



Licence number	L9272/2020/1
Licence holder	Water Corporation
ACN	634 169 841
Registered business address	John Tonkin Water Centre 629 Newcastle Street LEEDERVILLE WA 6007
DWER file number	DER2020/000481
Duration	19/08/2021 to 18/08/2041
Date of issue	19/8/2021
Date of amendment	26/07/2023
Premises details	Dardanup Wastewater Treatment Plant Banksia Road DARDANUP WA 6236 Legal description – Lot 20 on Deposited Plan 100642 Part of Lot 82 on Deposited Plan 403943 As defined by the coordinates in Schedule 2

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed design capacity
Category 54 Sewage facility: premises – (a) on which sewage is treated (excluding septic tanks); or (b) from which treated sewage is discharged onto land or into waters.	165 m ³ per day

This licence is granted to the licence holder, subject to the attached conditions, on 26 July 2023, by:

Grace Campbell
A/Senior Environmental Officer
Industry Regulation
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Licence history

Date	Reference number	Summary of changes
07/11/1996	R00292	Registration granted.
19/08/2021	L9272/2020/1	Licence granted.
14/10/2021	L9272/2020/1	DWER initiated administrative amendment.
7/10/2022	L9272/2020/1	Licence amendment to allow for an extension to the expiry of improvement conditions.
26/07/2023	L9272/2020/1	Licence amendment to amend the reporting date for the Annual Audit Compliance Report (AACR) and the Environmental Report to 1 October annually.

Interpretation

In this licence:

- (a) the words 'including', 'includes' and 'include' in conditions mean "including but not limited to", and similar, as appropriate;
- (b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;
- (c) where tables are used in a condition, each row in a table constitutes a separate condition;
- (d) any reference to an Australian or other standard, guideline, or code of practice in this licence:
 - (i) if dated, refers to that particular version; and
 - (ii) if not dated, refers to the latest version and therefore may be subject to change over time;
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- (f) unless specified otherwise, all definitions are in accordance with the EP Act.

NOTE: This licence requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this licence.

Licence conditions

The licence holder must ensure that the following conditions are complied with:

Infrastructure and equipment

1. The licence holder must ensure that the site infrastructure and equipment listed in Table 1 is maintained and operated in accordance with the corresponding operational requirement set out in Table 1.

Table 1: Infrastructure and equipment requirements

Site infrastructure and equipment	Operational requirement
Sewage treatment system	<ul style="list-style-type: none"> Operated to receive and treat a sewage inflow of up to 165 m³ per day.
Facultative Pond 1 Maturation Ponds 2A and 3A	<ul style="list-style-type: none"> Ponds to be free of leaks and defects and the integrity of the liner is maintained to achieve a hydraulic permeability of $\leq 1 \times 10^{-9}$ m/sec; Overtopping of the wastewater treatment ponds does not occur except as a result of an extreme rainfall event (greater than 1 in 10-year event of 72 hours duration); An embankment freeboard equal to, or greater than, 300 mm is maintained; Vegetation and floating debris (emergent or otherwise) are prevented from encroaching onto pond surfaces or inner pond embankments; and Trapped overflows are maintained on the outlet of ponds to prevent carry-over of surface floating matter to subsequent ponds.
Storage Pond	<ul style="list-style-type: none"> Treated wastewater is not to be stored within the Storage Pond.
Irrigation Area	<ul style="list-style-type: none"> No irrigation generated run-off or discharge occurs beyond the premises boundary of the irrigation area; Treated wastewater is evenly distributed over the irrigation area to ensure no ponding or pooling occurs; No soil erosion occurs; Irrigation does not occur on land that is waterlogged; and Vegetation cover is maintained over the irrigation area, with the exception during harvest of the timber.
Discharge pipe exiting Maturation Pond 3A and discharging to tree lot	<ul style="list-style-type: none"> To be free of leaks and defects.
Stormwater infrastructure	<ul style="list-style-type: none"> Stormwater runoff is prevented from entering the wastewater treatment ponds and causing erosion of outer pond embankments.
Security measures	<ul style="list-style-type: none"> Implement security measures at the premises to prevent unauthorised access; Undertake regular inspections of all security measures and repair damage as soon as practicable; and Ensure the entrance gates are closed and locked when the premises is closed or unmanned.

