



Licence number	L5997/1992/11
Licence holder	Water Corporation
ACN	634 169 841
Registered business address	John Tonkin Water Centre 629 Newcastle Street LEEDERVILLE WA 6007
DWER file number	DEC14180/1
Duration	01/11/2013 to 31/10/2032
Date of issue	24/10/2013
Date of amendment	18/07/2023
Premises details	Halls Head (Mandurah No. 2) Water Resource Recovery Facility Peelwood Parade HALLS HEAD WA 6210 Legal description - Lot 10 on Diagram 79777 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 (b) from which treated sewage is discharged onto land or into waters.	5,800 m ³ /day

This licence is granted to the licence holder, subject to the attached conditions, on 18 July 2023, by:

Grace Campbell

**A/SENIOR ENVIRONMENTAL OFFICER - INDUSTRY REGULATION
REGULATORY SERVICES**

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

[L5997/1992/11 \(Amended 18/07/2023\)](#)

Licence history

The licenses issued for the premises since 20/10/2003 are:

Date	Reference number	Summary of changes
10/10/2000	L5997/1992/3	Licence re-issue
09/08/2001	L5997/1992/5	Licence re-issue
28/08/2002	L5997/1992/6	Licence re-issue
22/09/2003	L5997/1992/7	Licence re-issue
28/08/2004	L5997/1992/8	Licence re-issue
28/08/2005	L5997/1992/9	Licence re-issue
01/11/2008	L5997/1992/10	Licence re-issue
01/11/2013	L5997/1992/11	Licence re-issue
11/02/2016	L5997/1992/11	Licence amendment
29/04/2016	L5997/1992/11	Amendment Notice - Extension of expiry date to 31 October 2032
08/03/2017	L5997/1992/11	Amendment Notice 1 - Administrative amendment to replace bore B1/84 with B1/16 and update premises map
18/07/2023	L5997/1992/11	Licence amendment to alter the reporting date for the Annual Audit Compliance Report (AACR) and the Environmental Report to 1 October annually and to alter the premises name.

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:

Premises operation

1. The licence holder must only allow waste to be accepted on to 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	5800 m ³ /day	Accepted through sewer inflow(s) only

Note 1: Includes pump station reticulated sewage transported to WWTP.

2. The licence holder must ensure that the wastes 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: Infrastructure and equipment requirements

Waste type	Process	Process limits
Sewage	Biological and physical treatment	5800 cubic metres per day
Sewage sludge	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 provided with the infrastructure detailed in Table 3.

Table 3: Containment infrastructure

Storage 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
Oxidation ditches	Wastewater	Concrete lined to achieve a permeability of at least $<10^{-9}$ m/s or equivalent
Clarifiers 1- 4	Wastewater	Concrete lined to achieve a permeability of at least $<10^{-9}$ m/s or equivalent
Infiltration ponds	Treated wastewater	Designed to support effective infiltration as part of the groundwater supply to the City of Mandurah under the managed aquifer recharge program
Sewage sludge compound	Sewage sludge	Sludge is thickened in dissolved air floatation thickener (DAFT) and then stored in metal sludge storage tank.

4. The licence holder must manage all wastewater treatment oxidation ditches, evaporation and infiltration ponds such that:
 - (a) the integrity of the containment infrastructure is maintained;
 - (b) there is no discernible seepage loss from the wastewater treatment vessels or sludge holding ponds;
 - (c) overtopping of the ponds or infiltration ponds does not occur; and
 - (d) vegetation and floating debris (emergent or otherwise) is prevented from encroaching onto pond surfaces or inner pond embankments.

Emissions

5. The licence holder must ensure that where waste is emitted to land 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: Emissions to land

Emission point reference and location on map of emission points	Emission point reference on map of emission points	Description	Source including abatement
L1	Evaporation/infiltration ponds	Infiltration of treated wastewater	Treated wastewater pipeline from the final treatment tank

Monitoring

6. 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].
7. 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;
8. 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.

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

Table 5: Monitoring of emissions to land

Emission point reference	Parameter	Units	Frequency
L1 – treated wastewater discharged to the infiltration/evaporation ponds from the final treatment tank	pH		Quarterly
	Biochemical oxygen demand (BOD)	mg/L	
	Total Dissolved Solids (TDS)		
	Total Suspended Solids (TSS)		
	Nitrate + Nitrite - Nitrogen		
	Ammonium nitrogen		
	Total Nitrogen		
	Total Phosphorous		
	<i>Escherichia coli</i>		

Note: In-field non-NATA analysis of pH permitted

11. 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	Parameter	Units	Averaging period	Frequency
Sewage - Inlet Flow Meter (rising main)	Volumetric flow rate (cumulative)	m ³ /day	Monthly	Monthly
Treated wastewater discharged to premises infiltration/evaporation ponds	Volume of treated wastewater determined by inflow monitoring device	m ³ /day	Monthly	Monthly

- 12.** The licence holder must undertake the monitoring in Table 7 according to the specifications in that table and record and investigate results that do not meet any limit specified.

