

# LICENCE FOR PRESCRIBED PREMISES Environmental Protection Act 1986

LICENCE NUMBER: L5973/1992/11

FILE NUMBER: 2010/002285

# LICENSEE

Water Corporation 629 Newcastle Street LEEDERVILLE WA 6007 ABN: 28 003 434 917

# PREMISES

Pinjarra Wastewater Treatment Plant Lot 19 on Diagram 44739 Adelaide Road OAKLEY WA 6324 Being Lot 19 on Diagram 44739 as depicted in Schedule 1

### PRESCRIBED PREMISES CATEGORY

Schedule 1 of the Environmental Protection Regulations 1987

CATEGORY NUMBER	CATEGORY DESCRIPTION	CATEGORY PRODUCTION OR DESIGN CAPACITY	PREMISES PRODUCTION OR DESIGN CAPACITY
54	<ul> <li>Sewage facility premises –</li> <li>(a) on which sewage is treated (excluding septic tanks); or</li> <li>(b) from which treated sewage is discharged onto land or into waters.</li> </ul>	100 cubic metres or more per day	1840 cubic metres per day

# CONDITIONS

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

Ruth Dowd Senior Manager – Industry Regulation (Waste Industries) Officer delegated under Section 20 of the *Environmental Protection Act 1986* 

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### DEFINITIONS

For the purposes of this Licence, unless the contrary intention appears:

'Act' means the Environmental Protection Act 1986;

**'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;

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

'CEO' for the purpose of correspondence means; Chief Executive Officer Department Administering the Environmental Protection Act 1986 Locked Bag 33 CLOISTERS SQUARE WA 6850 Email: <u>info@der.wa.gov.au</u>

'Licence' means this Licence numbered L5973/1992/11 and issued under the Act;

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

'NATA' means the Australian body of the National Association of Testing Authorities; and

'Premises' means Lot 19 on Diagram 44739.

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#### GENERAL CONDITIONS

- (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.

#### ANNUAL MONITORING REPORT

- (2) The licensee shall provide to the CEO by **1 September in each year** an Annual Monitoring Report (AMR) containing data required by any condition of this licence. The Annual Monitoring Report shall contain data collected from **1 July the previous year to 30 June in that year**. The report shall contain but not be limited to:
  - (a) monitoring data required by any condition of this licence, which shall be presented in a tabular and graphical format;
  - (b) an explanation of the monitoring results with respect to the environmental impacts of the premises;
  - (c) the number and type of complaints received as required by Condition 4 of this licence; and
  - (d) any changes on or off the premises to site boundaries, location of monitoring/sampling points, discharge points, waste storage areas, surface drainage and on-site or off-site impacts or pollution.

#### ANNUAL AUDIT COMPLIANCE REPORT

(3) The licensee shall provide to the CEO by 1 September in each year, an Annual Audit Compliance Report (AACR) in the form in Attachment 2 of this licence, signed and certified in the manner required by Section C of the form, indicating the extent to which the licensee has complied with the conditions of this licence, and any previous licence issued under Part V of the Act for the premises, during the period beginning 1 July the previous year and ending on 30 June in that year.

#### MONITORING AND REPORTING PARAMETERS

(4) The licensee shall use the following units for monitoring data parameters as required by any condition of this licence:

Parameter	Unit		
Monthly volume of treated wastewater discharged to wastewater infiltration ponds	Cubic metres per day or ML/day (average for the month)		
Standing water level	Metres (Australian Height Datum)		
pH	pH units		
Escherichia coli (E.coli)	Colony forming units per 100 millilitres		
All other parameters	Milligrams per litre (mg/L)		

#### COMPLAINTS

- (5) The licensee shall keep a written and accurate record of all complaints received at the premises concerning the environmental impact of the premises. The complaint record shall contain the following information (if known):
  - (a) date and time of complaint;

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- (b) location about which the complaint was made;
- (c) general description of the nature of complaint;
- (d) wind direction, wind speed and temperature at the time of the complaint;
- (e) likely source of the reported problem; and
- (f) action taken in response to the complaint.
- (6) The licensee shall ensure the record required by Condition 5 of this licence shall be available for viewing or copying by an officer of DER on request.

