



Licence number	L5989/1991/11
Licence holder	Water Corporation
Registered business address	John Tonkin Centre 629 Newcastle Street LEEDERVILLE WA 6007
DWER file number	2010/003537
Duration	04/12/2012 to 03/12/2023
Date of issue	04/12/2012
Premises details	Northam Waste Resource Recovery Facility Legal description - Crown Reserve 25729 NORTHAM WA 6401

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.	1,500 m ³ per day

This licence is granted to the licence holder, subject to the attached conditions, on 28 November 2022, by:

Abbie Crawford
A/Manager, Waste Industries

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

Instrument history

Date	Reference number	Summary of changes
01/10/2000	L5989/1991/4	Licence granted
01/12/2001	L5989/1991/5	Licence granted
01/12/2002	L5989/1991/6	Licence granted
04/12/2003	L5989/1991/7	Licence granted
04/12/2004	L5989/1991/8	Licence granted
04/12/2005	L5989/1991/9	Licence granted
03/12/2007	L5989/1991/10	Licence granted
02/12/2010	W4791/2010/1	Works Approval granted for installation of a UV disinfection unit
26/07/2012	L5989/1991/10	Licence amended to include UV disinfection unit
04/12/2012	L5989/1991/11	Licence granted
19/12/2013	L5989/1991/11	Licence amendment to extend due date for NIMP to from 30 December 2013 to 30 June 2014
26/04/2016	L5989/1991/11	Notice of Amendment of Licence Expiry Dates to extend expiry to 3 December 2022.
23/12/2019	W6224/2019/1	Works Approval granted for increase in approved design throughput to 2,000 m ³ per day, lining the ponds, reconfiguring and upgrading the pond system to improve quality of discharges.
16/05/2022	L5989/1991/11	<p>Notice of Amendment of Licence Reporting Requirements to reduce the frequency of environmental reporting from annual to biennial, commencing 1 October 2022 and biennially thereafter.</p> <p>Notice of Amendment of Licence Reporting Requirements to amend the reporting date for the AACR to 1 October 2022 and annually thereafter.</p>
28/11/2022	L5989/1991/11	Licence Amendment to extend the expiry date for 12 months to enable preparation for the Licence Renewal, and alter the premises name to be Northam Waste Resource Recovery Facility.

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:

Environmental Improvement Plan

1. The licensee shall submit to the Director for approval an Environmental Improvement Plan by 30 June 2013.
2. The Environmental Improvement Plan, see condition 1 of this licence, shall incorporate actions and associated completion dates to achieve the objective of meeting the ANZECC water quality guidelines for surface water for the discharge into the Avon River by the 31 December 2017.
3. The licensee shall complete the action in the approved Environmental Improvement Plan by the dates specified in the plan

Maintenance of wastewater treatment pond

4. The licensee shall manage the wastewater treatment pond in a manner such that:
 - (a) stormwater runoff resulting from site drainage shall be prevented from entering the wastewater treatment pond or causing the erosion of the outer pond embankment;
 - (b) overtopping of the wastewater treatment pond into the environment does not occur;
 - (c) there is no discernible seepage loss from the wastewater treatment pond; and
 - (d) vegetation (emergent or otherwise) shall be prevented from growing on the pond wastewaters or on the inner pond embankments.

Discharge to water

5. The licensee shall:
 - (a) make available treated wastewater for reuse; and
 - (b) only discharge to the Avon River surplus effluent that cannot be reused.
6. The licensee shall ensure that when the Northam Shire cannot fully utilise all treated wastewater discharged from the wastewater treatment ponds, the final pond discharge concentration of total phosphorus is less than an arithmetical mean of 1.0 mg/L, when measured over 3 out of 4 consecutive sampling periods.

Nutrient Irrigation Management Plan

7. The licensee shall develop a Nutrient Irrigation Management Plan by 30 June 2014 and submit it to be approved by the Director for reuse schemes.

Flow monitoring device

8. The licensee shall maintain devices for measuring monthly cumulative volumes of treated wastewater discharged for reuse and discharged to the environment. The monthly flow results shall be presented in the annual environmental report in a tabular form.

Treated wastewater sampling requirements

9. The licensee shall collect all wastewater samples in accordance with the relevant parts of AS/NZS 5667.
10. The licensee shall conduct a monitoring program which measures the parameters stated in column 2 of Table 1 at the frequency stated in column 3 of Table 1, using the corresponding methods listed in column 4 of Table 1 at the sample points stated in column 1 of Table 1 and as depicted in Schedule 1.

Table 1: Sampling and monitoring program

Column 1	Column 2		Column 3	Column 4
Monitoring site	Parameters	Units ¹	Frequency	Method
Post UV Wet Well sampling point (as depicted in Schedule 1)	Total Suspended Solids	mg/L	Monthly	AS/NZS 5667 Standard Methods for Examination of Water and Wastewater – APHA-AWWA-WEF
	Total Dissolved Solids	mg/L		
	Biochemical Oxygen Demand	mg/L		
	Total Nitrogen	mg/L		
	Ammonium-Nitrogen	mg/L		
	Nitrate+Nitrite+Nitrogen	mg/L		
	Total Phosphorus	mg/L		
	pH	pH units		
	<i>E. coli</i> (coliform-forming units / 100 mL)	cfu/100 mL		
Up-Stream and Down-stream of Avon River discharge point	Total Nitrogen	mg/L	Monthly when discharging to Avon River and the river is flowing sufficiently	AS/NZS 5667 Standard Methods for Examination of Water and Wastewater – APHA-AWWA-WEF
	Ammonium-Nitrogen	mg/L		
	Nitrate+Nitrite+Nitrogen	mg/L		
	Total Phosphorus	mg/L		
	pH	pH units		
	Dissolved Oxygen	mg/L		

Note 1: With the exception of pH and *E. coli*, all measurements are to be reported in mg/L.