Table 7: Monitoring of ambient groundwater quality

Monitoring point reference and location	Parameter	Target	Units	Averaging period	Frequency
1/83, 1/16, 2/84, 6/88 and 7/88 As depicted in the premises map in Schedule 1	pH	None specified		Spot sample	Quarterly
	Electrical Conductivity		mS/m		
	Total Dissolved Solids		mg/L		
	Total Nitrogen				
	Total Phosphorous				
	Standing water level		mAHD		

Note: In-field non-NATA analysis of pH permitted

Records and reporting

- 13.** All information and records required by the licence must:
- be legible;
 - if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
 - except for records listed in condition 13(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
 - for those following records, be retained until the expiry of the licence and any subsequent licence:
 - off-site environmental effects; or
 - matters which affect the condition of the land or waters.
- 14.** The licence holder must ensure that:
- any person left in charge of the premises is aware of the conditions of the licence and has access at all times to the licence or copies thereof; and
 - any person who performs tasks on the premises is informed of all of the conditions of the licence that relate to the tasks which that person is performing.
- 15.** 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.

16. The licence holder must implement a complaints management system that as a minimum records the number and details of complaints received concerning the environmental impact of the activities undertaken at the premises and any action taken in response to the complaint.
17. The licence holder must:
- prepare an environmental report that provides information in accordance with Table 8 for the preceding annual period, and
 - submit the environmental report to the CEO by 1 October each year.

Table 8: Environmental reporting requirements

Condition	Requirement
-	Summary of treated wastewater reuse from the premises
-	Summary of any changes to site boundaries, location of monitoring and sampling points (both on and off-site), discharge points, waste storage areas, surface water drainage and on-site and/or off-site impacts or pollution.
-	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
Condition 10 Table 5	Monitoring of emissions to land
	Contaminant loading (kg/day – monthly average) to land of parameters monitored in Table 5 (except pH and <i>E.coli</i>)
Condition 11 Table 6	Monitoring of inputs and outputs
Condition 12 Table 7	Ambient groundwater quality monitoring including an assessment of the monitoring against previous monitoring results
Condition 15	Compliance
Condition 16	Complaints summary

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

18. The licence holder must submit the information in Table 9 to the CEO according to the specifications in that table.

Table 9: Non-annual reporting requirements

Parameter	Reporting period	Reporting date (after end of the reporting period)	Format or form ¹
Copies of original monitoring reports submitted to the licence holder by third parties	Not Applicable	Within 14 days of the CEO's request	As received by the licence holder from third parties

Taking a treatment pond offline for maintenance works that may result in an increase in odour emissions from the premises		No less than 24 hours in advance of works	None specified
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19. The licence holder must ensure that the parameters listed in Table 10 are notified to the CEO in accordance with the notification requirements of the table.

Table 10: Notification requirements

Condition	Parameter	Notification requirement ¹	Format or form ²
Condition 1 Table 1 Condition 2 Table 2	Breach of any limit specified in the licence	Part A: As soon as practicable but no later than 5pm of the next usual working day Part B: As soon as practicable	N1
Condition 9	Calibration report	As soon as practicable	None specified

Note 1: Notification requirements in the licence shall not negate the requirement to comply with s72 of the Act

Note 2: Forms are in Schedule 2

Definitions

In this licence, the terms in Table 11 have the meanings defined.

Table 11: 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).
AHD	means the Australian height datum.
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 5667.10	means the Australian Standard AS/NZS 5667.10 <i>Water Quality – Sampling – Guidance on sampling of waste waters</i> .
AS/NZS 5667.11	means the Australian Standard AS/NZS 5667.11 <i>Water Quality – Sampling – Guidance on sampling of groundwaters</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>
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.

Term	Definition
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 (WA).</i>
hardstand	means a surface with a permeability of 10^{-9} metres/second or less.
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.
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.
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.
Schedule 1	means Schedule 1 of this licence unless otherwise stated.
Schedule 2	means Schedule 2 of this licence unless otherwise stated.
spot sample	means a discrete sample representative at the time and place at which the sample is taken.
usual working day	means 0800 – 1700 hours, Monday to Friday excluding public holidays in Western Australia.
waste	has the same meaning given to that term under the EP Act.

END OF CONDITION

Schedule 1: Maps

Premises map

The premises is shown in the map below (Figure 1). The orange line depicts the premises boundary.



Figure 1: Map of the prescribed premises boundary and monitoring bores

Schedule 2: N1 Form

Licence: L5997/1992/11 Licensee: Water Corporation

Form: N1 Date of breach:

Notification of detection of the breach of a limit.

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

Part A

Licence Number	
Name of operator	
Location of premises	
Time and date of the detection	

Notification requirements for the breach of a limit	
Emission point reference/ source	
Parameter(s)	
Limit	
Measured value	
Date and time of monitoring	
Measures taken, or intended to be taken, to stop the emission	

Part B

Any more accurate information on the matters for notification under Part A.	
Measures taken, or intended to be taken, to prevent a recurrence of the incident.	
Measures taken, or intended to be taken, to rectify, limit or prevent any pollution of the environment which has been or may be caused by the emission.	
The dates of any previous N1 notifications for the Premises in the preceding 24 months.	

Name	
Post	
Signature of behalf of Water Corporation	
Date	