



Licence number	L6270/1991/10
Licence holder	Water Corporation
ABN	28 003 434 917
Registered business address	John Tonkin Water Centre 629 Newcastle St Leederville WA 6007
DWER file number	DER2013/000796-1
Duration	01/11/2013 to 31/10/2026
Date of issue	31/10/2013
Date of amendment	29/08/2023
Premises details	Kununurra Wastewater Treatment Plant Reserve 30945 Duncan Highway KUNUNURRA WA 6743 Legal description - Lot 3008 on Plan 48173 As defined by the premises map in Schedule 1

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production/ design capacity
Category 54 Sewage facility: premises – (a) on which sewage is treated (excluding septic tanks); or from which treated sewage is discharged onto land or into waters.	2000 m ³ per day

This licence is granted to the licence holder, subject to the attached conditions, on 29 August 2023, by:

Grace Campbell

A/Senior Environmental Officer – Industry Regulation

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

[L6270/1991/10 \(Amended 29/08/2023\)](#)

Licence history

Date	Reference number	Summary of changes
21/02/1992	3446	New application.
21/02/1993	4083	Licence re-issue.
01/10/1995	6270	Licence re-issue.
1/10/1998	6270/2	Licence re-issue.
7/10/1999	6270/3	Licence re-issue.
7/10/2000	6270/4	Licence re-issue.
7/10/2001	6270/4	Licence re-issue.
7/10/2002	6270/5	Licence re-issue.
7/10/2003	6270/6	Licence re-issue.
7/10/2004	6270/7	Licence re-issue.
1/11/2006	6270/8	Licence re-issue.
31/10/2008	L6270/1991/9	Licence re-issue.
31/10/2013	L6270/1991/10	Licence re-issue to REFIRE format.
26/03/2015	L6270/1991/10	Licence amendment to give effect to Minister for Environment Appeal determination 371/13.
11/06/2015	L6270/1991/10	Licence amendment to allow the presence of Duckweed in the treatment ponds.
29/04/2016	L6270/1991/10	Licence amendment to extend licence expiry date (Amendment Notice 1).
9/06/2016	L6270/1991/10	Licence amendment to allow the operation of the Sodium Nitrate Dosing Unit at the Treatment Plant.
29/08/2023	L6270/1991/10	Licence amendment to alter the reporting date for the Annual Audit Compliance Report 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:

Waste Acceptance

1. The licence holder must only allow waste to be accepted onto the premises if:
 - (a) it is of a type listed in Table 1;
 - (b) the quantity accepted is below any limit listed in Table 1; and
 - (c) it meets any specification listed in Table 1.

Table 1: Waste acceptance

Waste	Quantity Limit	Specification
Sewage	None Specified	Accepted through sewer inflow(s) only

Waste Processing

2. The licence holder must ensure that the waste types accepted onto the premises are only subjected to the process(es) set out in Table 2 and in accordance with any process limits described in that table.

Table 2: Waste processing

Waste type	Process	Process limits and targets
Sewage	Biological, physical and chemical treatment	Treatment of sewage and septage waste must be targeted at or below the treatment capacity of 2000 m ³ /day.
Sewage sludge area	Storage	None specified

Infrastructure and equipment

3. The licence holder must ensure that waste material is only stored and/or treated within vessels or compounds with the infrastructure detailed in Table 3.

Table 3: Containment infrastructure

Vessel or compound	Material	Requirements
Inlet works	Grit and screenings	Stored in a sealed bin which is surrounded by a bunded hardstand area which returns sludge leachate to the start of the treatment process
Facultative Treatment Ponds (1A and 1B)	Wastewater	Lined to achieve a permeability of less than 10 ⁻⁹ m/s or equivalent

Vessel or compound	Material	Requirements
Maturation Treatment Ponds (2A, 2B, 3A, 3B, 4A and 4B).	Wastewater	Lined with 25 cm clay liner
M1 Channel	Treated wastewater	In-situ clay lined
Sewage Sludge Compound	Sewage sludge	A bunded hardstand area capable of preventing surface run-off of leachate and sludge and which returns sludge leachate to the start of the treatment process

