



# Licence

## *Environmental Protection Act 1986, Part V*

**Licensee:** Water Corporation

**Licence:** L8240/2008/2

**Registered office:** 629 Newcastle Street  
LEEDERVILLE WA 6007

**Premises address:** Narembeen Wastewater Treatment Plant  
Lot 28597 on Plan 182591  
Reserve 35856  
Soldiers Road  
NAREMBEEN WA 6302

**Issue date:** Monday, 18 May 2015

**Commencement date:** Wednesday, 20 May 2015

**Expiry date:** Thursday, 19 May 2033

**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	130 cubic metres per day

**Conditions**

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

Date signed: 21 June 2016

.....  
 Alan Kietzmann  
 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 works with the business owners, community, consultants, industry and other representatives 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.



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 Narembeen Wastewater Treatment Plant is located 2.5km north-east of the Narembeen town-site and is surrounded by agricultural land. Narembeen is located approximately 286km from Perth and has a population of 900 residents who are serviced by the treatment plant. The plant has been operating since 1998 and is designed to treat 130m<sup>3</sup>/day.

The closest residential receptor is located 800m south-west of the site, and a cooperative bulk handling facility is located 750m to the south. The nearest major water source is Walker Lake which lies approximately 2km south-west. The site is not located within an environmentally sensitive area and is not within a drinking water supply area. Depth to groundwater in the area is approximately 4 to 6 metres.

The operations at the Narembeen Wastewater Treatment Plant include the treatment of sewage to a secondary standard before it is taken off-site for re-use by the Shire of Narembeen. The sewage is accepted through sewage pipes, however in the event of a breakdown sewage may also be accepted via tanker. The wastewater receives primary treatment in an Imhoff tank. When the effluent level is high enough, effluent leaves the Imhoff tank through the outlet weir. The effluent then undergoes secondary treatment in a clay lined pond before leaving the premises through an effluent pipeline to a storage dam owned by the Shire of Narembeen on the adjacent Lot.

Digested solids from the Imhoff tank are removed regularly and transferred to a clay lined drying bed. The sludge is removed as required, being disposed of to Nutrarich for composting or to landfill.

The main emission from the site is fugitive emissions in the form of odour. Given the remoteness of the site from sensitive receptors the odour is considered to pose a low risk however odour emissions are managed by the ongoing operation, maintenance and desludging of the ponds.

There is also a potential environmental risk from accidental discharges of wastewater or sludge to land (and potentially groundwater) and from the treated wastewater as it is reused by the council for irrigation. The risk is managed through defined water quality levels, compliance monitoring prior to discharge, infrastructure specifications and notification requirements.

**2016 amendment:**

Amendments to the licence were initiated by DER to rectify a typographical error, update the premises address details and implement administrative changes to the instrument. The expiry date for the licence has also been amended in-line the notice of *Amendment of Licence Expiry Dates* dated 29 April 2016 (for background refer to <https://www.der.wa.gov.au/images/documents/our-work/licences-and-works-approvals/notice-of-amendmentof-licence-expiry-dates.pdf>).

The licences and works approvals issued for the Premises since 20/05/2010 are:

Instrument log		
Instrument	Issued	Description
L8240/2008//1	20/05/2010	New Licence



L8240/2008/2	30/05/2015	Licence re-issue and amendment to REFIRE format
L8240/2008/2	29/04/2016	The expiry date for the licence was amended in-line with the notice of <i>Amendment of Licence Expiry Dates</i> dated 29 April 2016.
L8240/2008/2	21/6/2016	Administrative amendment to licence

### **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**



## 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*;

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

**'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*;

**'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](mailto:info@der.wa.gov.au)

**'cfu/100mL'** means coliform forming units per 100 millilitres;

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

**'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;

**'Geobag'** means a geotextile dewatering bag that allows solids to dewater over time while containing the solid component;

**'in-situ soils'** means soils that are in place and have not been moved from their original place of deposition;

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

**'Licence'** means this Licence numbered L8240/2008/2 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;

**‘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;

**‘spot sample’** means a discrete sample representative at the time and place at which the sample is taken;

**‘Waste Code’** means the Waste Code assigned to a type of controlled waste for purposes of waste tracking and reporting as specified in the Department of Environment Regulation “Controlled Waste Category List” (July 2014), as amended from time to time; and

**‘wastewater treatment vessels’** means any vessel or tank containment infrastructure associated with the treatment of wastewater.

