Government of Western Australia
Department of Environment Regulation

Licence

Environmental Protection Act 1986, Part V

Licensee: Gardincourt Estate Pty Ltd

Licence: L7907/2004/8

Registered office: Suite 1
16 Prince Street
BUSSELTON WA 6280

ACN: 075 573 465

Premises address: Willow Bridge Estate
178 Gardincourt Drive
HENTY WA 6236
Being Lots 4 and 6 on Plan 14175 as depicted in Schedule 1

Issue date: Thursday, 25 June 2015

Commencement date: Wednesday, 1 July 2015

Expiry date: Tuesday, 30 June 2020

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
25	Alcoholic beverage manufacturing: premises on which an alcoholic beverage is manufactured and from which liquid waste is or is to be discharged onto land or into water.	350 kilolitres or more per year	1 000 kilolitres per annual period

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

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.

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
Willow Bridge Estate is located in south west Western Australia in the Geographe Wine Region. The winery is situated in the Ferguson Valley, which is 20 minutes from the coastal city of Bunbury and approximately 2 hours south of Perth. The winery is located on Gardincourt Drive in Henty in the Shire of Dardanup.

The winery is surrounded by other viticulture and open grazing country with patches of remnant vegetation. Neighbouring activities include horticultural activities such as grazing of cattle and sheep. Soil type consists of clay loam with areas of gravel/sand. The closest residence, except for the licensee's residence, is approximately 500 m west of the irrigation area.

The winery crushes approximately 500 tonnes of grapes per year, producing 1.4 to 2.3 megalitres of wastewater and up to 125 tonnes of marc per year. The main environmental risk posed by the site activity is associated with the nutrient rich wastewater generated by the wine making process.

Wastewater is treated in a main aeration tank which overflows to two small settling tanks that have poly pipes connected to transfer overflow of treated wastewater to the beginning of their irrigation zone. Uncontaminated stormwater can be diverted away from the treatment system when required. Sludge is periodically removed from the tanks and taken to the marc storage area.

Treated wastewater from the wastewater treatment system is gravity fed to an artificial wetland where it is initially discharged through a series of drainage channels. A storage pond down gradient of the irrigation area has the potential to receive treated wastewater during heavy rainfall events. The pond has an overflow into an ephemeral creek which flows into the adjacent property.

Wine marc is stored temporarily on a bunded compacted limestone hardstand pad. The pad has a 300 mm compacted limestone base, is approximately 15 x 20 m and is bunded with the same material. The pad slopes to the rear where leachate generated from the marc is captured by a slotted drain pipe connected to a 6 m^3 concrete sump. Collected leachate is periodically pumped out into a vessel and discharged to the start of the wastewater treatment system.

This Licence is the successor to licence L7907/2004/7 and includes a reassessment of the acceptability and impacts of all emissions and discharges from the Premises.

The licences and works approvals issued for the Premises for the 3 licences prior to issue of this Licence are:

Instrument log		
Instrument	**Issued**	**Description**
L7907/2004/5	29/02/2008	Licence re-issue
L7907/2004/6	19/03/2009	Licence re-issue
L7907/2004/7	06/03/2014	Licence re-issue
L7907/2004/7	07/08/2014	Licence amendment to REFIRE format
L7907/2004/8	DRAFT	Licence re-issue

Severance
It is the intent of these Licence conditions that they shall operate so that, if a condition or a part of a condition is beyond the power of this Licence to impose, or is otherwise *ultra vires* or invalid, that condition or part of a condition shall be severed and the remainder of these conditions shall nevertheless be valid to the extent that they are within the power of this Licence to impose and are not otherwise *ultra vires* or invalid.

END OF INTRODUCTION

Licence conditions

1 General

1.1 Interpretation

1.1.1 In the Licence, definitions from the *Environmental Protection Act 1986* apply unless the contrary intention appears.

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

'Act' means the *Environmental Protection Act 1986;*

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

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

'AS/NZS 5667.4' means the Australian Standard AS/NZS 5667.4 *Water Quality – Sampling – Guidance on sampling from lakes, natural and man-made;*

'AS/NZS 5667.6' means the Australian Standard AS/NZS 5667.6 *Water Quality – Sampling – Guidance on sampling of rivers and streams;*

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

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

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

'CEO' for the purpose of correspondence means;
Manager Licensing, Process Industries
Department of Environment Regulation
Locked Bag 33
CLOISTERS SQUARE WA 6850
Telephone: (08) 9333 7510
Facsimile: (08) 9333 7550
E-mail: industry.regulation@der.wa.gov.au;

'code of practice for the storage and handling of dangerous goods' means the 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;

'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 2.3 and 2.5;

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

'lees' means the material which accumulates in the bottom of grape juice or wine fermentation tanks;

'Licence' means this Licence numbered L7907/2004/8 and issued under the Act;

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

'marc' means grape material (mainly skin, pulp and seeds) which is left over after grape crushing and pressing;

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

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

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

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

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

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

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

'vintage' means the period of time during which the first and last grapes of the season are received for crushing.

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 version of that guideline or code of practice in force from time to time, and shall include any amendments or replacements to that guideline 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 materials 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 ensure that all wastewaters from alcoholic beverage manufacturing operations including wash down water, by-products wastewater and contaminated run-off are directed to a wastewater treatment system.