2. The licence holder must immediately recover, or remove and dispose of, spills of sewage and sewage sludge whether inside or outside an engineered containment system.
3. The licence holder must only allow waste to be accepted onto the premises if:
 - (a) It is of a type listed in Table 2; and
 - (b) The quantity accepted is below any limit listed in Table 2; and
 - (c) It meets any specification listed in Table 2.

Table 2: Waste acceptance

Waste	Quantity Limit	Specification ¹
Sewage	165m ³ per day	Accepted through Flowmeter S8002928 or tankered to the WWTP during emergency events or maintenance work only.

Note 1: Additional requirements for the acceptance of controlled wastes are set out in the *Environmental Protection (Controlled Waste) Regulations 2004*.

4. The licence holder must ensure that the waste accepted onto the premises is only subjected to the processes set out in Table 3 and in accordance with any process requirements described in Table 3.

Table 3: Waste processing

Waste type	Process	Process requirements
Sewage	Physical and biological treatment	<ul style="list-style-type: none"> Treatment of sewage waste must not exceed the treatment capacity of 165m³ per day (as a monthly average).
Treated wastewater	Irrigation of treated wastewater	<ul style="list-style-type: none"> Disposal of treated wastewater by irrigation to the adjacent tree lot; and Managed in accordance with the <i>Dardanup Wastewater Treatment Plant Nutrient and Irrigation Management Plan 2012</i>, with the exception of the following: <ul style="list-style-type: none"> Sampling and testing for all monitoring to be in accordance with condition 5, Note 2 of Table 5 within condition 9, and Note 1 of Table 6 within condition 11; Groundwater monitoring to be in accordance with condition 11 and Figure 2; and Soil sampling not required until such time as specified in the updated NIMP as required by condition 12 improvement reference IR2.
Sewage sludge	Storage and processing	<ul style="list-style-type: none"> Containment infrastructure to be constructed as required; Containment infrastructure to be bunded and lined to achieve hydraulic permeability of $\leq 1 \times 10^{-9}$ m/sec; Sludge leachate to be returned to the start of the treatment process; and Removal of sludge to a premises authorised to receive sewage sludge or biosolids waste.

Monitoring

5. The licence holder must ensure that:
 - (a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;
 - (b) all wastewater sampling is conducted in accordance with AS/NZS 5667.10;
 - (c) all groundwater sampling is conducted in accordance with AS/NZS 5667.11;
 - (d) all microbiological samples are collected and preserved in accordance with AS/NZS 2031; and
 - (e) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured, unless indicated otherwise in the relevant table.
6. The licence holder must ensure that quarterly monitoring is undertaken in each quarterly period such that there are at least 45 days in between the days on which samples are taken in successive quarters.
7. The licence holder must operate and maintain the pH meter and flow meter S8002928 to the manufacturer's specifications.
8. The licence holder must undertake the monitoring in Table 4 according to the specifications in that table.

Table 4: Monitoring of inputs and outputs

Input/Output	Monitoring Point Reference	Parameter	Units	Averaging period	Frequency
Sewage	Road Tanker	Volume	m ³	Per load	Per load
	Flowmeter S8002928 ¹	Volumetric flow rate (cumulative)	m ³ per day	Monthly	Continuous
Treated wastewater	Flume S8008227 ¹				

Note 1: Refer to Figure 3 for monitoring point references

9. The licence holder must undertake the monitoring in Table 5 according to the specifications in that table.

Table 5: Process monitoring

Monitoring Point Reference	Process description	Parameter	Units	Frequency
Outlet S8000216 ¹	Discharge from Treated Wastewater Flume	pH ²	-	Quarterly
		Biological Oxygen Demand	mg/L	
		Total Dissolved Solids	mg/L	
		Total Suspended Solids	mg/L	
		Ammonium-nitrogen	mg/L	
		Nitrate + Nitrite as Nitrogen	mg/L	
		Total Nitrogen	mg/L	
		Total Phosphorus	mg/L	
		<i>E. coli</i>	cfu/100 mL	

Note 1: Refer to Figure 3 for monitoring point references.

Note 2: In-field, non-NATA accredited analysis permitted.

