



Mr Gordon Groth
Environmental Operations Manager
Water Corporation
PO Box 100
LEEDERVILLE WA 6902

Dear Mr Groth

ENVIRONMENTAL PROTECTION ACT 1986 – AMENDMENT TO LICENCE

Licence: L7685/1993/6

Premises: Dongara Wastewater Treatment Plant

Further to my letter dated 25 March 2015, please find enclosed your amended *Environmental Protection Act 1986* licence.

If you have any questions or objections relating to the licence, please do not hesitate to contact the enquiries officer above on (08) 9964 0901 for clarification or discussion of any grievances you have.

If you are concerned about, or object to any aspect of the amendment, you may lodge an appeal with the Minister for the Environment within 21 days from the date on which this licence is received. The Office of the Appeals Convenor can be contacted on 6467 5190 to find out the procedure and fee.

Members of the public may also appeal the amendments. The Appeals Registrar at the Office of the Appeals Convenor can be contacted after the closing date of appeals to check whether any appeals were received.

Yours sincerely

Rebecca Kelly
Officer delegated under Section 20
of the *Environmental Protection Act 1986*

7 May 2015

enc: Amended Licence L7685/1993/6
copy to: Local Government Authority: Shire of Irwin



Licence

Environmental Protection Act 1986, Part V

Licensee: Water Corporation

Licence: L7685/1993/6

Registered office: 629 Newcastle Street
LEEDERVILLE WA 6007

Premises address: Dongara Wastewater Treatment Plant
Blenheim Road
SPRINGFIELD WA 6215
Being Lot 203 on Plan 45869 as depicted in Schedule 1.

Issue date: Thursday, 03 October 2013

Commencement date: Friday, 11 October 2013

Expiry date: Wednesday, 10 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	1,200 cubic metres per day

Conditions

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

.....
Officer delegated under section 20
of the *Environmental Protection Act 1986*



Contents

Licence	1
Contents	2
Introduction	2
Licence conditions	5
1 General	5
2 Emissions	10
3 Monitoring	11
4 Improvements	13
5 Information	14
Schedule 1: Maps	16
Schedule 2: Reporting & notification forms	19

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

Dongara Wastewater Treatment Plant (WWTP) is located on Lot 203 on Plan 45869, Blenheim Road, Springfield on the outskirts of Dongara. The WWTP has been in operation since 1993.

The upgraded system has a design capacity of 1200kL/day and treats effluent through a lagoon system (claylined) comprising one aeration lagoon (Pond 1) and three sedimentation lagoons (Ponds 2-4) in series. Sewerage is screened prior to entering the aerated lagoon. The high performance aerated lagoon system is mechanically aerated to increase the oxidation rate of pollutants. Wastewater then enters a series of sedimentation lagoons. Both aerobic and anaerobic treatment of the wastewater occurs in these lagoons (Ponds 2-4) along with the settling out of solids and biomass.

A clay-lined pond (previous primary pond) at the Dongara WWTP is used as an emergency storage pond (Pond 6) for treated wastewater during periods of heavy rainfall or where the Dongara Golf Course tanks are full. In addition, the Premises has an area of land within its boundary to irrigate to land, and for infiltration of treated wastewater (Pond 5 – not operational/ not in use) in the event that the storage pond cannot cope with the volume of wastewater at the Premises.

Another clay-lined pond (previous secondary pond) at the Dongara WWTP is used as a biosolids drying bed (Pond 7) for the desludging of the ponds. Treated wastewater is chlorinated and pumped to storage tanks at the Dongara Golf Course for reuse.

The average daily inflow to the plant for 2013/ 2014 was 419.5 cubic metres (m³).

The WWTP is located within a rural residential zone and is approximately 600 metres from the nearest residential property and approximately 1,7 kilometres from the coast. The Irwin River is located approximately 1.4 kilometres north of the WWTP.

A desktop assessment of groundwater bores (WIN Bore site identification 12776486 & 12776479) at the Premises show the depth below ground level to be approximately 35.8m, and total dissolved solids averaging 3,470 mg/L.

The main emissions from the Premises include emissions to land via irrigation or potential integrity failure of the clay-lined ponds.

This Licence is the result of an amendment sought by DER to convert the existing licence to a new format REFIRE licence and to address issues identified from a recent compliance inspection and assessment of Annual Environmental Reports relating to the management of monitoring bores at the Premises.