# WATER POLLUTION CONTROL CONDITIONS

#### MAINTENANCE OF WASTEWATER TREATMENT PONDS

- (7) The licensee shall manage the wastewater treatment ponds in a manner such that:
  - (a) there is no surface discharge of wastewater from the premises; and
  - (b) all reasonable and practicable means are taken to minimise vegetation (emergent or otherwise) from growing in the pond wastewaters or on the inner pond embankments.

#### SAMPLING REQUIREMENTS

- (8) The licensee shall collect and have analysed once every month, a representative sample of the treated wastewater being discharged from the final treatment pond to the Alcoa process runoff pond. Samples shall be analysed for the following parameters:
  - (a) pH;
  - (b) Total Suspended Solids (TSS);
  - (c) Total Dissolved Solids (TDS);
  - (d) Biochemical Oxygen Demand (BOD);
  - (e) Total Phosphorus;
  - (f) Total Nitrogen;
  - (g) Oxidised nitrogen (nitrate + nitrite nitrogen); and
  - (h) Ammonium-nitrogen.
- (9) The licensee shall operate and maintain a suitable device for measuring monthly cumulative volumes of treated wastewater discharged from the treatment plant to the Alcoa process runoff pond.

### EXCEPTION REPORTING AND SAMPLING

- (10) The licensee shall advise the Director as soon as practicable of any failure of the treated wastewater pump station which has resulted in a surface discharge of treated wastewater from the premises.
- (11) In the event of a discharge described in Condition 10 of this licence, the licensee shall collect representative samples of the stream water, 100 metres and 500 metres downstream of the discharge point on a weekly basis whilst the discharge is occurring. Samples shall be analysed for the following parameters:
  - (a) Biochemical Oxygen Demand (BOD);
  - (b) Total Nitrogen;
  - (c) Total Phosphorus; and
  - (d) Escherichia coli.

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# GENERAL MONITORING REQUIREMENTS

- (12) The licensee shall collect all effluent or water samples required by the condition of this licence in accordance with the relevant parts of AS/NZS 2031, AS/NZS 5667.1 and AS/NZS 5667.10.
- (13) The licensee shall submit all water samples for analysis in a laboratory with NATA accreditation for the analyses specified.

#### POND AND SOLIDS MANAGEMENT

- (14) The licensee shall:
  - Inform the CEO no less than 24 hours prior to taking any equipment offline for maintenance works, that may result in an increase in odour emissions from the premises;
  - (b) Inform the CEO no less than 24 hours prior to taking a treatment pond offline for maintenance works;
  - (c) inform the CEO no less than 14 days prior to the removal of sewage sludge from any on-site treatment pond;
  - (d) where sewage sludge is temporarily stored on-site, direct sewage sludge to a low permeability (10<sup>-9</sup> metres per second or less) surface drying bed which:
    - (i) is adequately bunded to prevent surface runoff of leachate or sludge from crossing the boundary of the premises;
    - (ii) returns sludge leachate from the storage area back to the treatment ponds.

### **SCHEDULE 1**



# PINJARRA WASTEWATER TREATMENT PLANT PRESCRIBED PREMISES MAP

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

### **SCHEDULE 2**

# ANNUAL AUDIT COMPLIANCE REPORT

### **SECTION A**

#### LICENCE DETAILS

Licence Number: L5973/1992/11	Licence File Number: 2010/002285
Company Name: Water Corporation	ABN: 28 003 434 917
Trading as:	
Reporting period:	
to	

# STATEMENT OF COMPLIANCE WITH LICENCE CONDITIONS

1. Were all conditions of licence complied with within the reporting period? (please tick the appropriate box)

Yes  $\square$  Please proceed to Section C No  $\square$  Please proceed to Section B