10. The licence holder must determine the monthly load of each contaminant in the treated wastewater discharged to the treelot (excluding pH and *E. coli*) using flow-weighted data. The loads must be based on the treated wastewater discharge rates and the concentrations as measured in accordance with licence conditions 8 and 9.
11. The licence holder must undertake the monitoring in Table 6 according to the specifications in that table.

Table 6: Ambient environmental groundwater monitoring

Monitoring Point Reference	Parameter	Units	Frequency
Groundwater bores: <ul style="list-style-type: none"> MW12A 01/20 05/20 07/20 MW07A (Refer to Figure 2)	Standing water level	m(AHD) and mBGL	Quarterly (if groundwater is present)
	pH ¹	-	
	Biological Oxygen Demand	mg/L	
	Total Dissolved Solids	mg/L	
	Total Suspended Solids	mg/L	
	Ammonium-nitrogen	mg/L	
	Nitrate + Nitrite as Nitrogen	mg/L	
	Total Nitrogen	mg/L	
	Total Phosphorus	mg/L	
	<i>E. coli</i>	cfu/100 mL	

Note 1: In-field, non-NATA accredited analysis permitted.

Improvements

12. The licence holder must complete the improvements in Table 7 by the date of completion in Table 7.

Table 7: Improvement program

Improvement Reference	Improvement	Date of completion
IR1	<p>The licence holder must prepare and submit to the CEO, a report that includes, but is not limited to:</p> <ul style="list-style-type: none"> • A decision on whether the Storage Pond will be repaired or decommissioned; • Specific actions to achieve the proposed decision; and • A timeframe for the completion of the specific actions. 	14 October 2023
IR2	<p>The licence holder must prepare and implement an Irrigation Management Plan that includes, but is not limited to:</p> <ul style="list-style-type: none"> • A description of the irrigation scheme – sources of water, watering schedules and zone management, application infrastructure, monitoring infrastructure and methods, the length of time the scheme will operate for; • Application rates of treated sewage and any other nutrient sources, soil ameliorants, or pesticides/herbicides being applied to the discharge area – this should be related to the nutrient demand; • A description of the environmental siting of the irrigation area; • Expected medium or long term variations to the scheme or the environmental characteristics of the land on which the scheme is operated; and • Monitoring and scheme maintenance plan. 	14 April 2023

Records and reporting

13. The licence holder must record the following information in relation to complaints received by the licence holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:
- the name and contact details of the complainant (if provided);
 - the time and date of the complaint;
 - the complete details of the complaint and any other concerns or other issues raised; and
 - the complete details and dates of any action taken by the licence holder to investigate or respond to any complaint.
14. The licence holder must:
- undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and
 - prepare and submit to the CEO an Annual Audit Compliance Report in the approved form by 1 October each year.

- 15.** The licence holder must maintain accurate and auditable books including the following records, information, reports, and data required by this licence:
- (a) the calculation of fees payable in respect of this licence;
 - (b) any maintenance of infrastructure that is performed in the course of complying with condition 1 of this licence;
 - (c) monitoring programmes undertaken in accordance with conditions 8, 9, 10 and 11 of this licence; and
 - (d) complaints received under condition 13 of this licence.
- 16.** The books specified under condition 15 must:
- (a) be legible;
 - (b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;
 - (c) be retained by the licence holder for the duration of the licence; and
 - (d) be available to be produced to an inspector or the CEO as required.
- 17.** The licence holder must ensure that the parameters listed in Table 8 are notified to the CEO in accordance with the notification requirements of Table 8.

Table 8: Notification requirements

Condition or table	Parameter	Notification requirement ¹	Format or form
-	Breach of any limit specified in the licence	As soon as practicable but not later than 5 pm of the next usual working day.	None specified
Condition 4 Table 3	Desludging event	No less than 14 days prior to any desludging event, advise: <ul style="list-style-type: none"> (a) the dates that desludging is intended to occur; (b) the method by which the wastewater treatment pond is to be desludged; (c) the proposed action to mitigate potential impacts of odour emissions; and (d) the method by which the community will be advised of the desludging activities. 	Written notice
-	Taking process equipment offline for maintenance works that may result in increased odour emissions	No less than 72 hours in advance of works.	None specified
-	Groundwater bores being de-commissioned or rendered useless for monitoring purposes	Within 14 days	None specified

Note 1: Notification requirements in the licence shall not negate the requirement to comply with section 72 of the Act.

