

WESTERN AUSTRALIA

Department of Environment Regulation

Environmental Protection Act 1986

LICENCE NUMBER: L7395/1991/10

FILE NUMBER: SWB2004-03

NAME OF OCCUPIER:

Water Corporation

ADDRESS OF OCCUPIER:

629 Newcastle Street
Leederville WA 6007

NAME AND LOCATION OF PREMISES:

Capel Wastewater Treatment Plant
Lot 5613 on Plan 190864, Lot 1614 on Plan 140135
Capel WA 6271
(as depicted in Attachment 1)

Environmental Protection Regulations 1987

CLASSIFICATION(S) OF PREMISES:

Category 54: Sewage facility

COMMENCEMENT DATE OF LICENCE: Monday, 1 November 2010

EXPIRY DATE OF LICENCE: Monday, 31 October 2016

CONDITIONS OF LICENCE:

As described and attached:

DEFINITIONS

GENERAL CONDITION(S) (2)

WATER POLLUTION CONTROL CONDITION(S) (6)

SOLID WASTE CONTROL CONDITION(S)

ATTACHMENT(S)

Date signed: 16 October 2015

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

Date of Issue: Friday, 22 October 2010

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PREAMBLE

Applicability

This licence is issued to the Water Corporation for the operation of the Capel Wastewater Treatment Plant located on Lot 5613 on Plan 190864 and the disposal of treated wastewater to the Capel wetland located on Lot 1614 on Plan 140135, Capel (as depicted in Attachment 1), which includes but is not necessarily limited to, the following operations:

- treatment of wastewater through a series of three treatment ponds, which treats water to a secondary standard; and
- disposal of treated wastewater through a series of infiltration lagoons and trenches, or to the Capel wetlands (once the pipeline is constructed).

This facility is prescribed within Schedule 1 of the *Environmental Protection Regulations 1987* as outlined in Table 1:

Table 1: Category under which Capel WWTP is prescribed

Category	Category name	Description
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.

Nominal Rated Throughput

The nominal design capacity covered by this licence is 130 cubic meters per day. After the upgrade of the plant (which includes aerators, disinfection, alum dosing and the pipeline to the Capel Wetlands), the nominal design capacity covered by this licence is 320 cubic metres per day.

CONDITIONS OF LICENCE

DEFINITIONS

In these conditions of licence, unless inconsistent with the text or subject matter:

'AS3780' means Australian Standard 3780-2008: *The storage and handling of corrosive substances*;

'AS5667' means Australian Standard 5667.1-1998: *Water quality – Sampling. Part 1: Guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples*;

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

CEO for the purpose of correspondence means-

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

'Inform' and 'advise' means advise by telephone, e-mail or facsimile, respectively;

'licensee' means Water Corporation;

'mg/L' and 'm³/day' mean milligrams per litre and cubic metres per day, respectively; and

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'premises' means Capel Wastewater Treatment Plant located on Lot 5613 on Plan 190864 and Lot 1614 on Plan 140135 (as depicted in Attachment 1).

GENERAL CONDITIONS

MONITORING AND REPORTING

G1 The Licensee shall provide to the CEO, by **1 September each year**, an Annual Monitoring Report containing data collected over the previous financial year (**1 July to 30 June**). The report shall contain but not be limited to:

- (i) monitoring data or other collected data required by any condition of this licence;
- (ii) an assessment of the data against any limits set or other environmental guidelines, targets or policies referred to in this licence and data from previous years' monitoring;
- (iii) a summary of any data exceeding those limits, guidelines, targets or policies including information on why the exceedance occurred (if known) and action taken by the licensee to prevent recurrence of such exceedances.
- (iv) a summary of the number and type of complaints received;
- (v) any changes to site boundaries, location of groundwater monitoring bores, surface drainage channels and on-site or off-site impacts or pollution; and
- (vi) a list of any monitoring methods used to collect and analyse data required by any condition of this licence to demonstrate they comply with the methods specified in this licence.

G2 The Licensee shall by 1 September in each year, provide to the CEO an Annual Audit Compliance Report in the form in Attachment 2 to 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.

WATER POLLUTION CONTROL CONDITIONS

MAINTENANCE OF WASTEWATER TREATMENT PONDS

W1 The Licensee shall manage the wastewater treatment ponds such that:

- (i) uncontaminated stormwater runoff resulting from roof and site drainage shall not enter the wastewater treatment ponds or cause erosion of outer pond embankments;
- (ii) there is no discernible (visible) seepage loss from the treatment ponds;
- (iii) vegetation (emergent or otherwise) and debris are routinely removed from pond wastewaters or inner pond embankments; and
- (iv) trapped overflows are maintained on the discharge from all wastewater treatment ponds to prevent carry-over of surface floating matter to subsequent ponds.