Each page must be initialed by the person(s) who signs Section C of this annual audit compliance report

### **SCHEDULE 2**

# 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?					
□ Yes □ Reported to DER verbally Date	□ No				
□ Reported to DER in writing Date					
d) Has DER taken, or finalised any action in relation to the non	n compliance?				
e) Summary of particulars of compliance non compliance, and impact?	what was the environmental				
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 eff	fects of the non compliance				
i) Action taken or that will be taken to prevent recurrence of the	e non compliance				

Each page must be initialed by the person(s) who signs Section C of this annual audit compliance report

INITIAL:\_\_\_\_\_

# SECTION C

### SIGNATURE AND CERTIFICATION

This Annual Audit Compliance Report may only be signed by a person(s) with legal authority to sign it. The ways in which the Annual Audit Compliance Report 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 Annual Audit Compliance Report is being signed. If you are uncertain about who is entitled to sign or which category to tick, please contact the licensing officer for your premises.

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



# **Decision Document**

# Environmental Protection Act 1986, Part V

Proponent:	Water Corporation		
Licence:	L5973/1992/11		
Registered office:	629 Newcastle Street LEEDERVILLE WA 6007		
Premises address:	Pinjarra Wastewater Treatment Plant Lot 19 on Diagram 44739 Adelaide Road OAKLEY WA 6324 Being Lot 610 on Plan 187856 and Lot 575 on Plan 175884 as depicted in Schedule 1		
Issue date:	Friday, 16 October 2015		
Commencement date:	Sunday, 1 November 2015		
Expiry date:	Saturday, 31 October 2016		
Decision			

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

Decision Document prepared by:

Peter van Schoubroeck Licensing Officer

Decision Document authorised by:

Ruth Dowd Delegated Officer



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#### **Purpose of this Document** 1

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



# 2 Administrative summary

Administrative details				
Application type	Works Approval New Licence Licence amendme Works Approval a		□ ⊠ ent □	
Activities that cause the premises to become prescribed premises	Category number(s)		Assessed design capacity	
prescribed premises	54		1840 cubic metres per day	
Application verified Application fee paid	Date: 20/08/2015 Date: 14/09/2015			
Works Approval has been complied with Compliance Certificate received	Yes         No           Yes         No		A⊠ A⊠	
Commercial-in-confidence claim	Yes No			
Commercial-in-confidence claim outcome	None applicable			
Is the proposal a Major Resource Project?	Yes No			
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the <i>Environmental Protection Act 1986</i> ?	Yes□ No⊠	Man	erral decision No: aged under Part V  □ essed under Part IV  □	
Is the proposal subject to Ministerial Conditions?	Yes⊠ No⊠		sterial statement No: 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> )?				
Is the Premises within an Environmental Protection Policy (EPP) Area Yes No No Environmental Protection Peel Inlet – Harvey Estuary Policy 1992; Environmental Protection Swan Coastal Plain Lakes Policy 1992				
Is the Premises subject to any EPP requirements?	Yes No	]		



# 3 Executive summary of proposal and assessment

The Pinjarra Wastewater Treatment Plant (PWWTP) is located within the Shire of Murray about 3.1 kilometres east of the Pinjarra town centre. Under the Shire of Murray local planning scheme land located adjacent to the west and north is zoned rural, land located to the east is zoned industrial and land located to the south is zoned special use stable. The Alcoa aluminia refinery occupies all the adjacent land to the east of the Premises. The nearest residential neighbours are located about 2.5 kilometres to the north, west and south of the Premises. The Tate Gully tributary is located about 500 metres north of the PWWTP and flows east to west into the Murray River.

The PWWTP is located within or adjacent to (where specified):

- Environmental Protection Peel Inlet Harvey Estuary Policy 1992;
- Environmental Protection Swan Coastal Plain Lakes Policy 1992
- The *Rights in Water Irrigation Act 1914* Murray River and tributaries catchment proclaimed Murray Groundwater Area and proclaimed Murray River System surface water area; and
- The Waterways Conservation Act 1976 Peel Inlet Management Area (located ~ 2.6 kilometres west).