18. The licence holder must:

- (a) prepare an environmental report that provides information in accordance with Table 9 for the preceding annual period, and
- (b) submit the environmental report to the CEO by 1 October each year.

Table 9: Environmental reporting requirements

Condition	Requirement
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken.
Condition 3 Table 2	Summary of any treatment capacity exceedances and any action taken.
Condition 8 Table 4	Monitoring of inputs and outputs (a) volumes in m ³ presented in table format.
Condition 9 Table 5	Process monitoring: (a) data in tabulated and graphical form including the sampling date; (b) an assessment and interpretation of the data, including comparison to historical trends and loading limits; and (c) copies of laboratory sample analysis reports.
Condition 10	Nutrient and contaminant loading: (a) monthly and annual average data in kg/ha/day and kg/ha/yr, presented in table format.
Condition 11 Table 6	Monitoring of ambient environmental groundwater quality: (a) data in tabulated and graphical form including the sampling date; (b) an assessment and interpretation of the data, including comparison to historical trends and loading limits; and (c) copies of laboratory sample analysis reports.
Condition 13	Complaints record
Condition Error! Reference source not found.	Compliance

Note: Forms are available on the Department's website

19. The licence holder must ensure that the Environmental Report also contains:

- (a) an assessment of the information contained within the report against previous monitoring results from the previous three annual periods;
- (b) any changes to groundwater monitoring bores, site boundaries, surface drainage channels and on-site or off-site impacts or pollution that occurred during the annual period; and
- (c) quantities of sludge removed during each desludging event that occurred during the annual period.

Definitions

In this licence, the terms in Table 10 have the meanings defined.

Table 10: Definitions

Term	Definition
ACN	Australian Company Number.
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates may be available on the Department's website).
annual period	a 12 month period commencing from 1 July until 30 June of the immediately following year.
approved form	means the Annual Audit Compliance Report (AACR) form template approved by the CEO for use and available via DWER's external website.
books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer of the Department. "submit to / notify the CEO" (or similar), means either: Director General Department administering the <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 or: info@dwer.wa.gov.au
condition	a condition to which the licence is subject under section 62 of the <i>Environmental Protection Act 1986</i> .
<i>Dardanup Wastewater Treatment Plant Nutrient and Irrigation Management Plan 2012</i>	means the document <i>Nutrient and Irrigation Management Plan 2012 - Dardanup Wastewater Treatment Plant</i> , developed for the Water Corporation by WorleyParsons, October 2012.
discharge	has the same meaning given to that term under the EP Act.
emission	has the same meaning given to that term under the EP Act.
EP Act	<i>Environmental Protection Act 1986</i> (WA)
EP Regulations	<i>Environmental Protection Regulations 1987</i> (WA)
licence	refers to this document, which evidences the grant of a licence by the CEO under section 57 of the EP Act, subject to the specified conditions contained within.

Term	Definition
licence holder	refers to the occupier of the premises, being the person specified on the front of the licence as the person to whom this licence has been granted.
premises	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map (Figure 1) in Schedule 1 to this licence.
prescribed premises	has the same meaning given to that term under the EP Act.
waste	has the same meaning given to that term under the EP Act.

END OF CONDITIONS

Schedule 1: Maps

Premises map

The boundary of the prescribed premises is shown in the map below (Figure 1).



Figure 1: Map of the boundary of the prescribed premises

Licence: L9272/2020/1 (Amended 26/07/2023)

IR-T06 Licence template (v8.0) (September 2022)

Monitoring bores map

The locations of the monitoring bores are shown in the map below (Figure 2).



Figure 2: Ambient environmental groundwater monitoring

Licence: L9272/2020/1 (Amended 26/07/2023)

IR-T06 Licence template (v8.0) (September 2022)

Schedule 2: Premises boundary

The premises boundary is defined by the coordinates in Table 11.