The licences and works approvals issued for the Premises, since 08/09/1993, are:



Instrument log		
Instrument	Issued	Description
W1000/1993/1	08/09/1993	Works approval
W2732/1993/1	24/07/1999	Works approval
W3022/1993/1	26/04/2000	Works approval
L7685/1993/1	28/08/2002	Licence re-issue
L7685/1993/2	28/08/2003	Licence re-issue
L7685/1993/3	12/06/2004	Licence re-issue
W3931/1993/1	07/04/2006	Works approval
L7685/1993/4	11/10/2007	Licence re-issue
W4412/2007/1	07/04/2008	Works approval
L7685/1993/5	11/10/2010	Licence re-issue
L7685/1993/6	11/10/2013	Licence re-issue
L7685/1993/6	07/05/2015	Licence amendment to REFIRE format

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 year;

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

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

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

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

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

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

'CEO' for the purpose of correspondence means:

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

'code of practice for the storage and handling of dangerous goods' means document titled "Storage and handling of dangerous goods: Code of Practice" published by the Department of Mines and Petroleum, as amended from time to time;

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

'dangerous goods' has the meaning defined in the *Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007*;

'environmentally hazardous material' means material (either solid or liquid raw materials, materials in the process of manufacture, manufactured products, products used in the manufacturing process, by-products and waste) which if discharged into the environment from or within the premises may cause pollution or environmental harm. Note: Environmentally hazardous materials include dangerous goods where they are



stored in quantities below placard quantities. The storage of dangerous goods above placard quantities is regulated by the Department of Mines and Petroleum;

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

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

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

'hardstand' means a surface with a permeability of 10^{-9} metres/second or less;

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

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

'Licence' means this Licence numbered L7685/1993/6 and issued under the Act;

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

'NATA' means the National Association of Testing Authorities, Australia;

'NATA accredited' means in relation to the analysis of a sample that the laboratory is NATA accredited for the specified analysis at the time of the analysis;

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

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

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

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

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

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

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

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

'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.

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 General conditions

1.2.1 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.

1.2.2 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.

1.2.3 The Licensee, except where storage is prescribed in section 1.3, shall ensure that environmentally hazardous substances are stored in accordance with the code of practice for the storage and handling of dangerous goods.

1.2.4 The Licensee shall immediately recover, or remove and dispose of spills of environmentally hazardous materials outside an engineered containment system.

1.2.5 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, and/or target in this section.

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

- (a) it is of a type listed in Table 1.3.1; and
- (b) the quantity accepted is below any limit listed in Table 1.3.1; and
- (c) it meets any specification listed in Table 1.3.1

Table 1.3.1: Waste acceptance			
Waste	Waste Code	Quantity Limit	Specification ¹
Putrescible and Organic wastes			
Sewage	K130	1,200 m ³ /day	Accepted through sewer inflow and tankers only
Septage wastes (Sewage) – domestic wastes from apparatus for the treatment of sewage	K210		Tankered into the premises and discharged into the primary pond receival point.
	K200		
	K110		

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

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



Table 1.3.2: Waste processing		
Waste type	Process	Process requirements
Sewage (Ponds 1-4 & 6)	Physical, biological and chemical treatment	<p>Secondary treatment:</p> <ul style="list-style-type: none"> - pH of wastewater to be maintained at 6.5 to 8.5; <p>Discharged in order of priority:</p> <ul style="list-style-type: none"> - off-site for reuse at the Dongara Golf Course; or - directed to the Dongara WWTP emergency storage lagoon at times when reuse is not available; or - the fenced disposal area irrigated by the sprinkler system. <p>Wastewater to be:</p> <ul style="list-style-type: none"> - spread evenly over each disposal area; <p>Treatment of sewage and septage waste shall be targeted at or below the treatment capacity of 1,200 m³/day.</p>
Septage wastes	Physical, biological and chemical treatment	Septage wastes tankered into premises, and discharged into primary pond via receiveal point.
Sewage sludge (Pond 7)	Storage	<p>Geobags used for the management of sewage sludge;</p> <p>Temporarily stored sewage sludge discharged to a hard-stand area or approved drying bed which:</p> <ol style="list-style-type: none"> is adequately bunded to prevent surface runoff of leachate or sludge from crossing the boundary of the premises; and returns sludge leachate from the storage area back to the treatment ponds.

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

Table 1.3.3: Containment infrastructure		
Vessel or compound	Material	Requirements
Inlet works	Screenings	Stored in a skip bin which is on a hardstand area which returns sludge leachate to the start of the treatment process
Aeration pond - Pond 1	Wastewater	Clay lined to achieve a permeability of less than 10 ⁻⁹ m/s or equivalent.
Maturation pond - Pond 2		
Maturation pond - Pond 3		
Maturation pond - Pond 4		



Infiltration pond - Pond 5	Treated wastewater	Unlined, in-situ soils (not operational/ pond not part of process).
Storage pond - Pond 6	Treated wastewater	Clay lined to achieve a permeability of less than 10^{-9} m/s or equivalent.
Sewage sludge pond - Pond 7	Sewage sludge	Temporary or permanent infrastructure to consist of a bunded hardstand or lined area (lined to achieve a permeability of less than 10^{-9} m/s or equivalent), capable of preventing surface run-off of leachate and sludge and which includes a leachate collection system.