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.

## 1.2 Premises operation

1.2.1 The Licensee shall record and investigate the exceedance of any descriptive or numerical limit, and/or target in this section.

1.2.2 The Licensee shall only allow waste to be accepted on to the Premises if:

- (a) it is of a type listed in Table 1.2.1; and
- (b) the quantity accepted is below any limit listed in Table 1.2.1; and
- (c) it meets any specification listed in Table 1.2.1

**Table 1.2.1: Waste acceptance**

Waste	Waste Code	Quantity Limit	Specification <sup>1</sup>
<b>Putrescible and Organic wastes</b>			
Sewage	N/A		Accepted through sewer inflow(s) only
Septage wastes (Sewage) – domestic wastes from apparatus for the treatment of sewage	K210	130 cubic metres per day	Tankered into the premises and discharged via the Pump Station receivable point or into secondary treatment pond.

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

1.2.3 The Licensee shall ensure that the wastes accepted onto the Premises are only subjected to the process(es) set out in Table 1.2.2 and in accordance with any process requirements described in that table.



**Table 1.2.2: Waste processing**

Waste type	Process	Process requirements
Sewage	Separation of solids by passing through Imhoff tank	None specified
	Physical, biological and chemical treatment	Treatment of sewage waste shall be at or below the treatment capacity of 130 m <sup>3</sup> /day
Sewage sludge	Storage	Directed to the drying bed

1.2.4 The Licensee shall ensure that waste material is only stored and/or treated within vessels or compounds provided with the infrastructure detailed in Table 1.2.3.

**Table 1.2.3: Containment infrastructure**

Vessel or compound	Material	Requirements
Imhoff Tank	Solids and liquids	Treatment in sludge treatment tank
Secondary Treatment Pond	Wastewater	Lined with compact in-situ soils to a permeability of <math><1 \times 10^{-9}</math> m/s
Drying bed	Solids	Lined with compact in-situ soils to a permeability of <math><1 \times 10^{-9}</math> m/s

1.2.5 The Licensee shall manage all wastewater treatment 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.

1.2.6 The Licensee shall manage the wastewater treatment vessels such that:

- (a) overtopping of the vessels does not occur;
- (b) stormwater runoff is prevented from entering the vessels; and
- (c) there is no seepage loss from the vessels; and
- (d) vegetation and floating debris (emergent or otherwise) is prevented from growing or accumulating in the vessels.

1.2.7 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.

1.2.8 The Licensee shall immediately recover, or remove and dispose of spills of sewage and septage wastes outside an engineered containment system.



## 2 Monitoring

### 2.1 General monitoring

2.1.1 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 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.

2.1.2 The Licensee shall ensure that quarterly monitoring is undertaken at least 45 days apart

2.1.3 The Licensee shall record the treatment (production) capacity of the plant at the time sampling is undertaken pursuant to condition 2.2.1.

2.1.4 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.

2.1.5 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.

### 2.2 Monitoring of inputs and outputs

2.2.1 The Licensee shall undertake the monitoring in Table 2.2.1 according to the specifications in that table.

<b>Table 2.2.1: Monitoring of inputs and outputs</b>					
<b>Input/Output</b>	<b>Monitoring point reference</b>	<b>Parameter</b>	<b>Units</b>	<b>Averaging period</b>	<b>Frequency</b>
Treated wastewater discharged from the secondary treatment pond to Shire of Narembeen storage dam	SP Narembeen Secondary Pond Final Effluent	Volumetric flow rate (cumulative)	m <sup>3</sup> /day	Monthly	Quarterly
		pH	-		
		Total Suspended Solids	mg/L	Spot sample	
		Biochemical Oxygen Demand			
		Total-Nitrogen			
		Ammonium-nitrogen			
		Nitrate+Nitrite-Nitrogen			
		Total-Phosphorus			



Table 2.2.1: Monitoring of inputs and outputs					
Input/Output	Monitoring point reference	Parameter	Units	Averaging period	Frequency
		E. Coli	100cfu/100ml		

### 3 Information

#### 3.1 Records

3.1.1 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 3.1.1(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.

