

Licence

Environmental Protection Act 1986, Part V

Licensee: Water Corporation

Licence: L5976/1991/10

Registered office: 629 Newcastle Street

LEEDERVILLE WA 6007

Premises address: Carnarvon Wastewater Treatment Plant

Babbage Island Road MORGANTOWN WA 6701

Being Lot 1321 on Plan 193061 as depicted in Schedule 1.

Issue date: Thursday, 16 October 2014

Commencement date: Saturday, 1 November 2014

Expiry date: Thursday, 31 October 2019

Prescribed premises category

Schedule 1 of the Environmental Protection Regulations 1987

Category number	Category description	Category production or design capacity	Approved premises production or design capacity
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.	100 cubic metres or more per day	1,800 cubic metres per day

Conditions

This licence is subject to the conditions set out in the attached pages.

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Steve Checker Manager Licensing (Waste Industries) Officer delegated under section 20 of the *Environmental Protection Act 1986*

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Introduction

This Introduction is not part of the Licence conditions.

DER's industry licensing role

The Department of Environment Regulation (DER) is a government department for the state of Western Australia in the portfolio of the Minister for Environment. DER's purpose is to advise on and implement strategies for a healthy environment for the benefit of all current and future Western Australians.

DER has responsibilities under Part V of the *Environmental Protection Act 1986* (the Act) for the licensing of prescribed premises. Through this process DER regulates to prevent, control and abate pollution and environmental harm to conserve and protect the environment. DER also monitors and audits compliance with works approvals and licence conditions, takes enforcement action as appropriate and develops and implements licensing and industry regulation policy.

Licence requirements

This Licence is issued under Part V of the Act. Conditions contained within the Licence relate to the prevention, reduction or control of emissions and discharges to the environment and to the monitoring and reporting of them.

Where other statutory instruments impose obligations on the Premises/Licensee the intention is not to replicate them in the Licence conditions. You should therefore ensure that you are aware of all your statutory obligations under the Act and any other statutory instrument. Legislation can be accessed through the State Law Publisher website using the following link: http://www.slp.wa.gov.au/legislation/statutes.nsf/default.html

For your Premises relevant statutory instruments include but are not limited to obligations under the:

- Environmental Protection (Unauthorised Discharges) Regulations 2004 these Regulations make it an offence to discharge certain materials such as contaminated stormwater into the environment other than in the circumstances set out in the Regulations.
- Environmental Protection (Controlled Waste) Regulations 2004 these Regulations place obligations on you if you produce, accept, transport or dispose of controlled waste.
- Environmental Protection (Noise) Regulations 1997 these Regulations require noise emissions from the Premises to comply with the assigned noise levels set out in the Regulations.

You must comply with your Licence. Non-compliance with your Licence is an offence and strict penalties exist for those who do not comply.

Licence holders are also reminded of the requirements of section 53 of the Act which places restrictions on making certain changes to prescribed premises unless the changes are in accordance with a works approval, licence, closure notice or environmental protection notice.

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Other Guidelines which you should be aware of include:

• Western Australian Guidelines for Biosolids Management, Department of Environment and Conservation, December 2012 (as amended from time to time).

Licence fees

If you have a licence that is issued for more than one year, you are required to pay an annual licence fee prior to the anniversary date of issue of your licence. Non payment of annual licence fees will result in your licence ceasing to have effect meaning that it will no longer be valid and you will need to apply for a new licence for your Premises.

Ministerial conditions

If your Premises has been assessed under Part IV of the Act you may have had conditions imposed by the Minister for Environment. You are required to comply with any conditions imposed by the Minister.

Premises description and Licence summary

The Carnarvon Wastewater Treatment Plant (WWTP) is located on Lot 1321 Babbage Island Road, Morgantown WA 6701, which is a prescribed premises within Schedule 1 of the *Environmental Protection Regulations 1987*, and consists of three stabilisation ponds; a primary aeration, two maturation ponds and with an onsite emergency infiltration basin. A sludge drying bed is also available at the premises.

The inlet pipe at the premises is fitted with a grit and screening facility and the area is bunded and filters the waste stream prior to discharge into pond 1. A copper ioniser/ doser has been in operation at the Premises since 2006, for use as an algaecide and microbicide, as part of the wastewater treatment process.

The treated wastewater effluent is pumped into the Shire of Carnarvon's reuse storage facility. Reuse accounts for 100% of the effluent discharge from the Water Corporations facility. On-site infiltration is retained for emergency events and exceptional circumstances.