- 1.3.5 The Licensee shall manage all wastewater treatment, evaporation, and storage ponds such that:
- (a) overtopping of the ponds does not occur;
 - (b) a freeboard equal to, or greater than, 300mm is targeted;
 - (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;
 - (e) there is no discernible seepage loss from the treatment ponds;
 - (f) vegetation and floating debris (emergent or otherwise) is prevented from encroaching onto pond surfaces or inner pond embankments; and
 - (g) collected vegetation and floating debris from the treatment ponds is disposed of to a licenced landfill.
- 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;
 - (b) undertake regular inspections of all security measures and repair damage as soon as practicable; and
 - (c) ensure the entrance gates are closed and locked when the site is closed or unmanned.
- 1.3.7 The licensee shall maintain a sampling point for monitoring the wastewater discharge from the final treatment pond, so that representative treated wastewater discharge samples can be taken.
- 1.3.8 The Licensee shall ensure that all monitoring bores are maintained and operational for the purposes of groundwater sampling at all times.
- 1.3.9 The licensee shall maintain a suitable device for accurately measuring monthly cumulative volumes of treated wastewater discharged to:
- (a) the reuse storage tanks at the Dongara Golf Course, and
 - (b) to onsite infiltration or irrigation.



2 Emissions

2.1 General

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

2.2 Point source emissions to air

There are no specified conditions relating to point source emissions to air in this section.

2.3 Point source emissions to surface water

There are no specified conditions relating to point source emissions to surface water in this section.

2.4 Point source emissions to groundwater

There are no specified conditions relating to point source emissions to groundwater in this section.

2.5 Emissions to land

2.5.1 The Licensee shall ensure that where waste is emitted to land from the emission points in Table 2.5.1, and identified on the map of emission points in Schedule 1, it is done so in accordance with the conditions of this Licence.

Table 2.5.1: Emissions to land

Emission point reference and location on Map of emission points	Emission point reference	Description	Source including abatement
L1	Dongara Golf Course	Discharge from WWTP to Shire storage tanks for reuse	Treated wastewater pumped from final maturation pond.
L2	Dongara WWTP Emergency storage lagoon	Storage of treated wastewater	Treated wastewater pumped from final maturation pond.
L3	On-site irrigation area	Irrigation of treated wastewater	Treated wastewater pumped from final maturation pond.

2.6 Fugitive emissions

There are no specified conditions relating to fugitive emissions in this section.

2.7 Odour

There are no specified conditions relating to odour in this section.

2.8 Noise

There are no specified conditions relating to noise in this section.



3 Monitoring

3.1 General monitoring

3.1.1 The licensee shall ensure that:

- (a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;
- (b) all wastewater sampling is conducted in accordance with AS/NZS 5667.10;
- (c) all groundwater sampling is conducted in accordance with AS/NZS 5667.11;
- (d) all microbiological samples are collected and preserved in accordance with AS/NZS 2031;
and
- (e) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in the relevant table.

3.1.2 The Licensee shall ensure that :

- (a) monthly monitoring is undertaken at least 15 days apart;
- (b) quarterly monitoring is undertaken at least 45 days apart;
- (c) six monthly monitoring is undertaken at least 5 months apart; and
- (d) annual monitoring is undertaken at least 9 months apart.

3.1.3 The Licensee shall ensure that all monitoring equipment used on the Premises to comply with the conditions of this Licence is calibrated in accordance with the manufacturer's specifications, and the requirements of the Licence.

3.1.4 The Licensee shall, where the requirements for calibration cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods.

3.2 Monitoring of point source emissions to air

There are no specified conditions relating to monitoring of point source emissions to air in this section.

3.3 Monitoring of point source emissions to surface water

There are no specified conditions relating to monitoring of point source emissions to surface water in this section.

3.4 Monitoring of point source emissions to groundwater

There are no specified conditions relating to monitoring of point source emissions to groundwater in this section.

