



Licence

Environmental Protection Act 1986, Part V

Licensee: Water Corporation

Licence: L6249/1991/8

Registered office: 629 Newcastle Street
LEEDERVILLE WA 6007

Premises address: Karratha Number 2 Wastewater Treatment Plant Reserve 36633, Lot 122 on Plan 183491, Part of Lot 551 (Plan 67856) and part of Lot 261 (Plan 189081) within coordinates E476944.58, N7704551.54; E476974.33, N7704551.55; E477183.53, N 7704366.49; E477129.08, N7704337.77; E477222.35, N7704160.94; E477038.02, N7704063.71; E477159.27, N7703833.83; E476995.71, N7703747.55; E476874.45, N7703977.43; E476944.86, N7704240.01
Gap Ridge, Millstream-Dampier Road, Karratha as depicted in Schedule 1.

Issue date: Thursday, 24 October 2013

Commencement date: Friday, 1 November 2013

Expiry date: Wednesday, 31 October 2018

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	3 000 cubic metres per day

Conditions

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



Steve Checker
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.

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 Water Corporation (Water Corp) operate the Karratha No. 2 Wastewater Treatment Plant (K2 WWTP). The K2 WWTP consists of two primary treatment ponds, two secondary treatment ponds, six unlined evaporation/infiltration ponds and two HDPE lined evaporation ponds. Disposal is via two Shire reuse ponds located just outside the Premises boundary. Excess Treated Wastewater (TWW) is disposed of via the 6 unlined evaporation/infiltration ponds.

This Licence is the result of an amendment sought by the Licensee to include two HDPE lined evaporation ponds constructed under Works Approval W5204/2012/1, which was issued to the Land Corporation (Land Corp). Land Corp was issued with Works Approval W5204/2012/1 to construct the Gap Ridge WWTP adjacent to the K2 WWTP and to hand over ownership to the Water Corp upon completion of construction for the commissioning and operation of the WWTP. However due to unforeseen low inflows into the Gap Ridge WWTP the Water Corp decided to mothball the WWTP. Water Corp intend to include the two HPDE lined evaporation ponds of Gap Ridge WWTP on the K2 WWTP Licence as a contingency measure for cyclonic/heavy rainfall events.

As part of this Licence amendment, Water Corp also wishes to decommission the onsite irrigation field. The use of the two extra evaporation ponds will provide enough contingency and negate the need to irrigate TWW in times of high flows into the WWTP. Upon receiving this Licence amendment, Water Corp will also decommission the reuse standpipe. The reuse standpipe was to provide TWW for dust suppression activities within Karratha. However the reuse stand pipe to date (based on information provided in the Annual Environmental Report's) the re use stand pipe has not been operational.

The main emissions from the Premises are emissions to land from the discharge of secondary treated wastewater into the six unlined evaporation ponds. Odour from raw wastewater is also a potential emission from the premises.

The Licences and Works Approvals for the Premises prior to the amendment of this Licence are:

Instrument log		
Instrument	Issued	Description
L6249/1991/1	07/10/2000	Licence re-issue – First licence noted in Industry Licensing System
L6249/1991/2	07/10/2001	Licence re-issue
L6249/1991/3	07/10/2002	Licence re-issue
L6249/1991/4	07/10/2003	Licence re-issue
L6249/1991/5	07/10/2004	Licence re-issue
L6249/1991/6	01/11/2006	Licence re-issue
L6249/1991/7	01/11/2008	Licence re-issue



L6249/1991/7	04/08 2011	Licence amendment for installation of aerators to increase treatment capacity and installation of an irrigation system for disposal of treated wastewater.
L6249/1991/7	07/03/2013	Licence amendment for provisions to enable third party reuse of treated wastewater via a standpipe
L6249/1991/8	01/11/2013	Licence reissue
L6249/1991/8	12/06/2014	Licence amendment to increase the onsite irrigation area
L6249/1991/8	13/08/2015	Licence amendment to include the operation of two evaporation ponds and decommissioning onsite irrigation area.