3.1.2 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.

3.1.3 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.

#### 3.2 Reporting

3.2.1 The Licensee shall submit to the CEO an Annual Environmental Report by September 1 each year. The report shall contain the information listed in Table 3.2.1 in the format or form specified in that table.

Table 3.2.1: Annual Environmental Report		
Condition or table (if relevant)	Parameter	Format or form <sup>1</sup>
-	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 2.2.1	Monitoring of inputs and outputs	None specified
	Contaminant loading (kg/day and kg/ha/day – quarterly average and total annual loading kg/yr and kg/ha/yr) of treated wastewater discharged from the premises of parameters monitored in Table 2.2.1 (except pH and E.coli)	None specified
3.1.2	Compliance	Annual Audit Compliance Report (AACR) <sup>2</sup>
3.1.3	Complaints summary	None specified

Note 1: Forms are in Schedule 2

Note 2: Electronic copy of AACR forms can be downloaded from the DER website: <https://www.der.wa.gov.au/our-work/licences-and-works-approvals/publications>



- 3.2.2 The Licensee shall ensure that the Annual Environmental Report also contains:
- (a) any relevant process, production or operational data recorded under condition 2.1.3; and
  - (b) an assessment of the information contained within the report against previous monitoring results and Licence limits.

3.2.3 The Licensee shall submit the information in Table 3.2.2 to the CEO according to the specifications in that table.

<b>Table 3.2.2: Non-annual reporting requirements</b>				
<b>Condition or table (if relevant)</b>	<b>Parameter</b>	<b>Reporting period</b>	<b>Reporting date (after end of the reporting period)</b>	<b>Format or form<sup>1</sup></b>
-	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

### 3.3 Notification

3.3.1 The Licensee shall ensure that the parameters listed in Table 3.3.1 are notified to the CEO in accordance with the notification requirements of the table.

<b>Table 3.3.1: Notification requirements</b>			
<b>Condition or table (if relevant)</b>	<b>Parameter</b>	<b>Notification requirement<sup>1</sup></b>	<b>Format or form<sup>2</sup></b>
-	Taking process equipment offline for maintenance works that may result in increased odour emissions	No less than 72 hours in advance of works	None specified
-	Removal of sewage sludge from a treatment pond, or sewage sludge storage pond or Geobag	No less than 14 days in advance of works <sup>3</sup>	
1.2.1	Breach of any limit specified in the Licence	Part A: As soon as practicable but no later than 5pm of the next working day  Part B: As soon as practicable	N1
3.1.5	Calibration report	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.



## Schedule 1: Maps

### Premises map

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





## 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:
Company Name:	ABN:
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:





## 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:
An individual	<input type="checkbox"/> <input type="checkbox"/>	by the individual licence holder, or 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 unincorporated company	<input type="checkbox"/> <input type="checkbox"/>	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 corporation	<input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	by affixing the common seal of the licensee in accordance with the <i>Corporations Act 2001</i> ; or by two directors of the licensee; or by a director and a company secretary of the licensee, or 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 (other than a local government)	<input type="checkbox"/> <input type="checkbox"/>	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 local government	<input type="checkbox"/> <input type="checkbox"/>	by the chief executive officer of the licensee; or 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)



Licence: L8240/2008/2 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	Water Corporation
Location of Premises	
Time and date of the detection	

<b>Notification requirements for the breach of a limit</b>	
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 on behalf of Water Corporation	
Date	



# Decision Document

## *Environmental Protection Act 1986, Part V*

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**Proponent:** **Water Corporation**

**Licence:** **L8240/2008/2**

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**Registered office:** 629 Newcastle Street  
LEEDERVILLE WA 6007

**Premises address:** Narembeen Wastewater Treatment Plant  
Lot 28597 on Plan 182591  
Reserve 35856  
Soldiers Road  
NAREMBEEN WA 6302

**Issue date:** Thursday, 14 May 2015

**Commencement date:** Wednesday, 20 May 2015

**Expiry date:** Thursday, 19 May 2033

### **Decision**

Based on the assessment detailed in this document the Department of Environment Regulation (DER) CEO, delegated officer has decided to amend this licence. The delegated officer considers that in reaching this decision, he has taken into account all relevant considerations.