3.5 Monitoring of emissions to land

3.5.1 The Licensee shall undertake the monitoring in Table 3.5.1 according to the specifications in that table.



Table 3.5.1: Monitoring of emissions to land

Emission point reference	Monitoring point reference	Parameter	Units	Averaging Period	Frequency
L1, L2 and L3	Dongara Golf Course; Dongara WWTP emergency storage lagoon; Dongara WWTP onsite fenced disposal area irrigated by sprinkler system.	Volumetric flow rate (cumulative)	L/s or m ³ /day	Monthly	Continuous
		pH ¹		Spot Sample	Quarterly
		Biochemical Oxygen Demand	mg/L		
		Total Dissolved Solids			
		Total Suspended Solids			
		Nitrate + Nitrite-nitrogen			
		Ammonium-nitrogen			
		Total Nitrogen			
		Total Phosphorus			
		Residual chlorine ¹			
		<i>Escherichia coli</i> ²		cfu/100 mL	
		Hydraulic loading	m ³ /ha/d	Continuous	Continuous
		Load of Total Nitrogen	kg/ha/d	Annual	Quarterly
Load of Total Phosphorus	kg/ha/d	Annual	Quarterly		

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

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

3.6 Monitoring of inputs and outputs

3.6.1 The Licensee shall undertake the monitoring in Table 3.6.1 according to the specifications in that table.

Table 3.6.1: Monitoring of inputs and outputs

Input/Output	Monitoring point reference	Parameter	Units	Averaging period	Frequency
Sewage - Inlet Flow	Inflow meter (M1)	Volumetric flow rate (cumulative)	m ³ /day	Monthly	Continuous
Treated wastewater discharged to on-site irrigation area	Outflow meter (M2)	Volumetric flow rate (cumulative)	m ³ /day	Monthly	
Treated wastewater pumped to Dongara Golf Course storage tanks	Outflow metre (M3)	Volumetric flow rate (cumulative)	m ³ /day	Monthly	
Septage (tankered)	None specified	Weight or volume per waste type	tonnes or m ³	N/A	Each load arriving at the Premises



3.7 Process monitoring

There are no specified conditions relating to process monitoring in this section.

3.8 Ambient environmental quality monitoring

3.8.1 The Licensee shall undertake the monitoring in Table 3.8.1 according to the specifications in that table and record and investigate results that do not meet any target specified.

Table 3.8.1: Monitoring of ambient groundwater quality				
Monitoring point reference and location	Parameter	Units	Averaging period	Frequency
Monitoring bores 2/95 (upstream), 3/95 and 4/95 (downstream).	Standing water level (SWL)	m(AHD) mBGL	Spot sample	Six monthly
	pH ¹	pH		
	Total Phosphorus	mg/L		
	Total Nitrogen			
	Total Dissolved Solids			

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

3.9 Meteorological monitoring

There are no specified conditions relating to meteorological monitoring in this section.

4 Improvements

There are no specified conditions relating to improvements in this section.



5 Information

5.1 Records

5.1.1 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 5.1.1(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.

5.1.2 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.

5.1.3 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.

5.1.4 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.

5.2 Reporting

5.2.1 The Licensee shall submit to the CEO an Annual Environmental Report within 63 calendar days after the end of the annual period. The report shall contain the information listed in Table 5.2.1 in the format or form specified in that table.

Table 5.2.1: Annual Environmental Report

Condition or table (if relevant)	Parameter	Format or form ¹
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken	None specified
Table 1.3.2	Summary of any treatment capacity target exceedances and any action taken.	None specified
1.3.3	Summary of any waste not processed in accordance with the condition, reasons why and action taken.	None specified
1.3.5	Summary of any freeboard target exceedances and any action taken.	None specified
Table 3.5.1	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 land of parameters monitored in Table 3.5.1 (except pH, residual chlorine and <i>E.coli</i>).	None specified
Table 3.6.1	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 3.8.1	Monitoring of ambient groundwater quality	AGWQ1
5.1.3	Compliance	Annual Audit Compliance Report (AACR)
5.1.4	Complaints summary	None specified

Note 1: Forms are in Schedule 2

5.2.2 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.

5.2.3 The Licensee shall submit the information in Table 5.2.2 to the CEO at the Contact Address according to the specifications in that table.

Table 5.2.2: 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

5.3 Notification

5.3.1 The Licensee shall ensure that the parameters listed in Table 5.3.1 are notified to the CEO at the Contact Address and in accordance with the notification requirements of the table.

Table 5.3.1: 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 .	
1.3.1 and 2.1.1	Breach of any limit specified in the Licence	Part A: As soon as practicable but no later than 5pm of the next working day. Part B: As soon as practicable.	N1
-	Any failure or malfunction of any pollution control equipment or any incident, which has caused, is causing or may cause pollution		
3.1.3	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.

