



Licence number	L7802/2001/11
Licence holder ACN	Water Corporation 28 003 434 917
Registered business address	629 Newcastle Street LEEDERVILLE WA 6007
DWER file number	DEC13257/1
Duration	30/10/2013 29/10/2027
Date of amendment	28/05/2021
Premises details	Kemerton Wastewater Treatment Plant Lot 310 on Plan 31339, Marriott Road WELLESLEY WA 6233

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i> )	Assessed design capacity
Category 54: Sewage facility	3,600 cubic meters per day

This licence is granted to the licence holder, subject to the attached conditions, on 28 May 2021, by:

### Steve Checker MANAGER WASTE INDUSTRIES REGULATORY SERVICES

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

# Licence history

Date	Reference number	Summary of changes
24/10/2013	L8702/2001/1	Licence granted.
29/04/2016	L8702/2001/1	Amendment to extend expiry date from 29/10/2018 to 09/12/2028
28/05/2021	L8702/2001/1	Amendment to upgrade the sludge dewatering systems and update the licence to new format.

## 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:

### **Construction and installation**

- **1.** The licence holder must:
  - (a) Construct the infrastructure listed in Table 1;
  - (b) In accordance with the corresponding design and construction requirements listed in Table 1; and
  - (c) At the corresponding infrastructure location listed in Table 1.

#### Table 1: Design and construction requirements

Infrastructure	Design and construction requirements	Infrastructure location
New sludge dewatering system - Decanter Centrifuges	Construction of a new sludge dewatering building to house the centrifuge and system, incorporating impervious concrete flooring which is sufficiently graded and bunded to contain spills or accidental discharges to land/water.	STP
	Pre-cast construction to be employed for new centrifuge sludge dewatering system;	
	All hoppers, sumps and/or conveyancing infrastructure to be lined with, or constructed of impervious material and free of leaks and defects	
	The construction of new centrifuge sludge dewatering system to occur whilst retaining operation of existing sludge dewatering system until successful commissioning of new system.	
Hazardous chemical and hydrocarbon storage area	Must be bunded and compliant with AS1940 and AS192	STP
	Fuel to be stored in self-bunded tanks	

### **Construction compliance reporting**

- 2. The licence holder must within 30 calendar days of the finalisation of construction of each item of infrastructure required by Condition 1:
  - (a) Undertake an audit of their compliance with the requirements of condition 1; and
  - (b) Prepare and submit to the CEO an Environmental Compliance Report on that compliance.
- **3.** The Environmental Compliance Report required by condition 2, must include as a minimum the following:

- (a) Certification by a qualified structural or civil engineer that the items of infrastructure or components thereof, as specified in condition 1, have been constructed in accordance with the relevant requirements specified in condition 1;
- (b) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 1; and
- (c) be signed by a person authorised to represent the works approval holder and contains the printed name and position of that person.
- **4.** The licence holder must only commence operations for the item of infrastructure identified in condition 1 when the requirement of condition 2 has been submitted by the licence holder for that item of infrastructure, unless condition 2 states that no Environmental Compliance Report is applicable for that item.

#### Infrastructure and equipment

**5.** The licence holder must ensure that the site infrastructure and equipment listed in Table 2 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 1.

Site infrastructure and equipment	Operational requirement	Infrastructure location (Figure 1)
WWTP	<ul> <li>Uncontaminated stormwater runoff resulting from roof and site drainage shall be prevented from entering the wastewater treatment stream;</li> </ul>	STP
	<ul> <li>(ii) There is no discernible seepage loss from the IDEA plant or storage pond;</li> </ul>	
	<ul> <li>Both vegetation (emergent or otherwise) and accumulated debris shall be routinely removed from the IDEA plant or storage pond waters and inner pond embankments;</li> </ul>	
	<ul> <li>(iv) Treated wastewater is discharged from the IDEA plant to the storage pond; and</li> </ul>	
	(v) Disinfected treated wastewater is discharged from the storage pond to the woodlot irrigation area, except where there is a prolonged irrigation pump failure (or required maintenance works), in which case, treated wastewater may be discharged to on-site infiltration.	
	<ul> <li>(vi) All chemicals must be stored in purpose-built areas that comply with AS3780</li> </ul>	
Sludge Dewatering System	(i) Sludge dewatering system to comprise of a decanter centrifuge system;	STP
	<ul> <li>(ii) Centrifuges to be operated to meet a dewatered sludge dry solids content of 15% w/w;</li> </ul>	