The PWWTP operated was established in 1992 with a 1840 kL/ day treatment capacity. The current MWWTP consists of the following operations and infrastructure:

- Two primary treatment ponds with a screenings removal facility;
- One secondary facultative pond; and
- A sludge drying bed, no longer in use.

All treated wastewater at the PWWTP is discharged to the adjacent Alcoa aluminia refinery for reuse in processing. Sludge waste from previous desludging was stored within Geotube installations with leachate returned to the wastewater treatment system.

This Licence is the successor to licence L5973/1992/10 and includes the following changes:

- Administrative updates, including contact details for the Department of Environment Regulation and condition numbering;
- Addition of a condition to ensure that emissions not authorised through the licence comply with the provisions of the *Environmental Protection Act 1986* (new condition 1); and
- Removal of a condition specific to solid waste and sludge disposal requirements.

The emission risks associated with the treatment of sewerage and discharge of treated wastewater from the PWWTP have not been assessed as part of the Licence reissue.

# 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 TAR	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	<b>Operation</b> Condition 1 has been included to ensure that emissions at the Premises not authorised through the licence comply with the provisions of the <i>Environmental Protection Act 1986</i> .	General provisions of the Environmental Protection Act 1986			
		Conditions 13 and 15 in licence version L5973/1992/10 have been removed from the Licence. The management and disposal of solid waste, sludge and biosolid waste outside of the prescribed premises is beyond the provisions of the licence. Management of such waste is regulated by the General provisions of the <i>Environmental Protection Act 1986.</i>				
Monitoring (general)	L12 and L13	<b>Operation</b> Conditions 12 and 13 have been amended (being conditions 11 and 12 in licence version L5973/1992/10) to accurately specify the standards applicable to ensure precision and accuracy during sample collection, analysis and reporting.	General provisions of the <i>Environmental</i> <i>Protection Act</i> 1986			
Licence Duration	N/A	This Licence will be issued for one year, until late 2016. This timeframe takes into consideration the factors within the document <i>Guidance statement: licence duration</i> . No other statutory approvals have been identified as limiting the timeframe for the issue of this Licence. The risk of emissions and associated assessment of those emissions has not been completed as part of this licence reissue. Subsequently consideration for 20 year licence duration.	Department of Environment Regulation 2015, <i>Guidance</i> <i>statement:</i> <i>Licence duration</i> General			
			Provisions of the Environmental Protection Act 1986			



# **5** Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
21/09/2015	Application advertised in West Australian (or other relevant newspaper)	Nil	
29/09/2015	Proponent sent a copy of draft instrument	<ul> <li>Administrative feedback as follows: <ul> <li>Request for licence expiry date to be on main page of licence as well as footer;</li> <li>References to licence expiry date not consistent between front page of licence footer and rest of documents;</li> <li>Request for licence duration to be at least 5 years;</li> <li>Correction on design capacity;</li> <li>References to "Director" should read "CEO"</li> <li>Correction of a condition number reference in condition 11;</li> <li>Correction to the licence and file numbers on AACR attachment; and</li> <li>Requested additional information on the infrastructure on site be included in the premises summary of the licence and decision document.</li> </ul> </li> </ul>	All items were addressed in the revised licence and decision document as requested, with exception to the suggestion that the expiry date should be displayed on the main page of the licence and that the licence duration should be at least 5 years (not 1). There is no express need to display the expiry date twice on the same page of the licence. Key dates are already displayed on the bottom of the front page of the licence. The licence has been issued for a period of 1 year (not 5) due to having insufficient time to conduct a complete review and assessment of the environmental risk of the operations on the premises and convert the licence reissue process. An expiry date of 31 October 2016 has therefore been applied to enable a proper review of the licence to occur over the next 12 months.



# 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