4. The licence holder must manage all wastewater treatment ponds such that:
 - (a) overtopping of the ponds does not occur except as a result of an extreme rainfall event;
 - (b) a freeboard at or below 200 mm is maintained;
 - (c) the integrity of the containment infrastructure is maintained;
 - (d) trapped overflows are maintained on the outlet of ponds to prevent carry-over of surface floating matter;
 - (e) vegetation and floating debris (emergent or otherwise) is prevented from encroaching onto pond surfaces or inner pond embankments with the exception of duckweed (*Lemna* sp.) on wastewater treatment ponds; and
 - (f) visual monitoring of duckweed coverage in conjunction with annual treatment efficiency monitoring is undertaken to ensure duckweed is not inhibiting the treatment efficiency of the plant.
5. The licence holder must:
 - (a) implement security measures at the site to prevent as far as is practical unauthorised access to the site;
 - (b) undertake regular inspections of all security measures and repair damage as soon as practicable; and
 - (c) ensure the entrance gates are closed and locked when the site is closed.

Emissions and discharges

Point source emissions to surface water

6. The licence holder must ensure that where waste is emitted to surface water from the emission points in Table 4 [and identified on the map of emission points in Schedule 1] it is done so in accordance with the conditions of this licence.

Table 4: Emission points to surface water

Emission point reference and location on Map of monitoring locations	Monitoring point and reference on Map of monitoring locations	Description	Source including abatement
M1 Channel	Treatment Plant Outlet Pipe	Discharge to M1 Channel via wastewater discharge point	Treated wastewater pipeline from wastewater treatment plant

Monitoring

General monitoring

7. The licence holder must ensure that:
 - (a) all water samples are collected and preserved in accordance with AS/NZS 5667.1 unless indicated otherwise in relevant table;
 - (b) all wastewater sampling is conducted in accordance with AS/NZS 5667.10;
 - (c) all surface water sampling is conducted in accordance with AS/NZS 5667.4, AS/NZS 5667.6 or AS/NZS 5667.9 as relevant;
 - (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 relevant table.
8. The licence holder must ensure that:
 - (a) monthly monitoring is undertaken at least 15 days apart; and
 - (b) quarterly monitoring is undertaken at least 45 days apart.
9. The licence holder must ensure that all monitoring equipment used on the premises to comply with the conditions of this licence is calibrated in accordance with the manufacturer's specifications and the requirements of the licence.
10. The licence holder must, where the requirements for calibration cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods.

Monitoring of point source emissions to surface water

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

Table 5: Monitoring of point source emissions to surface water.

Emission point reference	Monitoring point reference and location	Parameter	Units	Averaging period	Frequency
M1 Channel	Magflow Meter SP Kununurra WWTP Env. Discharge	Volumetric flow rate (cumulative)	L/s m³/hr	Continuous	Weekly
	Treatment Plant Outlet Pipe	pH¹	pH units	Spot sample	Quarterly
		5-day Biochemical Oxygen Demand	mg/L		
		Total Suspended Solids			
		Total Nitrogen			
		Total Phosphorus			
		Total Dissolved Solids			
		Nitrate/Nitrite			
		Ammonia/ Ammonium			
	Total Sodium				
Post Chlorination Sample Point	Escherichia coli	Cfu/ 100 mL		Quarterly	

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

Monitoring of inputs and outputs

12. The licence holder must undertake the monitoring in Table 6 according to the specifications in that table.

Table 6: Monitoring of inputs and outputs

Input/Output	Monitoring point reference	Parameter	Units	Averaging period	Frequency
Sewage – Inlet Flow Measurement (rising main)	None specified	Volumetric flow rate (cumulative)	m ³ /d or ML/d	Monthly	Monthly