nent requirements
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Site infrastructure and equipment	Оре	erational requirement	Infrastructure location (Figure 1)
	(iii)	Dispose of collected grit and screenings from the inlet works to a licensed or registered landfill;	
	(iv)	Dewater and store un-dewatered and dewatered sludge from the treatment plant within concrete lined storage areas.	
	(v)	Leachate filtrate to be routed to an impervious sump with cover and returned to the inlet works by impervious pipework.	
	(vi)	Dispose of sludge and biosolids in accordance with the document <i>Western</i> <i>Australian Guidelines for Biosolids</i> <i>Management</i> , Department of Environment and Conservation (December, 2012).	
	(vii)	No overtopping of sludge hoppers, leachate sumps or other infrastructure to occur.	
Woodlot irrigation area		sure that the nutrient loading rate does not eed the following;	Woodlot
	(i)	Nitrogen - 250 kilograms per hectare per year; and	
	(ii)	Phosphorus - 50 kilograms per hectare per year.	
	(iii)	Wastewater is evenly spread across the available irrigation area;	
	(iv)	A healthy vegetation cover is maintained over the irrigation area (and rainfed buffer);	
	(v)	Irrigation is minimised during periods of heavy rainfall;	
	(vi)	No ponding to occur within the woodlot irrigation areas; and	
	vii)	Ensure irrigation does not result in surface runoff from the premises.	

### **Emissions and discharges**

#### Calculation of contaminant load

**6.** The licence holder must determine the monthly load of each contaminant in the treated wastewater discharged from the treatment plant. The loads shall be based on the water discharge rate and the concentrations as measured in accordance with conditions 7 and 9. Monthly and annual average loads of the contaminants shall be reported in the Annual Environmental Report in kilograms per day.

### Monitoring

7. The licence holder must maintain suitable devices for measuring the monthly

cumulative volumes of wastewater treated by the IDEA plant and discharged from the wastewater storage dam to the woodlot irrigation area. The monthly flow results shall be presented in the next annual monitoring report in a tabular form.

- **8.** The licence holder must maintain, seven groundwater monitoring bores designated 01/02, 02/02, 03/02, 04/02, 05/02, 06/02 and 07/02, depicted in Figure 2, Schedule 1, to allow representative water samples to be collected.
- **9.** The licence holder must, at the frequencies stated in Table 3, take representative water samples from the sites stated in Column 1, at the frequency stated in Column 2 for the parameters stated in Column 3:

Column 1	Column 2	Column 3
Sampling site	Frequency	Parameters
Outlet from treatment plant to storage dam	Monthly	pH; Total Suspended Solids; Total Dissolved Solids; 5-Day Biochemical Oxygen Demand; Total Nitrogen; Ammonium-nitrogen; Nitrate + Nitrite- Nitrogen; and Phosphorus
Outlet from the storage dam to the irrigation area	Monthly	<i>Escherichia coil</i> (in colony forming units/100mL)
Groundwater bores: 01/02, 02/02, 03/02, 04/02, 05/02, 06/02 and 07/02 (Attachment 1).	Quarterly	pH; Total Dissolved Solids; Total Nitrogen; Total Phosphorus; and
Groundwater bores: 01/02, 02/02, 03/02, 04/02, 06/02 and 07/02.		Standing Water Level (in Metres AHD)

- **10.** The licence holder must every 6 months, collect representative samples of soil from five locations within the woodlot irrigation area at depths of 0-100 millimetres and 100- 200 millimetres. Soil samples shall be analysed for the following parameters: salinity; pH; nitrogen; phosphorus; sodium; calcium; magnesium; potassium; boron; aluminium; and Sodium Adsorption Ratio (SAR). Except for pH and sodium adsorption ratio, all measurements must be reported in mg/kg.
- **11.** The licence holder must:
  - (a) collect all water samples in accordance with the relevant parts of Australian Standard 5667;
  - (b) submit all water samples to a laboratory with current NATA accreditation for the analyses specified, and analysed in accordance with the current "Standard Methods for Examination of Water and Wastewater-APHAAVVWA-WEF"; and
  - (c) provide the recorded results of the sampling and analysis referred to in conditions 9, 10 and 11 to the CEO in accordance with condition 14.