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*;

‘**AHD**’ means the Australian height datum;

‘**annual period**’ means the inclusive period from 1 July until 30 June in the following letter;

‘**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:

Manager Licensing (Waste Industries)
Department of Environment Regulation
Locked Bag 33 Cloisters Square
PERTH WA 6850
Telephone: (08) 9333 7510
Facsimile: (08) 9333 7550
Email: industry.regulation@der.wa.gov.au;

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

‘**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;

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

‘**Licence**’ means this Licence numbered L6249/1991/8 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;

'normal operating conditions' means any operation of a particular process (including abatement equipment) excluding start-up, shut-down and upset conditions, in relation to stack sampling or monitoring;

'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 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;

'shut-down' means the period when plant or equipment is brought from normal operating conditions to inactivity;

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

'spot sample' means a discrete sample representative at the time and place at which the sample is taken;

'start-up' means the period when plant or equipment is brought from inactivity to normal operating conditions;

'usual working day' means 0800 – 1700 hours, Monday to Friday excluding public holidays in Western Australia;

'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;

'wastewater treatment vessels' means any vessel or tank containment infrastructure associated with the treatment of wastewater; and

'µS/cm' means microsiemens per centimetre.

- 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.

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:

- (a) 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 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 acceptance

Waste	Waste Code	Quantity Limit	Specification ¹
Putrescible and Organic wastes			
Sewage	N/A	3 000 m ³ /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 processes 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, biological and chemical treatment	Treatment of sewage waste shall be limited at or below the treatment capacity of 3 000 m ³ /day. TWW from the maturation is either directed to the two Shire reuse ponds located outside the premises boundary. Excess TWW is then directed to 1 of 6 unlined evaporation/infiltration ponds.
Sewage sludge	Storage and disposal	<ul style="list-style-type: none"> • Collected leachate to be returned to treatment ponds; and • Removal of sludge and biosolids in accordance with the document <i>Western Australian guidelines for biosolids management</i>, Department of Environment and Conservation, (December 2012 or updated version), or to a to a licensed landfill facility.



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
Primary Ponds 1 & 2 (Aerated Ponds)	Wastewater	Compact lined with pindan soil
Secondary Ponds 1 & 2	Wastewater	Compact lined with pindan soil
Maturation Pond 1	Wastewater	Compact lined with pindan soil
Evaporation/Infiltration Ponds 1 – 6	Treated wastewater	Unlined
Evaporation Ponds 7 & 8	Treated wastewater	HDPE lined to achieve a permeability of $<10^{-9}$ m/s or equivalent

1.3.5 The Licensee shall manage all wastewater treatment and evaporation/infiltration ponds such that:

- (a) overtopping of the ponds does not occur;
- (b) the integrity of the containment infrastructure is maintained;
- (c) trapped overflows are maintained on the outlet of ponds to prevent carry-over of surface floating matter; and
- (d) vegetation and floating debris (emergent or otherwise) is prevented from encroaching onto pond surfaces or inner pond embankments.

1.3.6 The Licensee shall:

- (a) implement security measures at the site to prevent as far as is practical unauthorised access to the site; and
- (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.



2 Emissions

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: Emissions to land

Emission point reference	Description	Source including abatement
L1	Discharge from Maturation Pond to Evaporation/Infiltration Ponds 1 – 2	TWW pumped from Maturation Pond 2 to Evaporation/infiltration Ponds 1 & 2



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 unless indicated otherwise in the relevant table;
- (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; and
- (d) 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 record production or throughput data and any other process parameters relevant to any non-continuous or CEMS monitoring undertaken.

3.1.4 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.

3.1.5 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.

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.

Table 3.2.1: Monitoring of emissions to land			
Monitoring point reference	Parameter	Units	Frequency
M1	Volumetric flow rate (cumulative) ¹	m ³ /day	Continuous
	pH ¹	pH units	Quarterly
	Biochemical Oxygen Demand	mg/L	
	Total Suspended Solids		
	Total Dissolved Solids		
	Total Nitrogen		
	Ammonium Nitrogen		
	Nitrate + Nitrite Nitrogen		
	Total Phosphorus		
<i>E.coli</i> ²	cfu/100 mL		

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

Note 2: Actual units are 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



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	Units	Averaging period	Frequency
Sewage - Inlet Flow	Inflow meter	Volumetric flow rate (cumulative)	m ³ /day	Monthly	Continuous
Treated wastewater discharged to Shire re-use evaporation/infiltration ponds	M1	Volumetric flow rate (cumulative)	m ³ /day	Monthly	Continuous
Treated wastewater discharged to onsite evaporation/infiltration ponds	M1	Volumetric flow rate (cumulative)	m ³ /day	Monthly	Continuous

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.