Treated wastewater is discharged via the adjacent Shire of Carnarvon reuse scheme to the Town Beach, Northwater Public Open Space, Brockman Park, Football Oval/Festival Grounds, Van Dongen Park and High School. Effluent reuse is managed under the current Recycling Water Supply Agreement (RWSA) (signed 10/03/2011, expires in March 2016) which is overseen by the Department of Health.

The Carnarvon WWTP and Shire storage ponds are less than 500 metres from domestic neighbours in the nearby built-up area. Long term plans involve decommissioning the current plant and utilising a new site.

The Carnarvon WWTP is designed to service a nominal population of approximately 9000. At 30 June 2013, there were 1156 services connected.

The Gascoyne River is located approximately 200 metres north of the Carnarvon Wastewater Treatment Plant.

The main potential risk from emissions includes impact on groundwater and the Gascoyne River which is in close proximity to the Premises.

This Licence is as a result of an amendment sought by the Licensee to update the premises operation details with the inclusion of the copper ioniser, change to reporting date submission to 63 days after the reporting period, and includes administrative changes to a new format (v2.9)

The licences and works approvals issued for the Premises, since 27/09/2000, are:

Instrument log		
Instrument	Issued	Description
L5976/1991/4	27/09/2000	Licence reissue
L5976/1991/5	03/10/2001	Licence reissue
L5976/1991/6	14/10/2002	Licence reissue
L5976/1991/7	08/09/2003	Licence reissue
L5976/1991/8	29/09/2004	Licence reissue

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L5976/1991/9	17/09/2009	Licence reissue
L5976/1991/10	16/10/2014	Licence reissue and amendment to new template format
L5976/1991/10	10/09/2015	Licence amendment to include copper ioniser and
		administrative changes.

Severance

It is the intent of these Licence conditions that they shall operate so that, if a condition or a part of a condition is beyond the power of this Licence to impose, or is otherwise *ultra vires* or invalid, that condition or part of a condition shall be severed and the remainder of these conditions shall nevertheless be valid to the extent that they are within the power of this Licence to impose and are not otherwise *ultra vires* or invalid.

END OF INTRODUCTION

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Licence conditions

1 General

1.1 Interpretation

- 1.1.1 In the Licence, definitions from the *Environmental Protection Act 1986* apply unless the contrary intention appears.
- 1.1.2 For the purposes of this Licence, unless the contrary intention appears:

'Act' means the Environmental Protection Act 1986;

'AHD' means the Australian height datum;

'annual period' means the inclusive period from 1 July until 30 June in the following year;

'AS/NZS 2031' means the Australian Standard AS/NZS 2031 Selection of containers and preservation of water samples for microbiological analysis;

'AS/NZS 5667.1' means the Australian Standard AS/NZS 5667.1 Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples;

'AS/NZS 5667.10' means the Australian Standard AS/NZS 5667.10 Water Quality – Sampling – Guidance on sampling of waste waters;

'AS/NZS 5667.11' means the Australian Standard AS/NZS 5667.11 Water Quality – Sampling – Guidance on sampling of groundwaters;

'averaging period' means the time over which a limit or target is measured or a monitoring result is obtained;

'CEO' means Chief Executive Officer of the Department of Environment Regulation;

'CEO' for the purpose of correspondence means:

Chief Executive Officer
Department Administering the Environmental Protection Act 1986
Locked Bag 33
CLOISTERS SQUARE WA 6850
Email: info@der.wa.gov.au;

'controlled waste' has the definition in Environmental Protection (Controlled Waste) Regulations 2004.

'emergency event' means rainfall equivalent to, or in excess of, a 72 hour, 1-in-10 year event;

'freeboard' means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point.

'fugitive emissions' means all emissions not arising from point sources identified in Sections 2.2, 2.3, 2.4 and 2.5;

'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;

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'leachate' means liquid released by or water that has percolated through waste and which contains some of its constituents.

'Licence' means this Licence numbered L5976/1991/10 and issued under the Act;

'Licensee' means the person or organisation named as Licensee on page 1 of the Licence;

'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;

'mass balance' means the calculation resource flows and losses based on the mass and/or volume of inputs to a process which balances the mass and/or volume of outputs as products, emissions and wastes, plus any change in stocks;

'Premises' means the area defined in the Premises Map in Schedule 1 and listed as the Premises address on page 1 of the Licence;

'process equipment' means any wastewater or sludge containment infrastructure or wastewater treatment vessel;

'quarterly' means the 4 inclusive periods from 1 July to 30 September, 1 October to 31 December and in the following year 1 January to 31 March, and 1 April to 30 June;

'Schedule 1' means Schedule 1 of this Licence unless otherwise stated;

'Schedule 2' means Schedule 2 of this Licence unless otherwise stated;

'six monthly' means the 2 inclusive periods from 1 July to 31 December and 1 January to 30 June in the following year;

'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: and

'wastewater treatment vessels' means any vessel or tank containment infrastructure associated with the treatment of wastewater and includes, but not limited to, oxidation ditches and infiltration ponds.