Ambient environmental quality monitoring

13. The licence holder must undertake the monitoring in Table 7 according to the specifications in that table.

Table 7: Monitoring of ambient environmental quality

Monitoring point reference and location	Parameter	Units	Averaging period	Frequency
M1 Channel sampling point approximately 50 metres upstream	Total Nitrogen; Total Phosphorus; and <i>Escherichia coli</i>	mg/L for Total Nitrogen and Total Phosphorus	Spot sample	Quarterly
M1 Channel sampling point approximately 225 metres down stream		Cfu/100 mL for <i>Escherichia coli</i>		
M1 Channel sampling point approximately 1 kilometre down stream				
M1 Channel sampling point approximately 6 kilometres down stream				

Improvements

14. The Licence Holder must complete the improvements in Table 8 by the date specified.

Table 8: Improvement program

Improvement reference	Improvement	Date of completion
IR1	The Licence Holder must submit to the CEO a report that assesses the design, operation and emissions achieved at the Premises against industry standards for preventing or abating pollution or environmental harm for the discharges to water; M1 Channel.	30/11/14
IR2	Where the design, operation and emission levels at the Premises do not conform to industry standards for preventing or abating pollution or environmental harm the report shall contain commitments and actions to improve wastewater quality with an improvement timetable and establishing appropriate discharge limits for key contaminants to achieve these industry standards.	31/05/15
IR3	The Licence Holder must submit to the CEO a report which provides a review of all alternate wastewater re-use options and recommendations on any alternate disposal options.	30/11/14
IR4	The Licence Holder must submit to the CEO a report which provides a review, by a suitably qualified independent third party, of all current and previous scientific studies in relation to possible impacts from wastewater discharges into the M1 Channel. The report is to make appropriate recommendations on the feasibility of the continued discharge of treated wastewater to the M1 Channel.	30/11/14

Records and reporting

15. All information and records required by the licence must:
- (a) be legible
 - (b) if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
 - (c) except for records listed in 15(d) be retained for at least 6 years from the date the records were made or until the expiry of the licence or any subsequent licence; and
 - (d) for those following records, be retained until the expiry of the licence and any subsequent licence:
 - (i) off-site environmental effects; or
 - (ii) matters which affect the condition of the land or waters.

- 16.** 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.
- 17.** The licence holder must:
- implement a complaints management system that must record the following information (if known or provided) about complaints received at the premises concerning any environmental impact of the activities undertaken at the premises:
 - name and address of the complainant(s) (if consented);
 - date and time of complaint;
 - date and time of alleged incident;
 - alleged source of the incident;
 - general description of the alleged incident, including any environmental or health impacts reported by the complainant;
 - wind direction, wind speed and temperature at time of alleged incident; and
 - actions taken by licence holder to address complaints, including the outcome of any investigation(s) and action(s) to verify any impacts.
 - complete an annual analysis and review of complaints recorded under 17(a) to identify any common factors and root cause of complaints and proposals to address these.
- 18.** The licence holder must:
- prepare an environmental report that provides information in accordance with Table 9 for the preceding annual period, and
 - submit the environmental report to the CEO by 1 October each year.

Table 9: Environmental reporting requirements

Condition or table	Requirement	Format or form ¹
-	Summary of any failure or malfunction of any pollution control equipment or any incidents that have occurred during the annual period and any action taken	None specified
Table 2	Summary of any treatment capacity target exceedances and any action taken	None specified
Condition 4	Summary of any freeboard target exceedances and any action taken.	None specified
Table 5	Monitoring of point source emissions to surface waters	None specified
	Contaminant loading (kg/day – monthly average) to	None specified

	surface water of parameters monitored in Table 5 (except pH and <i>E.coli</i>)	
Table 6	Monitoring of inputs and outputs	None specified
Table 7	Monitoring of ambient environmental quality	None specified
Condition 16	Compliance	Annual Audit Compliance Report (AACR)
Condition 17	Complaints summary	None specified

Note 1: Forms are on the Department's website.