FLOW MONITORING DEVICE

W2 The Licensee shall maintain metering devices for measuring monthly cumulative volumes of treated wastewater discharged from the final lined treatment pond to the onsite infiltration lagoons and to the Capel wetlands. The monthly flow results shall be presented in the next annual monitoring report in a tabular format.

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ENVIRONMENTAL MONITORING PROGRAMME

W3(a) The Licensee shall maintain monitoring bores BH1, BH2, BH3, BH4, BH5, BH6, BH7, BH8, BH9, B70, B72 and B73 to allow representative groundwater samples to be collected as depicted in Attachment 1.

W3(b) The Licensee shall collect water samples from the locations listed in column 1 of Table 2, at the sampling frequencies stated in column 2 of table 2, take and have the water samples analysed for the parameters listed in column 3 of table 2:

Table 2: Wastewater treatment plant monitoring requirements

Column 1	Column 2	Column 3
Monitoring site	Sampling frequency	Parameters to be measured
Discharge from the final treatment pond	Monthly	pH, Biochemical Oxygen Demand, Total Dissolved Solids, Total Suspended Solids, Nitrate-Nitrogen, Ammonium-nitrogen, Total Nitrogen, Phosphorus and <i>Escherichia coli</i>

With the exception of pH and *Escherichia coli*, all measurements are to be reported in mg/L.

W3(c) When disposing of treated wastewater to the Capel wetlands, the Licensee shall collect water samples from the monitoring sites listed in column 1 of table 3 and depicted in Attachment 1, at the frequencies stated in column 2 of table 3, take and have the water samples analysed for the parameters listed in column 3 of table 3:

Table 3: Capel Wetlands monitoring requirements

Column 1	Column 2	Column 3
Monitoring site	Sampling frequency	Parameters to be measured
Swamphen, Island, Peninsula and Higgins Lakes	Quarterly: January, April, August and October	pH, Biochemical Oxygen Demand, Total Dissolved Solids, Total Suspended Solids, Nitrate-nitrogen, Ammonium-nitrogen, Total Nitrogen, and Total Phosphorus.
Bores BH1, BH2, BH3, BH4, BH5, BH6, BH7, BH8, BH9, B70, B72 and B73	Quarterly: January, April, August and October	pH, Total Dissolved Solids (calculated from Electrical Conductivity), Total Nitrogen, Ammonium-Nitrogen, Nitrate + Nitrite-nitrogen and Total Phosphorus.

With the exception of pH, all measurements are to be reported in mg/L

W3(d) The Licensee shall measure the Standing Water Level in metres AHD (Australian Height Datum) in Bores BH1, BH2, BH3, BH4, BH5, BH6, BH7, BH8, BH9, B70, B72 and B73, quarterly, and shall be reported in the annual monitoring report.

SAMPLE ANALYSIS

W4(a) The Licensee shall collect all water samples in accordance with the relevant parts of AS5667.

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W4(b) The Licensee shall submit all water samples to a laboratory with current NATA accreditation for the analyses specified, and have the samples analysed in accordance with the current "Standard Methods for Examination of Water and Wastewater-APHA-AWWA-WEF".

CALCULATION OF CONTAMINANT LOAD

W5 The Licensee shall determine the monthly load of each contaminant in the treated wastewater discharged from the final pond (except pH and *Escherichia coli*) using flow-weighted data. The loads shall be based on the treated wastewater discharge rates and the concentrations as measured in accordance with condition W2 and W3(b). Monthly and annual average loads of the contaminants shall be reported in the Annual Monitoring Report in kilograms per day.

BUNDING AND CONTAINMENT

W6(a) The Licensee shall store environmentally hazardous chemicals including caustic soda and hypochlorite (where the total volume of each substance stored on the premises exceeds 250 litres) in accordance with AS3780.

W6(b) The Licensee shall lock or otherwise secure perimeter valves on bunded areas in the closed position whilst the site is unattended.

SOLID WASTE POLLUTION CONTROL CONDITION

POND AND SOLIDS MANAGEMENT

S1(a) The Licensee shall dispose of collected vegetation and floating debris from the treatment ponds to a licensed or registered landfill.

S1(b) The Licensee shall:

- (i) inform the CEO prior to taking a treatment pond offline for maintenance works;
- (ii) inform the CEO no less than 14 days prior to the removal of sewage sludge from a treatment pond;
- (iii) where sewage sludge is temporarily stored on-site, direct sewage sludge to a hard-stand area or drying bed which:
 - (a) is adequately bunded to prevent surface runoff of leachate or sludge from crossing the boundary of the premises; and
 - (b) return sludge leachate from the storage area back to the treatment ponds.