- 1.1.3 Any reference to an Australian or other standard in the Licence means the relevant parts of the standard in force from time to time during the term of this Licence.
- 1.1.4 Any reference to a guideline or code of practice in the Licence means the current version of the guideline or code of practice in force from time to time, and shall include any amendments or replacements to that guidelines or code of practice made during the term of this Licence.
- 1.1.5 Nothing in the Licence shall be taken to authorise any emission that is not mentioned in the Licence, where the emission amounts to:
 - (a) pollution;
 - (b) unreasonable emission;
 - (c) discharge of waste in circumstances likely to cause pollution; or
 - (d) being contrary to any written law.

1.2 General conditions

1.2.1 The Licensee shall operate and maintain all pollution control and monitoring equipment to the manufacturer's specification or any relevant and effective internal management system.

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- 1.2.2 The Licensee shall immediately recover, or remove and dispose of spills of environmentally hazardous materials outside an engineered containment system.
- 1.2.3 The Licensee shall:
 - implement all practical measures to prevent stormwater run-off becoming contaminated by the activities on the Premises; and
 - (b) treat contaminated or potentially contaminated stormwater as necessary prior to being discharged from the Premises. 1

Note1: The Environmental Protection (Unauthorised Discharges) Regulations 2004 make it an offence to discharge certain materials into the environment.

1.3 Premises operation

- 1.3.1 The Licensee shall record and investigate the exceedance of any descriptive or numerical limit, and/or target in this section.
- 1.3.2 The Licensee shall only allow waste to be accepted on to the Premises if:
 - (a) it is of a type listed in Table 1.3.1; and
 - (b) the quantity accepted is below any limit listed in Table 1.3.1; and
 - (c) it meets any specification listed in Table 1.3.1

Table 1.3.1: Waste a	cceptance	
Waste	Quantity Limit	Specification ¹
Sewage – waste from the reticulated sewerage system	1,800 cubic metres/ day	Accepted through sewer inflow(s) and tankered waste only.

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

1.3.3 The Licensee shall ensure that the wastes accepted onto the Premises are only subjected to the process(es) set out in Table 1.3.2 and in accordance with any process requirements described in that table.

Table 1.3.2: Waste processing					
Waste type	Process	Process requirements			
Sewage	Physical and biological treatment	Treatment of sewage waste shall be at or below the treatment capacity of 1 800 m ³ /day			
Sewage sludge	Storage – sludge drying bed	Returns sludge leachate to the start of the treatment process			

1.3.4 The Licensee shall ensure that waste material is only stored and/or treated within vessels or compounds provided with the infrastructure detailed in Table 1.3.3.

Table 1.3.3: Containment infrastructure					
Vessel or compound	Material	Requirements			
Inlet works	Screening	Stored in a sealed bin which is surrounded by a bunded hardstand area which returns sludge leachate to the start of the treatment process.			
Pond 1 (aeration)	Wastewater	Clay lined to achieve a permeability of less than 10 ⁻⁹			
Pond 2 (facultative)	Wastewater	m/s or equivalent.			
Pond 3 (maturation)	Treated wastewater				

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Infiltration area	Treated wastewater	Unlined, in-situ soils. Used in emergency events only.
Sludge drying bed	Sewage sludge	Temporary or permanent infrastructure to consist of a bunded hardstand or lined area (lined to achieve a permeability of less than 10 ⁻⁹ m/s or equivalent), capable of preventing surface run-off of leachate and sludge and which includes a leachate collection system.

- 1.3.5 The Licensee shall manage all wastewater treatment, evaporation, and infiltration ponds such that:
 - (a) overtopping of the ponds does not occur;
 - (b) a freeboard equal to, or greater than, 300mm 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; and
 - (e) vegetation and floating debris (emergent or otherwise) is prevented from encroaching onto pond surfaces or inner pond embankments.
- 1.3.6 The Licensee shall manage the infiltration of treated wastewater such that:
 - (a) treated wastewater is evenly distributed over the infiltration area;
 - (b) wastewater disposal is to be rotated between the infiltration areas on a regular basis to minimise soil erosion and surface ponding and allow the soils to dry between disposal; and
 - (c) sludges are removed from the base of the pond to maintain the infiltration performance;
- 1.3.7 The Licensee shall:
 - (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 or unmanned.
- 1.3.8 The Licensee shall manage the sewage sludge drying beds and geobag laydown area such that:
 - (a) stormwater runoff is prevented from entering the beds or area; and
 - (b) discharges/leachate from the beds or area are directed to the primary pond.
- 1.3.9 The Licensee shall only discharge treated wastewater from pond 3 to the emergency overflow storage ponds, during an emergency event.