### **Records and reporting**

**12.** 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:

- (a) the name and contact details of the complainant, (if provided);
- (b) the time and date of the complaint;
- (c) the complete details of the complaint and any other concerns or other issues raised; and
- (d) the complete details and dates of any action taken by the licence holder to investigate or respond to any complaint.
- **13.** The licence holder must:
  - (a) undertake an audit of their compliance with the conditions of this licence during the preceding financial year (1 July to 30 June); and
  - (b) prepare and submit to the CEO by 1 September each year an Annual Audit Compliance Report and Annual Environmental Report in the approved form for the previous financial year (1 July to 30 June).
- **14.** 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) the works conducted in accordance with condition 1 of this licence;
  - (c) any maintenance of infrastructure that is performed in the course of complying with condition 5 of this licence;
  - (d) monitoring programmes undertaken in accordance with conditions 7, 8 and 9 of this licence; and
  - (e) complaints received under condition 12 of this licence.
- **15.** The books specified under condition 14 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.

# **Definitions**

In this licence, the terms in Table 1 have the meanings defined.

#### Table 1: 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).
APHA-AWWA- WEF	means American Public Health; American Water Works Association; Water Environment Federation
AS1940	means the current version of Australian Standard 1940 – 2004 – The storage and handling of flammable and combustible liquids
AS 3780	means the current version of Australian Standard 3780 – The storage and handling of corrosive substances – Western Australia
AS/NZS 5667	means the current version of Australian Standard/ New Zealand Standard 5667 – Water Quality - Sampling
BFP	means Belt Filter Presses
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
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	Environmental Protection Act 1986 (WA)
EP Regulations	Environmental Protection Regulations 1987 (WA)
extreme rainfall	means the rainfall quantity from a 1:100 year rainfall event of 72

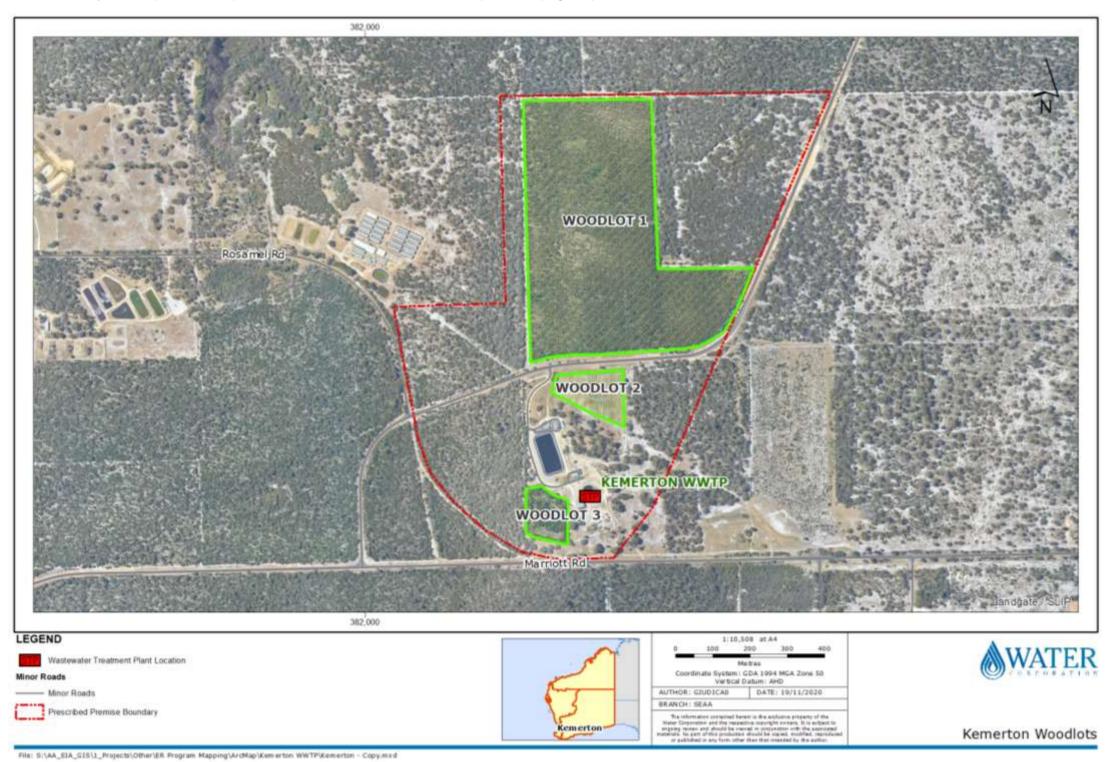
Term	Definition
event	hours duration, as defined by Australian Rainfall and Runoff 1987
IDEA	means "Intermittent Decanting Extended Aeration"
inform and advise	means inform or advise by e-mail, telephone or facsimile
licence	refers to this document, which evidences the grant of a licence by the CEO under 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 and mg/kg	means milligrams per liter and milligrams per kilogram, respectively
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 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 as red in the map below (Figure ).