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

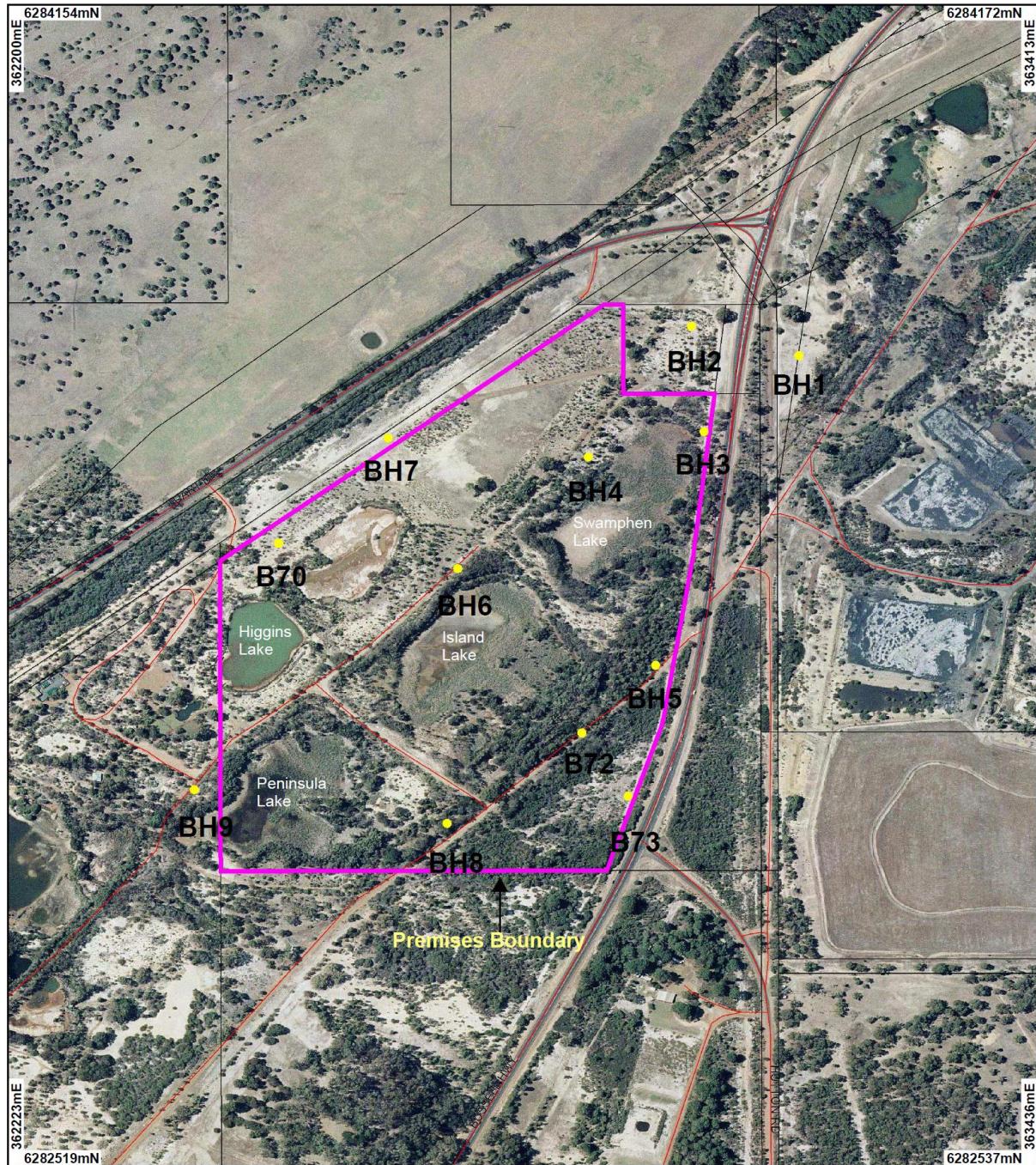
Date of Issue: 22 October 2010

Attachment 1 – Premises maps

The pink line depicts the premises boundary



Bore Locations – Capel Wetlands



ATTACHMENT 2**LICENCE NUMBER: L7395/1991/10****FILE NUMBER: SWB2004-03****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 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 initialed by the person(s) who signs Section C of this Annual Audit Compliance Report