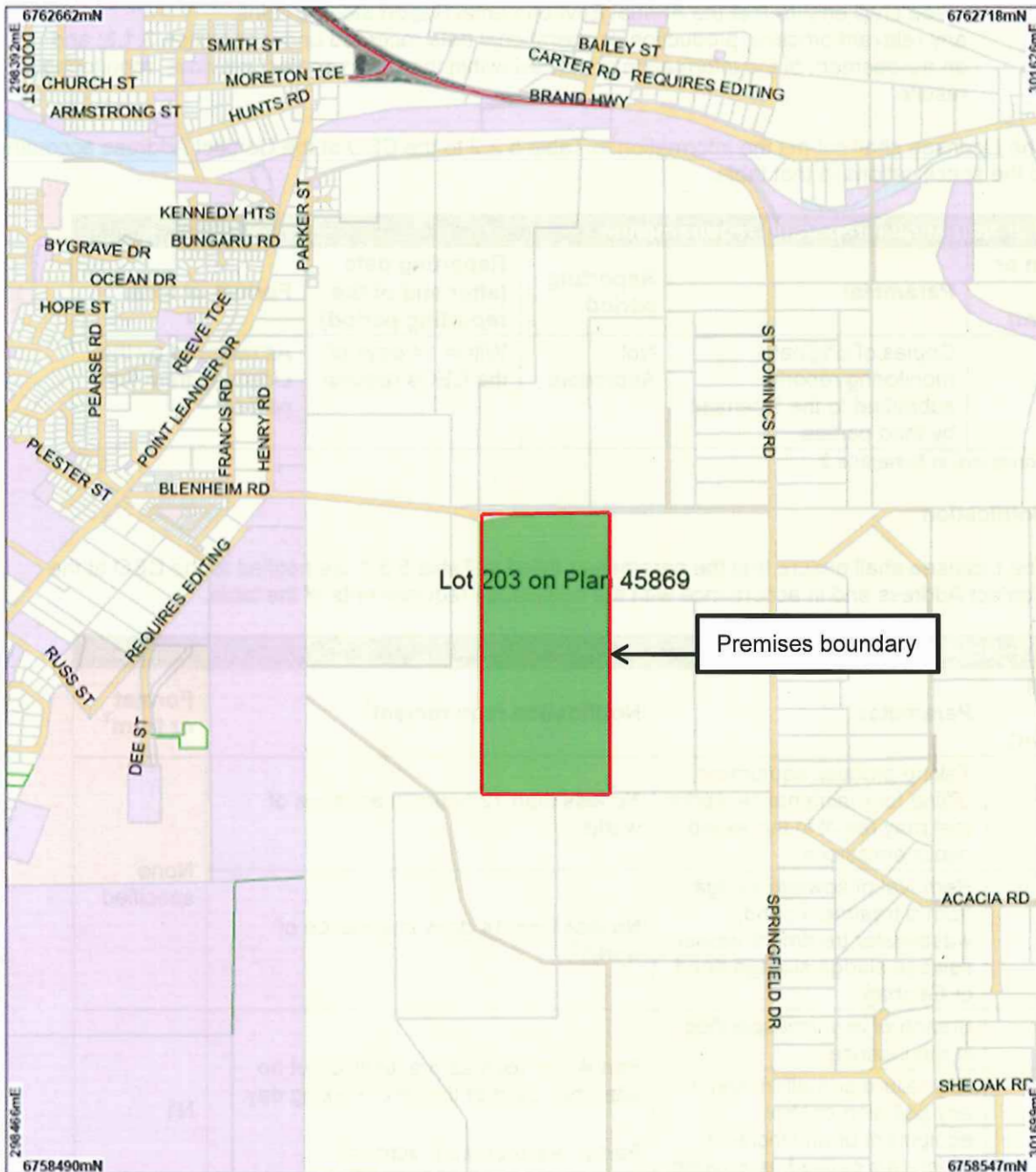
Note 2: Forms are in Schedule 2



Schedule 1: Maps

Premises map

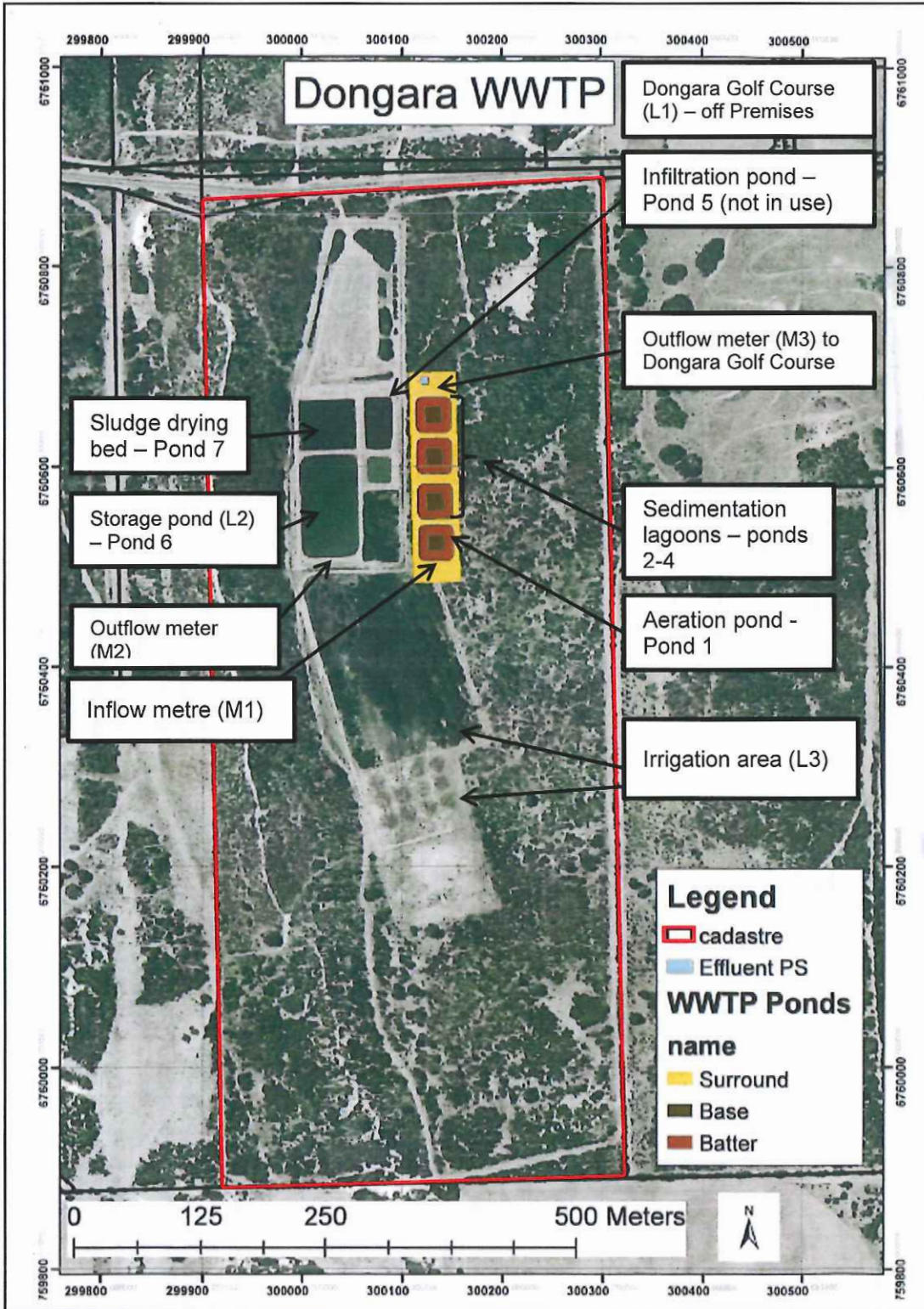
The Premises is shown in the maps below. The red line depicts the Premises boundary.





Map of emission points

The locations of the emission and monitoring points defined in Tables 2.5.1, 3.5.1, 3.6.1, and 3.8.1 are 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) 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: L7685/1993/6
 Form: N1

Licensee: Water Corporation
 Date of breach:

Notification of detection of the breach of a limit or any failure or malfunction of any pollution control equipment or any incident which has caused, is causing or may cause pollution.

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	

Notification requirements for any failure or malfunction of any pollution control equipment or any incident which has caused, is causing or may cause pollution	
Date and time of event	
Reference or description of the location of the event	
Description of where any release into the environment took place	
Substances potentially released	
Best estimate of the quantity or rate of release of substances	
Measures taken , or intended to be taken, to stop any emission	
Description of the failure or accident	



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

Proponent: Water Corporation

Licence: L7685/1993/6