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2 Emissions

2.1 General

2.1.1 The Licensee shall record and investigate the exceedance of any descriptive or numerical limit specified in any part of section 2 of this Licence.

2.2 Emissions to land

2.2.1 The Licensee shall ensure that where waste is emitted to land from the emission points in Table 2.2.1 and identified on the map of emission points in Schedule 1 it is done so in accordance with the conditions of this Licence.

Table 2.2.1: Emis	Table 2.2.1: Emissions to land					
Emission point reference	Emission point reference on Map of emission points	Description	Source including abatement			
L1	Emergency Overflow from Pond 3 to infiltration area	Discharge to the infiltration area is only authorised when the WWTPs storage capacity is exhausted and when there is no capacity to send the water offsite for subsequent storage and third-party reuse.	Treated wastewater pumped from Pond 3 during emergency events only			

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3 Monitoring

3.1 General monitoring

- 3.1.1 The licensee shall 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].
- 3.1.2 The Licensee shall ensure that :
 - (a) monthly monitoring is undertaken at least 15 days apart;
 - (b) quarterly monitoring is undertaken at least 45 days apart; and
 - (c) six monthly monitoring is undertaken at least 5 months apart;
- 3.1.3 The Licensee shall 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.
- 3.1.4 The Licensee shall, 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.

3.2 Monitoring of emissions to land

3.2.1 The Licensee shall undertake the monitoring in Table 3.2.1 according to the specifications in that table.

M2 & M3 Post ioniser sample point Post ioniser	Emission point reference	Monitoring point reference	Parameter	Units	Averaging Period	Frequency
M2 & M3 Post ioniser sample point Post ioniser sample point Post ioniser sample point Post ioniser sample point Biochemical Oxygen Demand Total Dissolved Solids Total Suspended Solids Nitrate + Nitrite- nitrogen Ammonium- nitrogen Total Nitrogen Total Nitrogen		by 'mass balance'		m ³ /day	Monthly	Continuous
M2 & M3 Post ioniser sample point Nitrate + Nitrite- nitrogen Ammonium- nitrogen Total Nitrogen			pH ¹	рН	Spot Sample	Quarterly
Total Phosphorus Copper	M2 & M3		Oxygen Demand Total Dissolved Solids Total Suspended Solids Nitrate + Nitrite- nitrogen Ammonium- nitrogen Total Nitrogen Total Phosphorus	mg/L		

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

Note 2: The actual level is to be reported except where the result is greater than the highest detectable level of 24,000 cfu/100mL. In this case the reporting of the highest detectable level is permitted.

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3.3 Monitoring of inputs and outputs

3.3.1 The Licensee shall undertake the monitoring in Table 3.3.1 according to the specifications in that table.

Table 3.3.1: Monitoring of inputs and outputs					
Input/Output	Monitoring point reference	Parameter ¹	Units	Averaging period	Frequency
Wastwater Treatment Plant - Inlet Flow	Inflow meter (M1 – S2042103)	Volumetric flow rate (cumulative)	m ³ /day	Monthly	Continuous
Treated wastewater discharged to Shire of Carnarvon ponds	Outflow meter (M2 - S0037360)	Volumetric flow rate (cumulative)	m ³ /day	Monthly	Continuous
Treated wastewater discharged to on-site infiltration ponds	Outflow meter or mass balance calculation (M3)	Volumetric flow rate (cumulative)	m ³ /day	Monthly	Emergency/ abnormal events only

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

3.4 Ambient environmental quality monitoring

3.4.1 The Licensee shall undertake the monitoring in Table 3.4.1 according to the specifications in that table and record and investigate results that do not meet any target specified.

Table 3.4.1: Moni	Table 3.4.1: Monitoring of ambient groundwater quality					
Monitoring point reference and location	Parameter	Units	Averaging period	Frequency		
Monitoring Bores:	Standing water level ¹	m(AHD) mBGL	Spot sample	Six monthly		
1/94 and 2/94	pH ¹	рН				
(Schedule 1)	Copper	mg/L				
	Total Dissolved Solids					
	Total Nitrogen					
	Total Phosphorus					

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

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4 Information

4.1 Records

- 4.1.1 All information and records required by the Licence shall:
 - (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 4.1.1(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.
- 4.1.2 The Licensee shall ensure that:
 - (a) 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
 - (b) 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.
- 4.1.3 The Licensee shall complete an Annual Audit Compliance Report indicating the extent to which the Licensee has complied with the conditions of the Licence, and any previous licence issued under Part V of the Act for the Premises for the previous annual period.
- 4.1.4 The Licensee shall 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.