Table 3.4.1: Monitoring of ambient groundwater quality				
Monitoring point reference and location	Parameter	Units	Averaging period	Frequency
BH01 – BH04	Standing water level ¹	m(AHD) mBGL	Spot sample	Quarterly
	pH ¹	pH units		
	Electrical conductivity ¹	µS/cm		
	Total Nitrogen	mg/L		
	Ammonium Nitrogen			
	Nitrate + Nitrite-Nitrogen			
Total Phosphorus				

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



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 by 1 September each year. 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 3.2.1	Monitoring of emissions to land	None specified
	Contaminant loading (kg/day and kg/ha/day – monthly average and total annual loading kg/yr and kg/ha/yr) to infiltration ponds of parameters monitored in Table 3.5.1 (except pH and <i>E. coli</i>)	
Table 3.2.2	Monitoring of inputs and outputs	None specified
	Methodology and calculations used to estimate the daily volumetric flow rate of treated wastewater pumped to evaporation basins and results of those calculations.	None specified
Table 3.4.1	Monitoring of ambient groundwater quality	Tabular form
4.1.3	Compliance	Annual Audit Compliance Report (AACR)
4.1.4	Complaints summary	None specified



Note 1: Forms are in Schedule 2

- 4.2.2 The Licensee shall ensure that the Annual Environmental Report also contains:
- (a) any relevant process, production or operational data recorded under condition 3.1.3; and
 - (b) an assessment of the information contained within the report against previous monitoring results and Licence limits.

4.2.3 The Licensee shall submit the information in Table 4.2.2 to the CEO at the Contact Address 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: Notification requirements

Condition or table (if relevant)	Parameter	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	None specified
-	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	
-	Direct discharge to the environment, excluding infiltration, within 48 hours of becoming aware that such a discharge will occur, or has occurred	No less than 48 hours	
1.3.1	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: Notification requirement in the Licence shall not 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,



Schedule 1: Maps

Premises map

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





Map of monitoring points

The locations of the emission point defined in Table 2.2.1 and monitoring point defined in Table 3.2.1 are shown below.





Map of monitoring locations

The locations of the monitoring points defined in Table 3.4.1 is shown below.





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 B

DETAILS OF NON-COMPLIANCE WITH LICENCE CONDITION.

Please use a separate page for each licence condition that was not complied with.

a) Licence condition not complied with:	
b) Date(s) when the non compliance occurred, if applicable:	
c) Was this non compliance reported to DER?:	
<input type="checkbox"/> Yes	<input type="checkbox"/> Reported to DER verbally Date _____ <input type="checkbox"/> Reported to DER in writing Date _____
<input type="checkbox"/> No	
d) Has DER taken, or finalised any action in relation to the non compliance?:	
e) Summary of particulars of the non compliance, and what was the 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) must 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: L6249/1991/8
 Form: N1

Licensee: Water Corporation
 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	

Notification requirements for the breach of a limit

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

Part B

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

Name	
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Post	
Signature on behalf of Water Corporation	
Date	



Decision Document

Environmental Protection Act 1986, Part V

Proponent: Water Corporation

Licence: L6249/1991/8

Registered office: 629 Newcastle Street
LEEDERVILLE WA 6007

Premises address: Karratha Number 2 Wastewater Treatment Plant
Reserve 36633, Lot 122 on Plan 183491, Part of Lot 551 (Plan 67856) and
part of Lot 261 (Plan 189081) within coordinates E476944.58,
N7704551.54; E476974.33, N7704551.55; E477183.53, N 7704366.49;
E477129.08, N7704337.77; E477222.35, N7704160.94; E477038.02,
N7704063.71; E477159.27, N7703833.83; E476995.71, N7703747.55;
E476874.45, N7703977.43; E476944.86, N7704240.01
Gap Ridge, Millstream-Dampier Road,

Issue date: Thursday, 24 October 2013

Commencement date: Friday, 1 November 2013

Expiry date: Wednesday, 31 October 2018

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 and legal requirements and that the Licence and its conditions will ensure that an appropriate level of environmental protection is provided.

Decision Document prepared by: Chris Slavin
Licensing Officer

Decision Document authorised by: Steve Checker
Delegated Officer



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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 <input type="checkbox"/>	
	New Licence <input type="checkbox"/>	
	Licence amendment <input checked="" type="checkbox"/>	
	Works Approval amendment <input type="checkbox"/>	
Activities that cause the premises to become prescribed premises	Category number(s)	Assessed design capacity
	54	3 000 cubic metres per day
Application verified	Date: N/A	
Application fee paid	Date: N/A	
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	N/A	
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 ₂ requirements of Kwinana EPP.		