Registered office: 629 Newcastle Street
LEEDERVILLE WA 6007

Premises address: Dongara Wastewater Treatment Plant
Blenheim Road
SPRINGFIELD WA 6215
Being Lot 203 on Plan 45869

Issue date: Thursday, 03 October 2013

Commencement date: Friday, 11 October 2013

Expiry date: Wednesday, 10 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.

Decision Document prepared by:

Caroline Conway-Physick
Licensing Officer

Decision Document authorised by:

A. Kietzmann
Manager Licensing



Contents

Decision Document	1
Contents	2
1 Purpose of this Document	2
2 Administrative summary	3
3 Executive summary of proposal and assessment	4
4 Decision table	5
5 Advertisement and consultation table	9
6 Risk Assessment	10
Appendix A	Error! Bookmark not defined.

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.

Works approval and licence conditions

DER has three types of conditions that may be imposed on works approvals and licences. They are as follows;

Standard conditions (SC)

DER has standard conditions that are imposed on all works approvals and licences regardless of the activities undertaken on the Premises and the information provided in the application. These are included as the following conditions on works approvals and licences:

Works approval conditions: 1.1.1-1.1.4, 1.2.1, 1.2.2, 5.1.1 and 5.1.2.

Licence conditions: 1.1.1-1.1.4, 1.2.1-1.2.4, 5.1.1-5.1.4 and 5.2.1.