4.2 Reporting

4.2.1 The Licensee shall submit to the CEO an Annual Environmental Report within 63 calendar days after the end of the annual period (i.e. 1 September annually). The report shall contain the information listed in Table 4.2.1 in the format or form specified in that table.

Table 4.2.1: Annual Environmental Report					
Condition or table (if relevant)	Parameter	Format or form ¹			
-	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	None specified			
Table 1.3.2	Summary of any treatment capacity target exceedances and any action taken	None specified			
1.3.5	Summary of any freeboard target exceedances and any action taken	None specified			
Table 3.2.1	Monitoring of emissions to land	LR1			
	Monitoring of inputs and outputs	None specified			
Table 3.3.1	Methodology and calculations used to estimate the daily volumetric flow rate of treated wastewater pumped to infiltration channel and results of those calculations	None specified			
Table 3.4.1	Monitoring of ambient groundwater quality	AGWQ1			
4.1.3	Compliance	Annual Audit Compliance Report (AACR)			
4.1.4	Complaints summary	None specified			

Note 1: Forms are in Schedule 2

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- 4.2.2 The Licensee shall ensure that the Annual Environmental Report also contains an assessment of the information contained within the report against previous monitoring results and Licence limits and/or targets.
- 4.2.3 The Licensee shall submit the information in Table 4.2.2 to the CEO according to the specifications in that table.

Table 4.2.2: Non-annual reporting requirements							
Condition or table (if relevant)	Parameter	Reporting period	Reporting date (after end of the reporting period)	Format or form ¹			
-	Copies of original monitoring reports submitted to the Licensee by third parties	Not Applicable	Within 14 days of the CEOs request	As received by the Licensee from third parties			

Note 1: Forms are in Schedule 2

4.3 Notification

4.3.1 The Licensee shall ensure that the parameters listed in Table 4.3.1 are notified to the CEO at the Contact Address and in accordance with the notification requirements of the table.

Table 4.3.1: N	otification requirements			
Condition or table Parameter (if relevant)		Notification requirement ¹	Format or form ²	
-	Taking process equipment offline for maintenance works that may result in increased odour emissions	No less than 72 hours in advance of works		
-	Removal of sewage sludge from a treatment pond, wastewater treatment vessel, sewage sludge storage pond or Geobag	No less than 14 days in advance of works ³	None specified	
-	Groundwater bores being de- commissioned or rendered useless	Within 14 days		
1.3.1 and 2.1.1	Breach of any limit specified in the Licence	Part A: As soon as practicable but no later than 5pm of the next working day	N1	
3.1.3	Calibration report	Part B: As soon as practicable As soon as practicable	None specified	

Note 1: No notification requirement in the Licence shall negate the requirement to comply with s72 of the Act.

Note 2: Forms are in Schedule 2

Note 3: 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.

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Schedule 1: Maps

Premises map

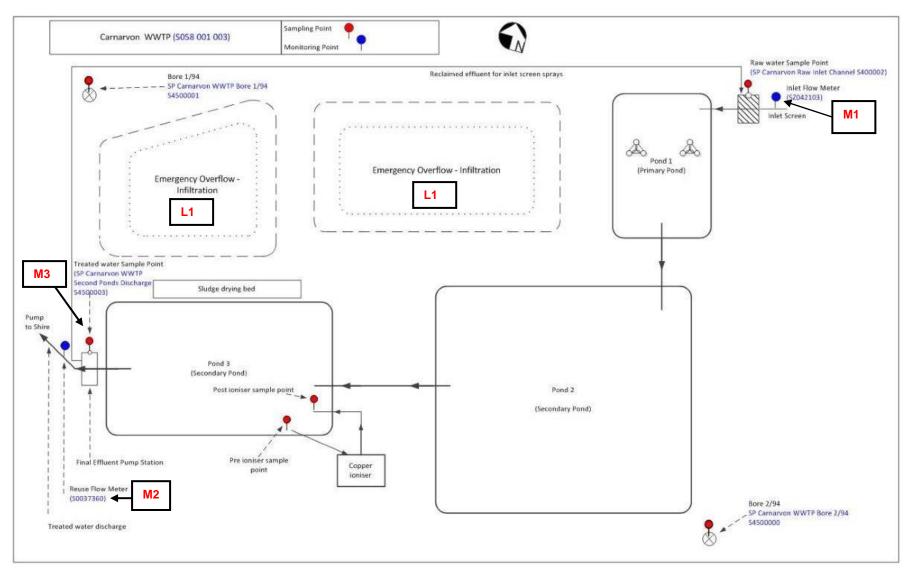
The Premises is shown in the maps below. The pink line depicts the Premises boundary.