Decision Document prepared by:

Jarrod Abrahams  
Licensing Officer

Decision Document authorised by:

Alan Kietzmann  
Manager Licensing



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## 1 Purpose of this Document

This decision document explains how DER delegated officer has assessed and determined the application and provides a record of the 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 <input type="checkbox"/> New Licence <input checked="" type="checkbox"/> Licence amendment <input type="checkbox"/> Works Approval amendment <input type="checkbox"/>	
Activities that cause the premises to become prescribed premises	<b>Category number(s)</b>	<b>Assessed design capacity</b>
	54	130 cubic metres per annual period
Application verified	Date: 10/03/2015	
Application fee paid	Date: 19/03/2015	
Works Approval has been complied with	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
Compliance Certificate received	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
Commercial-in-confidence claim	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Commercial-in-confidence claim outcome		
Is the proposal a Major Resource Project?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the <i>Environmental Protection Act 1986</i> ?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Referral decision No: Managed under Part V <input type="checkbox"/>



		Assessed under Part IV <input type="checkbox"/>
Is the proposal subject to Ministerial Conditions?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Ministerial statement No: EPA 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 <input type="checkbox"/> No <input checked="" type="checkbox"/> Department of Water consulted Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises within an Environmental Protection Policy (EPP) Area Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If Yes include details of which EPP(s) here.		
Is the Premises subject to any EPP requirements? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> If Yes, include details here, eg Site is subject to SO <sub>2</sub> requirements of Kwinana EPP.		

### 3 Executive summary of proposal and assessment

The Narembeen Wastewater Treatment Plant is located 2.5km north-east of the Narembeen town-site and is surrounded by agricultural land. Narembeen is located approximately 286km from Perth and has a population of 900 residents who are serviced by the treatment plant. The plant has been operating since 1998 and is designed to treat 130m<sup>3</sup>/day.

The closest residential receptor is located 800m south-west of the site, and a cooperative bulk handling facility is located 750m to the south. The nearest major water source is Walker Lake which lies approximately 2km south-west. The site is not located within an environmentally sensitive area and is not within a drinking water supply area. Depth to groundwater in the area is approximately 4 to 6 metres.

The operations at the Narembeen Wastewater Treatment Plant include the treatment of sewage to a secondary standard before it is taken off-site for re-use by the Shire of Narembeen. The sewage is accepted through sewage pipes, however in the event of a breakdown sewage may also be accepted via tanker. The wastewater receives primary treatment in an Imhoff tank. When the effluent level is high enough, effluent leaves the Imhoff tank through the outlet weir. The effluent then undergoes secondary treatment in a clay lined pond before leaving the premises through an effluent pipeline to a storage dam owned by the Shire of Narembeen on the adjacent Lot.

Digested solids from the Imhoff tank are removed regularly and transferred to a clay lined drying bed. The sludge is removed as required, being disposed of to Nutrarich Pty Ltd (L8001/2005/5) for composting or to landfill.

The main emission from the site is fugitive emissions in the form of odour. Given the remoteness of the site from sensitive receptors the odour is considered to pose a low risk, however odour emissions are managed by the ongoing operation, maintenance and desludging of the ponds.

There is also a potential environmental risk from accidental discharges of wastewater or sludge to land (and potentially groundwater) and from the treated wastewater as it is reused by the council for irrigation. The risk is managed through defined water quality levels, compliance monitoring prior to discharge, infrastructure specifications and notification requirements.



This Licence is the successor to licence L6921/1997/8.

**2016 amendment:**

DER initiated amendments to the licence to rectify a typographical error, update the premises address details and implement administrative changes to the instrument in accordance with:

- The notice of *Amendment of Licence Expiry Dates* dated 29 April 2016 (for background refer to <https://www.der.wa.gov.au/images/documents/our-work/licences-and-works-approvals/notice-of-amendmentof-licence-expiry-dates.pdf>); and
- DER *Operational Procedure IR-OP-02 Redundant Conditions*.