19. The licence holder must ensure that the environmental report also contains an assessment of the information contained within the report against previous monitoring results and licence limits.
20. The licence holder must submit the information in Table 10 to the CEO at the Contact Address according to the specifications in that table.

Table 10: Non-annual reporting requirements

Parameter	Reporting period	Reporting date (after end of the reporting period)	Format or form
Copies of original monitoring reports submitted to the licence holder by third parties	Not Applicable	Within 14 days of the CEOs request	As received by the licence holder from third parties

21. The licence holder must ensure that the parameters listed in Table 11 are notified to the CEO in accordance with the notification requirements of the table.

Table 11: Notification requirements

Condition	Parameter	Notification requirement ¹	Format or form
Condition 6	Calibration report	As soon as practicable	None specified
-	Taking a process equipment offline for maintenance works that may result in increased odour emissions	No less than 72 hours in advance of works	None specified
-	Removal of sewage sludge from a treatment pond, sewage sludge	No less than 14 days in advance of works ²	None specified

	storage pond or Geobag		
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Note 1: No notification requirement in the licence shall negate the requirement to comply with s72 of the Act.

Note 2: The following information shall be included: (i) when desludging is proposed to occur, (ii) the desludging method, (iii) action to mitigate potential odour impacts, and (iv) the method by which the community will be advised of the desludging activities.

Definitions

In this licence, the terms in Table 12 have the meanings defined.

Table 12: 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.
AS/NZS 2031	means the Australian Standard AS/NZS 2031 <i>Selection of containers and preservation of water samples for microbiological analysis</i> .
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 <i>Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples</i> .
AS/NZS 5667.4	means the Australian Standard AS/NZS 5667.4 <i>Water Quality – Sampling – Guidance on sampling from lakes, natural and man-made</i> .
AS/NZS 5667.6	means the Australian Standard AS/NZS 5667.6 <i>Water Quality – Sampling – Guidance on sampling of rivers and streams</i> .
AS/NZS 5667.10	means the Australian Standard AS/NZS 5667.10 <i>Water Quality – Sampling – Guidance on sampling of waste waters</i> .
averaging period	means the time over which a limit is measured or a monitoring result is obtained.
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>

Term	Definition
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
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)
extreme rainfall event	means a one in ten year rainfall event of 72 hours duration.
freeboard	means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point.
geobag	means a geotextile dewatering bag that allows solids to dewater over time while containing the solid component.
hardstand	means a surface with a permeability of 10^{-9} metres/second or less.
in-situ soils	means soils that are in place and have not been moved from their original place of deposition.
leachate	means liquid released by, or water that has percolated through, waste and which contains some of its constituents.
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.
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.
M1 Channel	means the irrigation channel as depicted in Schedule 1: Premises map.
Magflow Meter SP Kununurra WWTP Env. Discharge	means the sample point as depicted in Schedule 1: Map of monitoring locations.
NATA	means the National Association of Testing Authorities, Australia.
NATA accredited	means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis.
Post Chlorination Sample Point	means the sample point as depicted in Schedule 1: Map of monitoring locations.

Term	Definition
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.
process equipment	means any wastewater or sludge containment infrastructure or wastewater treatment vessel.
quarterly period	means the four inclusive periods from 1 April to 30 June, 1 July to 30 September, 1 October to 31 December and in the following year, 1 January to 31 March.
Schedule 1	means Schedule 1 of this licence unless otherwise stated.
spot sample	means a discrete sample representative at the time and place at which the sample is taken.
Treatment Plant Outlet Pipe	means the sample point as depicted in Schedule 1: Map of monitoring point locations (Figure 2).
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 (pink). (Figure 1)



Figure 1: Map of the boundary of the prescribed premises

Map of monitoring locations

The locations of the monitoring points defined in Table 4 are shown below (Figure 2).



Figure 2: Map of monitoring point locations