Groundwater Area/Surface Water Area Has Regulatory Services (Water) been consulted? Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/> Regional office: Swan Avon / Mid-West Gascoyne / Kwinana Peel / North West / South West / Goldfields / South Coast
Is the Premises situated in a Public Drinking Water Source Area (PDWSA)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Name: Priority: N/A Are the proposed activities/ landuse compatible with the PDWSA (refer to <u>WQPN 25</u>)? 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 type="checkbox"/> No <input checked="" type="checkbox"/>	
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: Date of classification:
Direct interest stakeholders		
Shire of Capel	Letter to be sent	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
DMIRS	Letter to be sent	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>

SECTION 2: RECEPTORS

The nearest town of Capel	
Human receptors	Distance from activity / prescribed premises
The WWTP is surrounded by natural bushland. The closest resident is located approximately 600m northeast of the plant directly opposite the transfer station.	There is an ilmenite processing plant located approximately 500m southwest of the plant. Capel transfer station operates at approximately 600m northeast of the plant.
Environmental receptors	Distance from activity / prescribed premises
Specified Ecosystems	
Treated wastewater is disposed of via pipeline to the Capel wetlands consisting of Higgins Lake, Swamphen Lake, Island Lake and Peninsula Lake.	The wetland is located on Lot 1614 on Plan 140135 (Tuart Drive) approximately 2.2km south- east of the WWTP.