#### Figure 1: Map of the boundary of the prescribed premise

## Map of STP development

The boundary of STP Development Footprint is shown as light brown in the map below (Figure 2).

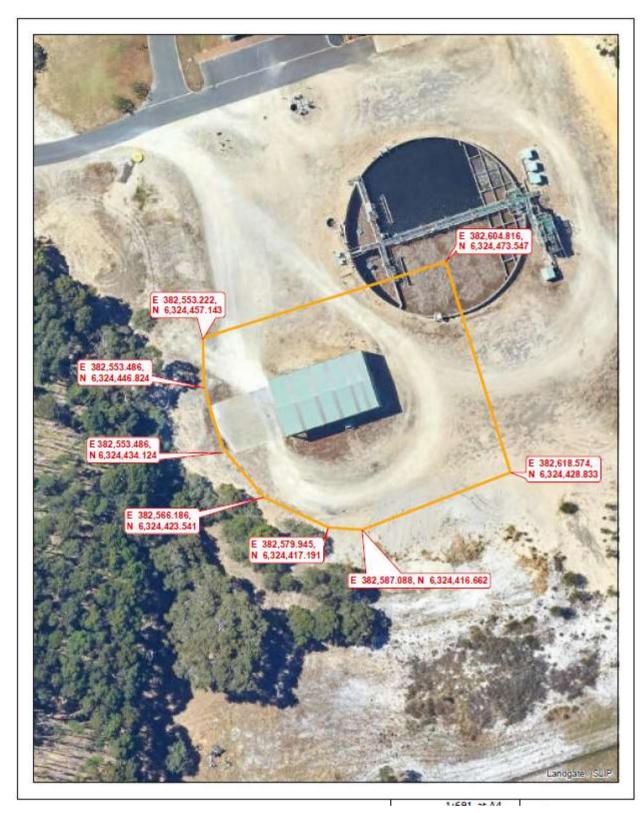


Figure 2: Map of the STP development footprint

L7802/2001/1 1 (28 May 2021)

IR-T06 Licence template (v7.0) (February 2020)

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## **Monitoring bore locations**

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

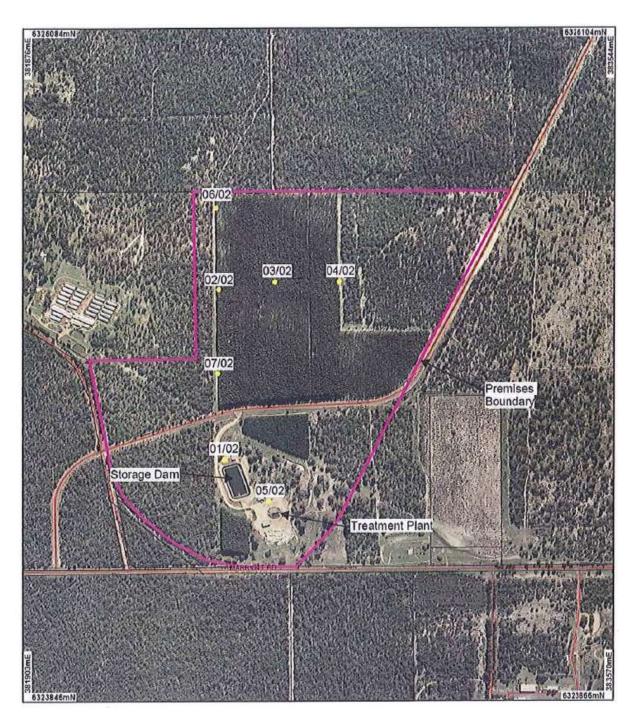


Figure 2: Map of the monitoring bores

Department of Water and Environmental Regulation