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Premises process table, emission and monitoring points map





Schedule 2: Reporting & notification forms

These forms are provided for the proponent to report monitoring and other data required by the Licence. They can be requested in an electronic format.

ANNUAL AUDIT COMPLIANCE REPORT PROFORMA SECTION A LICENCE DETAILS Licence Number: Licence File Number: ABN: Company Name: Trading as: Reporting period: to STATEMENT OF COMPLIANCE WITH LICENCE CONDITIONS 1. Were all conditions of the Licence complied with within the reporting period? (please tick the appropriate box) Yes Please proceed to Section C No ☐ Please proceed to Section B Each page must be initialled by the person(s) who signs Section C of this Annual Audit Compliance Report (AACR). Initial:

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SECTION B

DETAILS OF NON-COMPLIANCE WITH LICENCE CONDITION.

Please use	e a separate page for each licence condition that wa	as not complied with.		
	condition not complied with:			
b) Date(s)	when the non compliance occurred, if applicable:			
c) Was this	s non compliance reported to DER?:			
Yes	Reported to DER verbally Date Reported to DER in writing	□ No		
	Date			
d) Has DE	R taken, or finalised any action in relation to the non cor	npliance?:		
e) Summa	ry of particulars of the non compliance, and what was th	e environmental impact:		
f) If relevant, the precise location where the non compliance occurred (attach map or diagram):				
g) Cause of non compliance:				
h) Action taken, or that will be taken to mitigate any adverse effects of the non compliance:				
i) Action taken or that will be taken to prevent recurrence of the non compliance:				
Each page must be initialled by the person(s) who signs Section C of this AACR				
Initial:				

SECTION C

SIGNATURE AND CERTIFICATION

This Annual Audit Compliance Report (AACR) may only be signed by a person(s) with legal authority to sign it. The ways in which the AACR must be signed and certified, and the people who may sign the statement, are set out below.

Please tick the box next to the category that describes how this AACR is being signed. If you are uncertain about who is entitled to sign or which category to tick, please contact the licensing officer for your premises.

If the licence holder is	The Annual Audit Compliance Report must be signed and certified:
	by the individual licence holder, or
An individual	by a person approved in writing by the Chief Executive Officer of the Department of Environment Regulation to sign on the licensee's behalf.
A firm or other	by the principal executive officer of the licensee; or
unincorporated company	by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
	by affixing the common seal of the licensee in accordance with the Corporations Act 2001; or
	by two directors of the licensee; or
	by a director and a company secretary of the licensee, or
A corporation	if the licensee is a proprietary company that has a sole director who is also the sole company secretary – by that director, or
	by the principal executive officer of the licensee; or
	by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
A public authority	by the principal executive officer of the licensee; or
A public authority (other than a local government)	by a person with authority to sign on the licensee's behalf who is approved in writing by the Chief Executive Officer of the Department of Environment Regulation.
a local government	by the chief executive officer of the licensee; or
a loodi governinent	by affixing the seal of the local government.

It is an offence under section 112 of the *Environmental Protection Act 1986* for a person to give information on this form that to their knowledge is false or misleading in a material particular. There is a maximum penalty of \$50,000 for an individual or body corporate.

I/We declare that the information in this annual audit compliance report is correct and not false or misleading in a material particular.

SIGNATURE:	SIGNATURE:
NAME: (printed)	NAME: (printed)
POSITION:	POSITION:
DATE:/	DATE:/
SEAL (if signing under seal)	

Amendment date: Thursday, 10 September 2015

Environmental Protection Act 1986 Licence: L5976/1991/10 File Number: 2010/003112-1 Licence: L5976/1991/10 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
F : : : : : /	

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				

Amendment date: Thursday, 10 September 2015

Environmental Protection Act 1986 Licence: L5976/1991/10 File Number: 2010/003112-1

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.	
protein a recall office of the motion.	
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 on behalf of	
Water Corporation	
Date	



Decision Document

Environmental Protection Act 1986, Part V

Proponent: Water Corporation

Licence: L5976/1991/10

Registered office: 629 Newcastle Street

LEEDERVILLE WA 6007

Premises address: Carnarvon Wastewater Treatment Plant

Babbage Island Road MORGANTOWN WA 6701 Being Lot 1321 on Plan 193061

Issue date: Thursday, 16 October 2014

Commencement date: Saturday, 1 November 2014

Expiry date: Thursday, 31 October 2019

Decision

Based on the assessment detailed in this document, the Department of Environment Regulation (DER), has decided to issue an amended licence. DER considers that in reaching this decision, it has taken into account all relevant considerations.