The typographical error relates to the waste acceptance quantity limit as specified in licence condition 1.3.2 and Table 1.3.2. This error was identified as part of the compliance review of the 2014/15 Annual Environmental Report (Compliance review checklist report dated 5 November 2015). The quantity limit was specified as '130 cubic metres per annual period', however it should state 130 cubic metres per day as this is the assessed premises production or design capacity.

Condition headings or numbers retained for numbering purposes have also been removed. As a result the numbering of previous conditions has altered.

The proposed amendments do not alter existing emissions or discharges associated with the operation of the premises under the licence therefore associated environmental risks that were previously documented have not been revisited or re-assessed with the exception of stormwater management and odour emissions (due to removal of generic licence conditions). DER's assessment is detailed in the Decision table in section 4.



## 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 TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
General conditions	N/A	<p>In accordance with DER's internal <i>Operational Procedure IR-OP-02 Redundant Conditions</i>, former general conditions 1.2.1, 1.2.2, 1.2.3 and 1.2.5 have been removed from the licence. These conditions are considered 'redundant' as they do not meet the requirements for conditions in DER's <i>Guidance Statement: Setting Conditions</i> as they are either not valid, not enforceable or not risk-based.</p> <p>Former condition L1.2.4, relating to spills, recovery and removal/disposal, has been relocated to the 'Premises operation' section of the licence.</p> <p>As there are no longer any conditions within the 'General conditions' section of the licence the reference to this section has been removed.</p>	
Premises operation	L1.2.2 L1.2.3 L1.2.6 L1.2.8	<p>L1.2.2 and Table 1.2.1 (previously L1.3.2 Table 1.3.2) specifies waste acceptance criteria for waste that is authorised to be accepted onto the premises. Quantity limits for respective waste types form part of this criteria. As part of the compliance review of the 2014/15 Annual Environmental Report (Compliance review checklist report dated 5 November 2015), DER identified a typographical error relating to the waste acceptance quantity limit as specified in Table 1.3.2. The quantity limit was specified as '130 cubic metres per annual period', however it should state 130 cubic metres per day as this is the assessed premises production or design capacity. Wording in the Table 1.2.1 has been amended to correct the error.</p> <p>L1.2.3 and Table 1.2.2 outline the process requirements of each waste type. Wording in Table 1.2.2 has been amended to remove reference to 'targeted' treatment</p>	<i>Environmental Protection (Unauthorised Discharge) Regulations 2004</i>



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>capacity. In line with DER's current licensing process conditions that contain targets or trigger levels will not be applied or continued in licences or works approvals.</p> <p>L1.2.6 relates to operation of wastewater treatment vessels (such as the Imhoff tank); this condition has been amended to remove reference to 'discernible'. The term discernible is not an objectively measurable amount thus it had ambiguity to the condition.</p> <p>L1.2.8, relating to spills, replaces former condition L1.2.4; wording of the former condition has been amended to remove reference to spills of 'environmentally hazardous materials' and replaced with reference to spills of 'sewage and septage wastes'.</p> <p><b>Stormwater</b> <u>Emission Description</u> <i>Emission:</i> Stormwater contaminated after coming into contact with waste on site. <i>Impact:</i> Contamination of surrounding land and surface water drainage systems. Potential impacts on ecology of surface water from the addition of nutrients and heavy metals. <i>Controls:</i> Equipment on site is designed to direct stormwater way from waste areas. A freeboard is maintained on ponds to prevent overtopping.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Low</p> <p><u>Regulatory Controls</u> L1.2.5 of the previous licence, which related to prevention of stormwater becoming</p>	



