



Application for Licence Amendment

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

Licence Number	L6426/1991/14
Licence Holder	Water Corporation
File Number	DWERVT16694
Premises	Esperance Wastewater Treatment Plant Jetty Road CHADWICK WA 6450 Legal description - Lot 500 on Plan 407029 Part of Reserve 34464 As depicted in Schedule 1 of the Revised Licence
Date of Report	05 December 2024
Decision	Revised licence granted

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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 (the Premises), located at 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 Amendment summary

On 5 August 2024, the Licence Holder submitted an application to the department to amend Licence L6426/1991/14 under section 59 and 59 B of the *Environmental Protection Act 1986*.

When infiltration ponds at the Premises (WWTP #1) are at capacity, treated wastewater is piped from the Premises to infiltration ponds at WWTP #2, located approximately 7.5km north east of the Premises at Lot 2 on Plan 22578, Wylie Bay Road, Bandy Creek.

The Licence Holder has identified that existing monitoring bore 2/01 is located within Pond 2 of WWTP #2, as shown in Figure 1. When this pond rotates into operation it becomes inundated with treated wastewater which prevents access to the bore for monitoring purposes. To mitigate this issue, the Licence Holder has reviewed the adequacy of alternative existing bores at the premises and determined that Bore 2/20s, also located downgradient of Pond 2, will prove an adequate substitution for 2/01.

As such, the Licence Holder has applied to amend the licence to enable monitoring from groundwater bore 2/20s.



Figure 1: Location of bores 2/01 (existing) and 2/20s (proposed)

In amending the licence, the Delegated Officer has also:

- updated the format and appearance of the Licence;
- revised licence condition and table numbers, removed any redundant conditions and definitions, and realigned condition numbers for numerical consistency; and
- corrected clerical mistakes and unintentional errors.

The obligations of the Licence Holder have not changed in these administrative revisions to the licence.

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.

In accordance with the *Guideline: Risk Assessments* (DWER 2020) risk ratings need only be assessed where emission sources are proposed to change and must take into account potential source-pathway and receptor linkages.

The amendments do not alter the risk profile of the Premises, therefore a risk assessment has not been undertaken.

3.1 Assessment of Licence Holder's request to amend groundwater monitoring condition

In order to identify contamination of groundwater indicative of subsurface seepage from treatment ponds at WWPT #2, the Delegated Officer previously applied condition 18 to the licence. This requires quarterly monitoring of various parameters in groundwater from seventeen monitoring bores that surround the Premises and WWTP #2 at Lot 2 on Plan 22578, Wylie Bay Road.

The groundwater flow direction beneath the site is south-southwest towards Esperance Bay. Bore 02/20s is located approximately 85 m southwest of bore 2/01 and south-southwest of infiltration pond 2. This location is down-hydraulic gradient and the Licence Holder considers it suitable to monitor groundwater impacts from infiltration pond 2. Moreover, 02/20s is screened in the shallow portion of the superficial aquifer the same as 2/01, and it has been appropriately constructed for monitoring groundwater quality.

The Delegated Officer has considered the information provided by the Licence Holder and determined that bore 2/01 is not suitable for monitoring groundwater due to it being inaccessible when treated wastewater is discharged into infiltration pond 2. Bore 2/20s is considered a suitable alternative for monitoring down-hydraulic gradient groundwater quality. Licence condition 19 has been amended to delete bore 2/01, and replace it with bore 2/20s.

The Delegated Officer considers the requirements of condition 9(b) to prevent groundwater mounding to within one metre of the standard ground level at the monitoring bores (with the exclusion of bore 7/01 at WWTP 2) and condition 23 to report on the data collected from monitoring in the context of environmental impacts, historical trends, and in comparison with any relevant Australian Standards and guidelines, remain applicable to the licence. These conditions will not be amended.

4. Consultation

Table 1 provides a summary of the consultation undertaken by the department.

Table 1: Consultation

Consultation method	Comments received	Department response
Local Government Authority advised of proposal on 9 September 2024	No comments received	N/A
Licence Holder provided with draft amendment on 6 November 2024	Updated Figure 2 provided to correct typographical error on bore '2-20s' label	Updated Figure 2 included in Revised Licence

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 2 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 2: Summary of licence amendments

Condition no.	Proposed amendments
Licence history	Updated to include this amendment
All	<p>Minor wording changes to update conditions into current licensing format with no changes to requirements or intentions of conditions.</p> <p>Condition and Table numbering and cross-referencing updated following deletion of redundant conditions.</p> <p>Correction of grammatical and typographical errors.</p>
Condition 19. Table 7	Monitoring point reference '2/01' replaced with '2/20s'
Definitions	<p>Definitions updated: 'WWTP #2'</p> <p>Definitions removed: 'code of practice for the storage and handling of dangerous goods'; 'dangerous goods'; 'environmentally hazardous materials'; 'fugitive emissions'; 'usual working day'</p>
Schedule 1: Maps	Figure 2 updated to include monitoring bore '2-20S' and remove bore '2/01'.

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