Decision Document prepared by: Caroline Conway-Physick

Licensing Officer

Decision Document authorised by: Stephen Checker

Delegated Officer



Contents

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1 Purpose of this Document

This decision document explains how DER has assessed and determined the application and provides a record of DER's decision-making process and how relevant factors have been taken into account. Stakeholders should note that this document is limited to DER's assessment and decision making under Part V of the *Environmental Protection Act 1986*. Other approvals may be required for the proposal, and it is the proponent's responsibility to ensure they have all relevant approvals for their Premises.



2 Administrative summary

Administrative details				
Application type	Works Approval New Licence Licence amendment Works Approval amendment			
Activities that cause the premises to become		Category number(s) Assessed design capaci		
prescribed premises	54 – Sewage facility			1,800 cubic metres per day
Application verified	Date: N/A			
Application fee paid	Date: N/A			
Works Approval has been complied with	Yes□	No□	N	/A⊠
Compliance Certificate received	Yes□	No	N	/A⊠
Commercial-in-confidence claim	Yes□	No⊠		
Commercial-in-confidence claim outcome	N/A			
Is the proposal a Major Resource Project?	Yes□	No⊠		
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the Environmental Protection Act 1986?	Yes	No⊠	Ма	erral decision No: naged under Part V sessed under Part IV
Is the proposal subject to Ministerial Conditions?	Yes	No⊠		isterial statement No: A Report No:
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986</i>)? Yes□ No⊠ Department of Water consulted Yes□ No ⊠				
Is the Premises within an Environmental Protection Policy (EPP) Area Yes No If Yes include details of which EPP(s) here.				
Is the Premises subject to any EPP requirements? Yes No⊠ If Yes, include details here, eg Site is subject to SO₂ requirements of Kwinana EPP.				



3 Executive summary of proposal and assessment

The Carnarvon Wastewater Treatment Plant (WWTP) is located on Lot 1321 Babbage Island Road, Morgantown WA 6701, which is a prescribed premises within Schedule 1 of the *Environmental Protection Regulations 1987.* The plant consists of three stabilisation ponds; a primary aeration pond, two maturation ponds and with an onsite emergency infiltration basin. A sludge drying bed is also installed at the premises.

The inlet pipe at the premises is fitted with a grit and screening facility and the area is bunded and filters the waste stream prior to discharge into pond 1. A copper ioniser/ doser has been in operation at the Premises since 2006, for use as an algaecide and microbicide, as part of the wastewater treatment process.

The treated wastewater effluent is pumped into the Shire of Carnarvon's reuse storage facility. Reuse accounts for 100% of the effluent discharge from the Water Corporation's facility. On-site infiltration is retained for emergency events and exceptional circumstances.

Treated wastewater is discharged via the adjacent Shire of Carnarvon reuse scheme to the Town Beach, Northwater Public Open Space, Brockman Park, Football Oval/Festival Grounds, Van Dongen Park and High School. This effluent reuse is managed under the Recycling Water Supply Agreement (RWSA) (signed 10/03/2011), which is managed by the Department of health and expires in March 2016.

The Carnarvon WWTP and Shire storage ponds are less than 500 metres from residences in the nearby built-up area. Long term plans involve decommissioning the current plant and utilising a new site.

The Carnarvon WWTP is designed to service a nominal population of approximately 9000. At 30 June 2013, there were 1156 services connected.

The Gascoyne River is located approximately 200 metres north of the Carnarvon Wastewater Treatment Plant.

This partial decision document is as a result of an amendment sought by the Licensee to update the premises operation details with the inclusion of the copper ioniser, change to reporting date submission to 63 days after the reporting period, and includes administrative changes to a new format (v2.9).

Amendment date: Thursday, 10 September 2015

Environmental Protection Act 1986 Decision Document: L5976/1991/10 File Number: 2010/003112-1 Page 4 of 9

IRLB_TI0669 v2.7



4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987* and DER's Operational Procedure on Assessing Emissions and Discharges from Prescribed Premises. Where other references have been used in making the decision they are detailed in the decision document.