Table 11: Premises boundary coordinates

Easting	Northing	Zone
386670.90	6300802.23	50
386594.31	6300802.33	50
386543.19	6300859.02	50
386544.29	6301012.37	50
386389.84	6301091.44	50
386387.10	6301393.13	50
386397.19	6301403.07	50
386986.20	6301410.20	50
386988.44	6301418.96	50
387078.99	6301400.85	50
387082.06	6301411.56	50
387195.06	6301412.92	50
387208.26	6301151.30	50
387025.97	6301192.91	50
386935.22	6301211.05	50
386935.71	6301212.93	50

Schedule 3: Schematic map

Dardanup WWTP Schematic

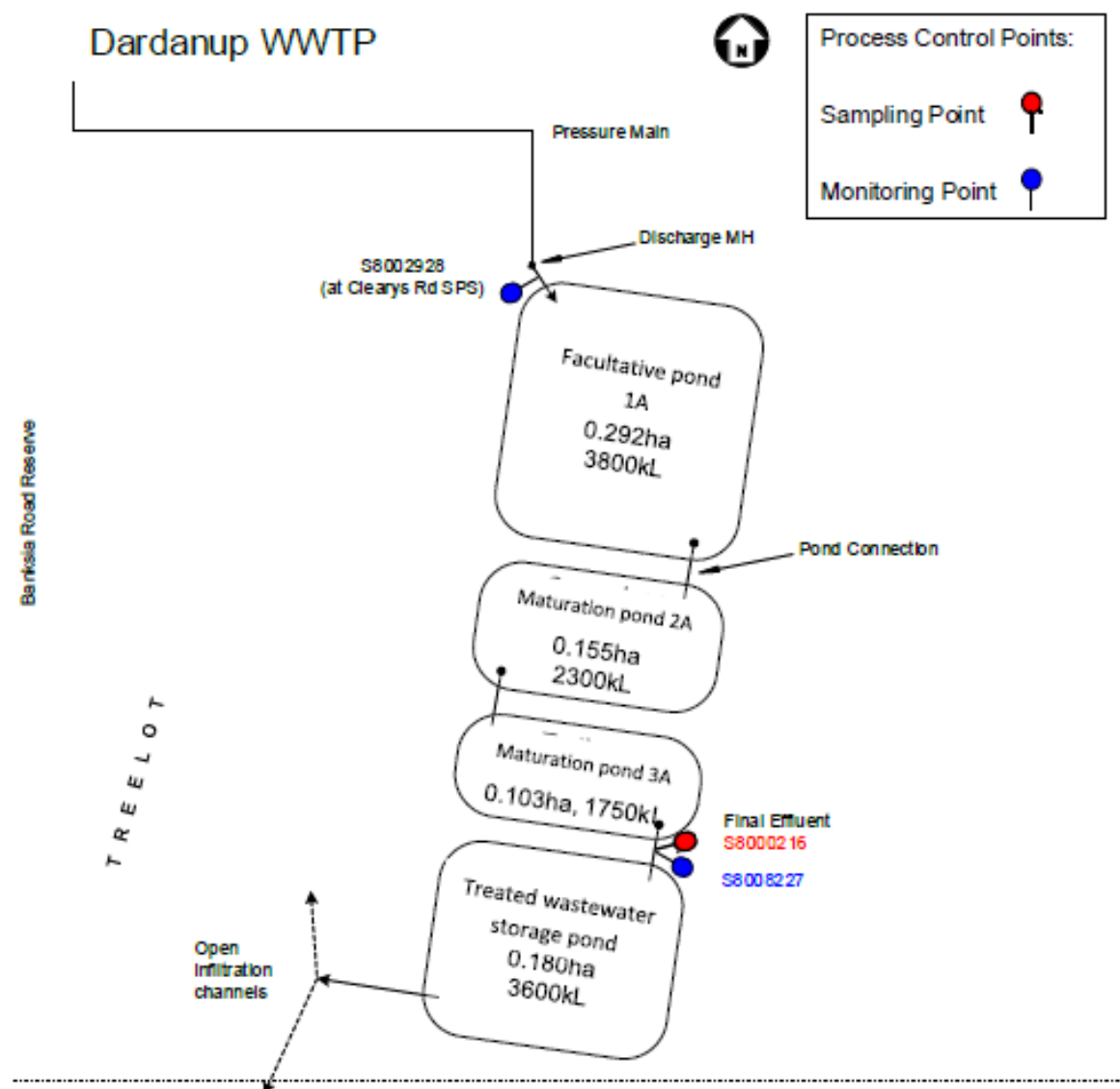


Figure 3: Schematic diagram of the prescribed premises