11. The licensee shall submit all water samples to a NATA accredited laboratory for the analyses specified in condition 10 of this licence for analysis in accordance with the "Standard Methods for Examination of Water and Wastewater-APHA-AWWA-WEF".

Calculation of contaminant load

12. The licensee shall, using the data collected in accordance with conditions 8, 9, 10 and 11 of this licence, determine the three monthly and annual load of the following parameters in wastewater discharged from the premises:
 - (a) total suspended solids;
 - (b) biochemical oxygen demand;
 - (c) total nitrogen;
 - (d) total phosphorus; and
 - (e) *E.coli* (coliform-forming units/100 ml).
13. With the exception of *E. coli*, all measurements taken in accordance with condition 12 of this licence are to be reported in kilograms per day (kg/day).

Odour control

14. The licensee should manage and operate the premises such that odours emanating from the premises do not unreasonably interfere with the health, welfare, convenience, comfort or amenity of any person.

Bunding and containment

15. The licensee shall store environmentally hazardous chemicals, including alum and hypochlorite (where the total volume of each substance stored on the premises exceeds 250 litres) within bunded areas in accordance with AS 3780.
16. The licensee shall ensure that perimeter valves on bunded areas are locked or otherwise secured in the closed positions while the site is unattended.

Discharge to land

17. The licensee shall dispose of sewage sludge from the treatment ponds as depicted in Schedule 1 and collected vegetation / floating debris from the treatment pond to a licensed landfill or facility approved by the Director to accept biosolids.
18. The licensee shall:
 - (a) advise the Director in writing no less than seventy-two (72) hours prior to taking a treatment pond offline for maintenance works;
 - (b) advise the Director in writing no less than fourteen (14) days prior to the removal of sewage sludge from the treatment pond; and
 - (c) where sewage sludge is temporarily stored on-site, direct sewage sludge to a hardstand area which:
 - (i) is adequately bunded; and
 - (ii) returns sludge leachate back to the treatment ponds.
19. The licensee shall dispose of sludge and biosolids in accordance with the biosolids guideline or Landfill Definitions.

ANNUAL ENVIRONMENTAL REPORT

20. The licensee must submit to the CEO by no later than 1 October 2022 and then biennially thereafter, an Environmental Report for the previous two annual periods (or part thereof). The report shall contain, but not be limited to:

- (a) monitoring data and other collected data required by any condition of this licence (data should be provided in tables and in graphical format);
- (b) an explanation of the monitoring data and other collected data required by any condition of this licence:
 - (i) in comparison with past monitoring data collected for the previous three (3) years;
 - (ii) an explanation of the monitoring results with respect to the environmental impacts; and
 - (iii) an assessment against relevant environmental guidelines and any known standards;
- (c) the number and type of complaints received, nature of complaint (cross referenced with prevailing wind directions) and action taken;
- (d) any issues raised from inspections or incident responses during the reporting period together with details as to how these have been addressed / rectified or, if the required work has yet to be completed, how and when they will be completed / rectified;
- (e) any changes to site boundaries, location of groundwater monitoring bores, surface drainage channels and on-site or off-site impacts or pollution; and
- (f) any discharges of treated wastewater to the environment.

ANNUAL AUDIT COMPLIANCE REPORT

21. The licensee must:

- (a) undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and
- (b) prepare and submit to the CEO by 1 October in each year, an Annual Audit Compliance Report in the approved form.

Definitions

In this licence, the terms in Table 2 have the meanings defined.

Table 2: 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.
ANZECC water quality guidelines	means the Australian and New Zealand Guidelines for Fresh and Marine Water Quality (2000), as amended from time to time, developed under the National Water Quality Management Strategy
APHA-AWWA-WEF	means American Public Health Association (APHA), the American Water Works Association (AWWA) and the Water Environment Federation (WEF);
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 5667.11	means the Australian Standard <i>AS/NZS 5667.11 Water quality - sampling - guidance on sampling groundwater</i> .
AS 3780	means the most recent version of the Australian Standard for The storage and handling of corrosive substances
biosolids guideline	means the "Western Australian Guidelines for Direct Land Application of Biosolids and Biosolids Products", (February 2002). Department of Environmental Protection, Water and Rivers Commission, Department of Health
Biochemical Oxygen Demand	means a water quality indicator which is reported in mg/L of oxygen and is a measure of the amount of oxygen used in the biochemical oxidation of organic matter in wastewater or a slurry and is generally tested over a period of 5 days under specified conditions (referred to as BOD ₅)
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>

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.
discernible	means capable of being seen, noticed or observed
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)
hardstand	means an area with a prepared (sealed) or natural surface which has a low permeability (i.e. having a hydraulic conductivity of less than 10 ⁻⁹ metres per second at unit hydraulic gradient) which prevents escapes of any liquids from the surface into the subsoil and groundwater
in writing	means correspondence via letter, electronic-mail or facsimile
Landfill Definitions	means the Landfill Waste Classification and Waste Definitions 1996 (as amended December 2009) Department of Environment and Conservation
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.
mg/L	means milligrams per litre
monthly period	means a one-month period commencing from day 1 of a month until to the last day of the month.
NATA	means National Association of Testing Authorities
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