DECISION TABL	-E		
Licence section	Condition number L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
General L1.2.1-L1.2.4 conditions		Condition 1.2.1 has been replaced by condition 1.1.5 within the amended Licence. Condition 1.2.3 has been removed from the amended Licence.	General provisions of the Environmental Protection Act 1986. Environmental
			Protection (Unauthorised Discharges) Regulations 2004.
Premises oepration	L1.3.5	Condition 1.3.5(b) freeboard has been changed from 'targeted' to 'maintained'. DER policy recommends the removal of all targets from the Licence. A freeboard limit is considered appropriate due to the ponds proximity to the Gascoyne river.	
Emissions general	L2.1.1	Administrative changes have been completed to update the documentation to new format version 2.9.	General provisions of the Environmental Protection Act 1986.
Emissions to land including monitoring	L2.1L2.4 L3.3.1	Emission description Emission: Discharge of treated wastewater from pond 3 to emergency overflow infiltration area. Impact: Contamination of surrounding land and potential impacts to the Gascoyne River which is approximately 200m north of the premises. Controls: Primary and secondary treatment before discharging to pond 3 for storage. 100% of wastewater reused by the Shire of Carnarvon. Discharge to infiltration area via emergency overflow only in an emergency event. The Licensee	General provisions of the Environmental Protection Act 1986.



DECISION TABLE						
Licence section	Condition number L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents			
		monitors for copper as part of their annual sampling however this has not been included within the Licence monitoring parameters previously.				
		Risk Assessment Consequence: Minor Likelihood: Unlikely Risk rating: Moderate				
		Regulatory controls Condition 1.3.4 and 2.2.1 stipulates that a discharge to the emergency overflow infiltration area can only occur during an emergency event when the storage capacity of the WWTP is exhausted and when the wastewater cannot be reused by the Shire of Carnarvon.				
		Condition 3.2.1 The now includes the monitoring of copper as a result of the operation of the copper ioniser at the premises to assist with the potential influence of copper to the freshwater system nearby (Gascoyne River).				
		Residual Risk Consequence: Minor Likelihood: Rare Risk rating: Low				
Odour	L2.7.1	Previous condition 2.7.1 for the control of odour has been removed from the Licence. The potential for odour from all WWTP does exist, however the WWTP is considered a low risk premises, with the ponds being approximately 500m from the domestic built up area. Odour is able to be adequately regulated under section 49 of the <i>Environmental Protection Act 1986</i> .	General provisions of the <i>Environmental</i> <i>Protection Act</i> 1986.			
Monitoring general	L3.1.1 L3.1.2-L3.1.4	Administrative changes have been incorporated within the conditions of this section through the amendment process.	General provisions of the <i>Environmental</i> <i>Protection Act 1986.</i>			



DECISION TAB	LE		
Licence section	Condition number L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
Monitoring of inputs and outputs	L3.3.1	Administrative changes have been incorporated within the conditions of this section through the amendment process.	General provisions of the <i>Environmental</i> <i>Protection Act 1986</i>
Ambient quality monitoring	L3.4.1	Administrative changes have been incorporated within the conditions of this section through the amendment process.	General provisions of the Environmental Protection Act 1986
Information	L4.1 L4.2 L4.3	Administrative changes have been incorporated within the conditions of this section through the amendment process. Condition 4.2.1: The Annual Environmental Report submission has been changed and is now required 63 days after the end of the reporting period (1 September) annually. This is as per the P4 form request submitted by Water Corporation.	General provisions of the Environmental Protection Act 1986
Licence Duration	N/A	The licence expires on 31 October 2019. No changes have been made to the expiry period for the Licence.	



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
13/08/2015	Proponent sent a copy of draft instrument	One comment was received from Water Corporation, via email on 02 September 2015 relating to <i>E. coli</i> concentrations (A963097).	The amended Licence does not stipulate concentration limits for <i>E. coli</i> parameter as this is managed through the 'Recycling Water Supply Agreement (RWSA)' signed 10/03/2011 which expires in March 2016. This agreement is managed through Department of Health. No changes have therefore been made within the Licence.



6. Risk Assessment

Note: This matrix is taken from the DER Corporate Policy Statement No. 07 - Operational Risk Management

Table 1: Emissions Risk Matrix

Likelihood	Consequence					
	Insignificant	Minor	Moderate	Major	Severe	
Almost Certain	Moderate	High	High	Extreme	Extreme	
Likely	Moderate	Moderate	High	High	Extreme	
Possible	Low	Moderate	Moderate	High	Extreme	
Unlikely	Low	Moderate	Moderate	Moderate	High	
Rare	Low	Low	Moderate	Moderate	High	