INITIAL: _____

ATTACHMENT 2

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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"/> No <input type="checkbox"/> Reported to DER in writing Date _____
d) Has DER taken, or finalised any action in relation to the non compliance?
e) Summary of particulars of 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 initialed by the person(s) who signs Section C of this Annual Audit Compliance Report

INITIAL: _____

ATTACHMENT 2

LICENCE NUMBER: L7395/1991/10

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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:
an individual	<input type="checkbox"/> by the individual licence holder, or <input type="checkbox"/> by a person approved in writing by the Chief Executive Officer of the Department of Environment and Conservation to sign on the licensee's behalf.
A firm or other unincorporated company	<input type="checkbox"/> by the principal executive officer of the licensee; or <input type="checkbox"/> 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 and Conservation.
A corporation	<input type="checkbox"/> by affixing the common seal of the licensee in accordance with the Corporations Act 2001; or <input type="checkbox"/> by two directors of the licensee; or <input type="checkbox"/> by a director and a company secretary of the licensee, or <input type="checkbox"/> if the licensee is a proprietary company that has a sole director who is also the sole company secretary – by that director, or <input type="checkbox"/> by the principal executive officer of the licensee; or <input type="checkbox"/> 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 and Conservation.
A public authority (other than a local government)	<input type="checkbox"/> by the principal executive officer of the licensee; or <input type="checkbox"/> 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 and Conservation.
a local government	<input type="checkbox"/> by the chief executive officer of the licensee; or <input type="checkbox"/> 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)



Decision Document

Environmental Protection Act 1986, Part V

Proponent: **Water Corporation**

Licence: **L7395/1991/10**

Registered office: 629 Newcastle Street
LEEDERVILLE WA 6007

Premises address: Capel Wastewater Treatment Plant
Range Road
CAPEL WA 6271
Being Lot 5613 on Plan 190864 and Lot 1614 on Plan 140135

Issue date: Friday: 22 October 2010

Commencement date: Monday, 1 November 2010

Expiry date: Monday, 31 October 2016

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:

Dr Bhabesh Das
Senior Licensing Officer

Decision Document authorised by:

Caron Goodbourn
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	320 m ³ 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"/>	
Compliance Certificate received	Yes <input type="checkbox"/>	No <input type="checkbox"/>	
Commercial-in-confidence claim	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Commercial-in-confidence claim outcome			
Is the proposal a Major Resource Project?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the <i>Environmental Protection Act 1986</i> ?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input type="checkbox"/>
Is the proposal subject to Ministerial Conditions?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Ministerial statement No: EPA Report No:
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986</i>)?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	Department of Water consulted Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>
Is the Premises within an Environmental Protection Policy (EPP) Area	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	
Is the Premises subject to any EPP requirements?	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	



3 Executive summary of proposal and assessment

The Capel Wastewater Treatment Plant (WWTP) is located on Range Rd approximately 1.6km south-west of Capel. The plant was built in 1991 and treats wastewater to a tertiary standard. The WWTP is designed to service a nominal population of 1,883. The WWTP is surrounded by natural bushland. There is an ilmenite processing plant located approximately 500m southwest of the plant. Capel transfer station operates at approximately 600m northeast of the plant. The closest resident is located approximately 600m northeast of the plant directly opposite the transfer station.

The Capel WWTP consists of three treatment ponds (primary, secondary and tertiary) connected in series. The primary treatment pond is fitted with two floating mechanical aerators. The WWTP is licensed to treat up to 320 m³ per day. The average daily inflow to the plant for the 2013/14 reporting period was 231 m³ per day.

Treated wastewater flows from the final pond into two onsite infiltration ponds for disposal. Treated wastewater is also disposed of via pipeline to the Capel wetlands consisting of Higgins Lake, Swamphen Lake, Island Lake and Peninsula Lake. The wetland is located on Lot 1614 on Plan 140135 (Tuart Drive) approxiamtly 2.2km south- east of the WWTP.

The Capel WWTP licence will be amended to extend the expiry date from 31 October 2015 to 31 October 2016. The licence will be amended to reflect the new licence format after this period. As part of this amendment, DER has not re-assessed the acceptability or impacts of emissions and discharges from the Premises or re-visited any existing emission control levels. There are no changes to the licence conditions apart from administrative changes and updates to reflect current activities. A partial decision document has been completed for the re-issue of this licence.



4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987*, DEC's Policy Statement - Limits and targets for prescribed premises (2006), 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
Licence Duration	N/A	The licence has been amended to extend the expiry date from 31 October 2015 to 31 October 2016. The licence will be amended to reflect DER's new licence format prior to the expiry of this licence.	N/A



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
01/10/2015	Proponent sent a copy of draft instrument	Submitted 21 day waiver. No comments.	Not applicable



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