3 Executive summary of proposal and assessment

The Water Corporation (Water Corp) operates the Karratha No.2 Wastewater Treatment Plant (K2 WWTP). The WWTP plant treats wastewater to a secondary standard and consists of two series of primary and secondary treatment ponds. Treated wastewater (TWW) is either reused by the City of Karratha to reticulate ovals in Karratha, or is contained within 6 unlined evaporation ponds.

The Land Corporation (Land Corp) was issued with Works Approval W5204/2012/1 to construct the Gap Ridge WWTP on land adjacent to the Karratha No.2 WWTP. The Gap Ridge WWTP was to treat and dispose of wastewater generated by the Gap Ridge Industrial Estate. The Gap Ridge WWTP was to consist of two primary and two secondary ponds, both of which are lined with Bentofix X2000 geo-synthetic clay liner (GCL) and three HDPE lined evaporation ponds. The compliance document for W5204/2012/1 was received DER on 10 January 2014. It was noted in the compliance document that only two evaporation ponds were constructed and a transfer pipe was constructed for raw effluent from K2 WWTP to be transferred to the Gap Ridge WWTP as there were lower flows coming to the WWTP than anticipated.

Land Corp transferred ownership of the Premises to Water Corp for the commissioning and operation (Licensing). It was the initial intention to amend the K2 WWTP Licence to include the Gap Ridge WWTP within the premises boundary. Commissioning of the Gap Ridge WWTP was delayed due to Cyclone Christine (commenced in early April 2014). Land Corp, on behalf of Water Corp, submitted correspondence to DER wishing to extend the commissioning period to 4 October 2014, due to unforeseen significantly low flows into the WWTP (7kL/day).

It was then Water Corp's intention to Licence the Gap Ridge WWTP separately. A Licence application for the Gap Ridge WWTP was submitted on 13 June 2014 and was verified on 25 June 2014 (L8828/2014/1). Water Corp sent DER an email notification on 3 September 2014 that it was their intention to 'mothball' the Gap Ridge WWTP.

This Licence amendment is for Water Corp to extend the K2 WWTP premises boundary and to include the two evaporation ponds constructed for the Gap Ridge WWTP as part of its operation. These two evaporation ponds will be used as a contingency disposal method for adverse weather events and when excess TWW needs to be diverted to (i.e. large inflows into the WWTP and when the Shire Reuse Scheme is offline for maintenance or due to failure). The two primary and two secondary ponds will be rehabilitated and taken off line. Water Corp will maintain these ponds, as they have outlined potential use of the ponds in the future.

Water Corp also wishes to decommission the onsite irrigation field. The use of the two extra evaporation ponds will provide enough contingency and negate the need to irrigate TWW in times of high flows into the WWTP. Upon receiving this Licence amendment, Water Corp will also decommission the reuse standpipe. The reuse standpipe was to provide TWW for dust suppression activities within Karratha. However the reuse stand pipe to date (based on information provided in the Annual Environmental Report's) has not been operational.

As part of this Licence amendment conducted 2015, DER has converted to the Licence into the standardised format. A partial Decision Document has also been completed as previous Licenses did not have Environmental Assessment Reports associated with them and do document the changes made in the new standardised format.

Where conditions have been changed or amended they are justified in Table 4. The previous licence contained condition (4) for odour management. Odour emissions can be sufficiently regulated under section 49 of the *Environmental Protection Act 1986*. In accordance with DER's licensing process, no specified conditions for fugitive emissions have been included on this licence.