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		<p>contaminated, has been removed from the licence as the condition is unclear and does not specify what stormwater infrastructure is required.</p> <p>The licensee must take practicable measures to prevent the contamination of stormwater on-site. Stormwater that has come into contact with waste should be considered and managed as potentially contaminated stormwater.</p> <p>Any related discharges of potentially contaminated stormwater to the environment may be subject to the <i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i>. General provisions of the EP Act relating to causing pollution and unreasonable emissions (e.g. Section 49) may also apply to these discharges.</p> <p><u>Residual Risk</u>  <i>Consequence</i>: Minor  <i>Likelihood</i>: Unlikely  <i>Risk Rating</i>: Low</p>	
<b>Emissions</b>	N/A	This section has been removed as there are no emissions authorised from the premises. All treated wastewater is reused by the Shire of Narembeen for irrigation of public spaces. Subsequent sections have been renumbered.	
<b>Odour</b>	N/A	<p><u>Emission Description</u>  <i>Emission</i>: Odour may be generated from the wastewater pond, treatment process, sludge storage compound and as a result of maintenance or abnormal operating conditions.  <i>Impact</i>: Odour can cause a nuisance to nearby sensitive receptors and can impact the amenity of the surrounding area. The nearest sensitive receptor is 750m to the south.  <i>Controls</i>: The licensee has not proposed any specific odour controls.</p> <p><u>Risk Assessment</u></p>	General provisions of the <i>Environmental Protection Act 1986</i>



<b>DECISION TABLE</b>			
<b>Works Approval / Licence section</b>	<b>Condition number W = Works Approval L = Licence</b>	<b>Justification (including risk description &amp; decision methodology where relevant)</b>	<b>Reference documents</b>
		<p><i>Consequence:</i> Minor  <i>Likelihood:</i> Possible  <i>Risk Rating:</i> Moderate</p> <p><u>Regulatory Controls</u>            The generic fugitive condition L2.7.1 of the previous licence, relating to odour emissions, has been removed as part of this amendment. In line with DER's current licensing process, odour emissions can be sufficiently regulated under the general provisions of the EP Act (substantive offences of the EP Act provide enforceable prohibitions for odour emissions that result in pollution or environmental harm).</p> <p>L1.2.2 through L1.2.6 ensures that the wastewater treatment system is operated within designed and approved parameters which assist in mitigating the occurrence of odour emissions at the site. DER will monitor site operations and complaints associated with odour emissions and where warranted the licence may be amended to include additional site-specific prescriptive conditions relating to process controls and management of odour.</p> <p><u>Residual Risk</u>  <i>Consequence:</i> Minor  <i>Likelihood:</i> Possible  <i>Risk Rating:</i> Moderate</p>	
<b>Monitoring general</b>	L2.1.3 L2.1.4 L2.1.5	L2.1.3, requiring the production or throughput data and any other process parameters relevant to the monitoring to be recorded, has been amended to clarify the intent of the condition and to ensure that the licensee is able to determine specifically what parameters they are required to record. L2.13 now requires the licensee to record production (treatment) capacity of the plant at the time of sampling to demonstrate that monitoring was undertaken to reflect normal operating conditions of the plant and equipment.	



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
Information	L3.2.1 L3.3.1	<p>L3.2.1 requires the submission of the Annual Environmental Report. Previous reporting requirements that required the licence to provide a summary of target exceedances has been removed from L3.2.1 as conditions that stipulate targets have been removed from the licence.</p> <p>L3.3.1 outlines notification requirements should any of the specified parameters occur. Notification requirements relating to a 'breach on any limit' (numerical or descriptive) has been included to account for limits set in Section 1 of the licence.</p> <p>The former parameter listed in Table 3.3.1, relating to 'Any failure or malfunction of any pollution control equipment or any incident, which has caused, is causing or may cause pollution', has been removed to avoid regulatory duplication. Conditions that require the occupier to report matters which they would otherwise be required to report to the CEO under section 72 of the EP Act will no longer be imposed on licences. These changes are also reflected in the amended N1 form in Schedule 2.</p> <p>Former licence condition 5.2.1 that relates to the 'knowledge of licence conditions' has been removed. It is not a defence to offences under the EP Act for the Licensee or its agents to claim they were unaware of licence conditions. Moreover, knowledge does not ensure compliance and the obligation to comply with conditions of the Licence must remain with the licensee and its agents.</p>	
Licence Duration	N/A	The expiry date for the licence has been amended in-line the notice of <i>Amendment of Licence Expiry Dates</i> dated 29 April 2016. The new expiry date for the licence is Thursday, 19 May 2033.	



## 5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
31 May 2016	Proponent sent a copy of draft instrument for 21 day comment period.	No comments were received. Water Corporation requested granting the amended licence on 21 June 2016.	N/A. Amendment finalised.



## 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