For such conditions, justification within the Decision Document is not provided.

Optional standard conditions (OSC)

In the interests of regulatory consistency DER has a set of optional standard conditions that can be imposed on works approvals and licences. DER will include optional standard conditions as necessary, and are likely to constitute the majority of conditions in any licence. The inclusion of any optional standard conditions is justified in Section 4 of this document.

Non standard conditions (NSC)

Where the proposed activities require conditions outside the standard conditions suite DER will impose one or more non-standard conditions. These include both premises and sector specific conditions, and are likely to occur within few licences. Where used, justification for the application of these conditions will be included in Section 4.



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	1,200 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		
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 checked="" type="checkbox"/> No <input type="checkbox"/> Comment requested from DoW in November 2014. No issues identified.	
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

Dongara Wastewater Treatment Plant (WWTP) is located on Lot 203 on Plan 45869, Blenheim Road, Springfield on the outskirts of Dongara. The WWTP has been in operation since 1993.

The upgraded system has a design capacity of 1200 cubic metres per day and treats effluent through a lagoon system (clay-lined) comprising one aeration lagoon (Pond 1) and three sedimentation lagoons (Ponds 2-4) in series. Sewerage is screened prior to entering the aerated lagoon. The high performance aerated lagoon system is mechanically aerated to increase the oxidation rate of pollutants. Wastewater then enters a series of sedimentation lagoons. Both aerobic and anaerobic treatment of the wastewater occurs in these lagoons (Ponds 2-4) along with the settling out of solids and biomass.

A clay-lined pond (previous primary pond) at the Dongara WWTP is used as an emergency storage pond (Pond 6) for treated wastewater during periods of heavy rainfall or where the Dongara Golf Course tanks are full. In addition, the Premises has an area of land within its boundary to irrigate to land, and for infiltration of treated wastewater (Pond 5 – not operational/ not in use) in the event that the storage pond cannot cope with the volume of wastewater at the Premises.

Another clay-lined pond (previous secondary pond) at the Dongara WWTP is used as a biosolids drying bed (Pond 7) for the desludging of the ponds. Treated wastewater is chlorinated and pumped to storage tanks at the Dongara Golf Course for reuse.

The average daily inflow to the plant for 2013/ 2014 was 419.5 cubic metres (m³).

The WWTP is located within a rural residential zone and is approximately 600 metres from the nearest residential property and approximately 1,7 kilometres from the coast. The Irwin River is located approximately 1,4 kilometres north of the WWTP.

A desktop assessment of groundwater bores (WIN Bore site identification 12776486 & 12776479) at the Premises show the depth below ground level to be approximately 35.8m, and total dissolved solids averaging 3,470 mg/L.

Main emissions from the Premises include emissions to land via irrigation or potential integrity failure of the clay-lined ponds.

This partial Decision Document relates to the amendment of Licence L7685/1993/6 initiated by DER. DER to convert the existing licence to a new format REFIRE licence. It also addresses issues identified from a recent compliance inspection and assessment of Annual Environmental Reports relating to the management of monitoring bores at the Premises.



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				
Licence section	Condition number L= Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
General conditions	L1.2.5	OSC	OSC 1.2.5 replaces condition 2(i) of the previous Licence. Condition 7 of the previous Licence has been replaced by an updated guidance statement which is stated within the Licence Introduction, 'Licence requirements' section of the REFIRE format licence.	General provisions of the <i>Environmental Protection Act, 1986</i> .
Premises operation	L1.3.3 L1.3.5 L1.3.7 L1.3.8 L1.3.9	OSC OSC OSC NSC NSC	OSC 1.3.3 replaces conditions 3, 4 and 6(iii) of the previous Licence. OSC 1.3.5 replaces condition 5 and 2(ii)-(v) of the previous Licence. OSC 1.3.7 replaces condition 13 of the previous Licence. NSC 1.3.8 has been included to address management and operation of the monitoring bores at the premises as there is no provision to address failure of the bore for the purposes of monitoring requirements within the Licence. NSC 1.3.9 replaces condition 11 of the previous Licence. Reference to infiltration via the channel at the Premises has been removed from the Licence as this does not occur at the Premises and the infiltration channel does not exist. Condition 4(ii) has been removed.	General provisions of the <i>Environmental Protection Act, 1986</i> . <i>Environmental Protection (Controlled Waste) Regulations 2004</i> .
Emissions general	L2.1.1	OSC	Descriptive limits will be set through condition 2.5.1 of the licence and therefore OSC regarding recording and investigation of exceedances of limits or targets has been included.	
Point source emissions to	L2.2 L3.2	N/A	Point source emissions to air including monitoring has not been reassessed through this amendment process.	General provisions of the