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	L1.2.3	<p><u>Regulatory Controls</u> Licence condition 1.2.3 has been added to the Licence which, replaces part of condition 5 (i) of the previous licence. This condition ensures the Licensee implements measures to prevent stormwater becoming contaminated on the Premises and to treat all contaminated or potential contaminated stormwater as necessary before leaving the Premises.</p>	<p>General provisions of the <i>Environmental Protection Act 1986</i>.</p> <p><i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i>.</p> <p>Application supporting documentation.</p>
Premises operation	L1.3.1 – L1.3.6	<p>Licence condition 1.3.1 has been added to the Licence to ensure the Licensee records and investigates exceedances such as increased treatment of wastewater at the WWTP and freeboard of the ponds.</p> <p>Licence condition 1.3.2 has been added to the licence to ensure that only sewage waste is accepted and at a rate of 3 000m³/day to ensure the WWTP can operate at its design capacity.</p> <p>Licence condition 1.3.3 has been added to the Licence to ensure the correct processing of sewage waste so that the WWTP can operate efficiently.</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>Licence condition 1.3.4 has been added to the Licence to ensure that wastewater is contained in infrastructure suitable to hold and treat wastewater, so to not cause significant emissions to the environment.</p> <p>Licence condition 1.3.5 has been added to the Licence to ensure the wastewater treatment ponds are maintained to avoid overtopping of the ponds causing pollution and no vegetation is growing on the ponds which may impact the integrity of the ponds.</p> <p>Licence condition 1.3.6 has been added to the Licence to ensure adequate security measures to prevent unauthorised access to the WWTP.</p>	
Emissions to land	L2.2.1	Licence condition 2.2.1 has been added to the licence to ensure that only TWW is discharged to unlined evaporation/infiltration basins.	
Monitoring general	L3.1.1 – L3.1.5	<p>Licence condition 3.1.1 is included as a requirement for wastewater and groundwater sampling in accordance with AS/NZS standards and analysis by a NATA accredited laboratory. L3.1.1 replaces conditions 14 and 15 of the previous licence.</p> <p>Licence condition 3.1.2 is included as a requirement for adequate time between sampling events.</p> <p>Licence condition 3.1.3 is included as a requirement to record process parameters relevant to non-continuous monitoring.</p> <p>Licence condition 3.1.4 and 3.1.5 are included as requirements for monitoring equipment to be correctly calibrated.</p>	Australian Standard AS/NZS 5667.10 – Water Quality – Sampling – Guidance on the sampling of wastewaters



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
Monitoring of emissions to land	L3.2.1	Licence condition 2.2.1 has been added to the Licence, which replaces condition 7 of the previous Licence to ensure Water Corp conduct quarterly monitoring of parameters listed in table 2.2.1. Monitoring samples are to be collected according to the relevant Australian Standards and sampled at a NATA accredited laboratory. As part of this amendment pH will be allowed to be conducted <i>in situ</i> without NATA accredited sampling due to short holding times for analysis and where E. Coli is reported as greater than the highest detectable level of 24,000 cfu/100ml, reporting of the highest detectable level is permitted.	Application supporting documentation.
Monitoring of inputs and outputs	L3.3.1	Licence condition 3.6.1 has been included on the Licence to ensure the monitoring of inflows coming into the WWTP are recorded by an inflow meter and treated effluent discharged from the secondary ponds to the Shire reuse ponds and evaporation ponds 1 and 2 is also recorded. This is necessary for comparison with the daily sewage treatment target volume.	N/A.
Ambient quality monitoring	L3.4.1	Ambient groundwater monitoring requirements have been added to the Licence. Groundwater depth at the shallowest point has been estimated to be approximately 2.9 m from the base of the ponds. There is the potential for leachate to contaminate groundwater below the unlined ponds. Four groundwater bores were constructed by Land Corp under Works Approval W5402/2012/1, and as such Water Corp will be required to sample groundwater on a quarterly basis. The monitoring of groundwater at WWTP's with unlined ponds is considered necessary and is consistent with other WWTP Licences in the region. Groundwater has not been previously monitored at the premises, and as such, targets have not been added to the Licence.	Australian Standard AS/NZS 5667.11 – Water Quality – Sampling – Guidance on the sampling of groundwaters
Information	L4.1.1 – L4.1.4 L4.2.1 – L42.3 L4.3.1	Licence condition 4.1.3 replaces condition 2 of the previous licence. Licence condition 4.2.1 replaces condition 1 of the previous licence. Licence condition 4.2.3 has been added to the Licence to ensure non annual reporting requirements such as target exceedances and monitoring reports from third parties are	General provisions of the <i>Environmental Protection Act 1986</i> .



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
		also submit to DER. Licence condition 4.3.1 has been added to the Licence to ensure the CEO is notified if; <ul style="list-style-type: none">• process equipment is being taken off line for maintenance;• sludge is being removed from a treatment pond;• there is a direct discharge to the environment• there is a breach of any limit specified in the licence;• there is any malfunction or failure of pollution control equipment; and calibration reports.	
Licence Duration	N/A	The current Licence was issued to Water Corp on 1 November 2013 and expires on 31 October 2018. As part of this amendment, DER has not reviewed the licence duration.	N/A



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		



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