DECISION TABLE				
Licence section	Condition number L= Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
air including monitoring				Environmental Protection Act, 1986.
Point source emissions to surface water including monitoring	L2.3 L3.3	N/A	Point source emissions to surface water including monitoring has not been reassessed through this amendment process. There are no surface water sources at or adjacent to the Premises.	General provisions of the Environmental Protection Act, 1986.
Point source emissions to groundwater including monitoring	L2.4 L3.4	N/A	Point source emissions to groundwater including monitoring has not been reassessed through this amendment process. No direct discharge of wastewater to groundwater occurs at the Premises. A desktop assessment of groundwater bores (WIN Bore site identification 12776486 & 12776479) at the Premises show the depth below ground level to be approximately 35.8m, and total dissolved solids averaging 3,470 mg/L.	General provisions of the <i>Environmental Protection Act, 1986</i> .
Emissions to land including monitoring	L2.5.1 L3.5.1	OSC OSC	OSC 2.5.1 replaces condition 3 and 4 of the previous Licence. OSC 3.5.1 replaces condition 12, 14 and 15 of the previous Licence. Condition 8 of the previous Licence has been included within Table 3.5.1 and 3.8.1, Section 3 of the new Licence. Emissions to land occur, in order of priority, to: <ul style="list-style-type: none"> • Dongara Golf Course (external); or • Dongara WWTP Irrigation area (fenced area onsite). A nutrient irrigation management plan (April 2010) is in place for the Premises which is managed by Water Corporation. The Licensee also holds a Department of Health Licence in conjunction with the Shire, for the irrigation to land at the golf course. Chlorination of wastewater occurs on site at the WWTP prior to being discharged to the Dongara Golf Course.	<i>Environmental Protection (Unauthorised Discharges) Regulations, 2004</i>



DECISION TABLE				
Licence section	Condition number L= Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
Fugitive emissions	L2.6	N/A	Fugitive emissions have not been reassessed through this amendment process.	
Odour	L2.7	N/A	Odour has not been reassessed through this amendment process. No odour issues or complaints have been received for the premises.	
Noise	L2.8	N/A	Noise has not been reassessed through this amendment process.	<i>Environmental Protection (Noise) Regulations 1997.</i>
Monitoring general	L3.1.1	OSC	OSC 3.1.1 replaces condition 9 and 10 of the previous Licence.	
Monitoring of inputs and outputs	L3.6.1	OSC	OSC 3.6.1 replaces condition 11 of the previous Licence.	
Process monitoring	L3.7	N/A	Process monitoring has not been reassessed through this amendment process.	
Ambient quality monitoring	L3.8.1	OSC	OSC 3.8.1 replaces condition 8 and 16 of the previous Licence.	
Meteorological monitoring	L3.9	N/A	Meteorological monitoring has not been reassessed through this amendment process.	
Improvements	L4.1.1	NSC	No improvement conditions have been included within this section. There are no current issues at the premises which require the inclusion of improvement conditons.	General provisions of the <i>Environmental Protection Act, 1986.</i>



DECISION TABLE				
Licence section	Condition number L= Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
Information	L5.1.4 L5.2.1 L5.2.2 L5.3.1	OSC OSC OSC OSC	OSC 5.1.4 replaces condition 1 of the previous Licence. OSC 5.2.1 replaces requirements from conditions 12 and 15, and conditions 18 and 19 of the previous Licence. OSC 5.2.2 replaces condition 20 of the previous Licence. OSC 5.3.1 replaces condition 6(i) and (ii). Condition 17 of the previous Licence has not been transferred into the amended Licence as this condition conflicts with new condition 1.3.8.	
Licence Duration	L7685/1993/6	N/A	The Premises has been assessed as a low risk site and the current Licence period was recommended for a period of five years. The current Licence expires on 10 October 2018. There are no current issues of concern that would necessitate the reduction of the Licence period.	



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
25/03/2015	Proponent sent a copy of draft instrument	<p>Comments received from Water Corporation (Craig Chaudhry) 28/04/2015.</p> <p>A total of eight comments were received which primarily related to premises description and operation within the licence. Improvement condition IR1 was requested for removal on the basis that the premises had one operational upstream bore and two operational downstream bores.</p>	<p>All minor comments were agreed and changes made to the documentation with the premises description and operation details updated. Response sent back to Water Corporation via email on 01/05/2015.</p> <p>Improvement condition IR1 was removed from the documentation.</p>
20/11/2014	Consultation with other parties	Department of Water was contacted for any comment regarding the proposed amendment to the current Licence (K. Wray).	No issues were identified. No additional changes made.
23/03/2015		Department of Health were contacted for a copy of the current Licence for reuse water between Water Corporation, the Shire and Department of Health.	Documentation received and reviewed. No additional changes made.



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