1.3.2 The Licensee shall ensure that waste material is only stored and/or treated within areas or compounds provided with the infrastructure detailed in Table 1.3.2.

Table 1.3.2: Containment infrastructure

Storage vessel or compound	Material	Infrastructure requirements
Catchment, settling and aeration tanks	Wastewater	Impermeable tanks with shadecloth covers
Marc storage area	Marc, lees, screening solids, wastewater treatment sludge and other organic solid wastes	A bunded compacted crushed limestone area with sealed drainage system capable of preventing surface run-off of leachate
Storage pond	Irrigated wastewater from wastewater treatment system	Constructed in-situ soil

1.3.3 The Licensee shall ensure that where wastes produced on the Premises are not taken off-site for lawful use or disposal, they are managed in accordance with the requirements in Table 1.3.3.

Table 1.3.3: Management of Waste

Waste Type	Disposal strategy	Operational requirements
Treated wastewater	Irrigation	The Licensee shall ensure irrigation meets the following requirements: - irrigation does not occur in areas where the water table rises to within 1 m of the surface during the irrigation period; - bunding/cut-off drains are maintained adjacent to wastewater irrigation areas such that run-off only discharges to a designated location identified on the Premises map in Schedule 1; - treated wastewater is evenly distributed over the irrigation area; - no soil erosion occurs; and - vegetation cover is maintained over the wastewater irrigation areas.
Marc, lees and other organic solid wastes	Offsite disposal	Stored on marc storage area prior to collection of the material by a licensed contractor for offsite reuse or disposal.
Leachate from marc storage area	Wastewater treatment system	Collected for periodic discharge to the start of the wastewater treatment system process.

1.3.4 The Licensee shall manage the wastewater treatment system such that:
(a) overtopping of the wastewater treatment system does not occur;
(b) uncontaminated stormwater runoff is prevented from entering the wastewater treatment system;
(c) there is no discernible leakage loss from the wastewater treatment system; and
(d) vegetation and floating debris (emergent or otherwise) is prevented from growing or accumulating in the wastewater treatment system.

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

2.3.1 The Licensee shall ensure that where waste is emitted to surface water from the emission points in Table 2.3.1 and identified on the map of emission points in Schedule 1 it is done so in accordance with the conditions of this Licence.

Table 2.3.1: Emission points to surface water

Emission point reference	Emission point reference on Map of emission points and monitoring locations	Description	Source including abatement
W1	Sample Point A	Discharge to surface water (ephemeral creek) via overflow from storage pond	Irrigated wastewater from wastewater treatment system

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	Emission point reference on Map of emission points and monitoring locations	Description	Source including abatement
L1	Irrigation Area	Outflow to irrigation area from wastewater treatment system	Winery wastewater treated via wastewater treatment system

2.5.2 The Licensee shall not cause or allow emissions to land that do not meet the limits listed in Table 2.5.2.

Table 2.5.2: Emission limits to land

Emission point reference	Parameter	Limit (including units)	Averaging period
L1	pH	5.5 – 8.5 (range)	Spot sample
	Load of total nitrogen	≤ 250 kg/ha	Annually
	Load of total phosphorus	≤ 50 kg/ha	Annually
	Load of biochemical oxygen demand (BOD)	≤ 30 kg/ha	Daily

2.6 Fugitive emissions

There are no specified conditions relating to odour 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 surface water sampling is conducted in accordance with AS/NZS 5667.4 or AS/NZS 5667.6 as relevant; and
(d) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured.

3.1.2 The Licensee shall ensure that monthly monitoring is undertaken at least 15 days apart.

3.1.3 The Licensee shall record production or throughput data and any other process parameters relevant to any non-continuous or CEMS monitoring undertaken.

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

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

3.2 Monitoring of 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

3.3.1 The Licensee shall undertake the monitoring in Table 3.3.1 according to the specifications in that table.

Table 3.3.1: Monitoring of point source emissions to surface water

Emission point reference	Monitoring point reference and location on Premises map	Parameter	Units	Averaging Period	Frequency
W1	Sample point A – discharge to surface water via overflow from the storage pond	pH	-	Spot sample	Monthly when flowing
		Electrical conductivity	mS/cm		
		Total nitrogen	mg/L		
		Total phosphorus	mg/L		
		Total dissolved solids (TDS)	mg/L		
		Total suspended solids (TSS)	mg/L		
		Biological oxygen demand (BOD)	mg/L		

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 and location on Map of emission points and monitoring locations	Parameter	Units	Averaging Period	Frequency
L1	M2 – inflow to wastewater treatment system	Volumetric flow rate	m^3/day	Monthly	Continuous
	M1 – Outflow from wastewater treatment system	pH	-	Spot sample	Monthly when irrigating
		Electrical conductivity	mS/cm		
		Total nitrogen	mg/L		
		Total phosphorus	mg/L		
		Total dissolved solids (TDS)	mg/L		
		Total suspended solids (TSS)	mg/L		
		Biological oxygen demand (BOD)	mg/L		

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	Parameter	Units	Averaging period	Frequency
Grapes	Grapes crushed	Tonnes	Annual	Each batch crushed
Alcoholic beverage	Alcoholic beverage produced	kL	Annual	Each batch produced

3.7 Process monitoring

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

3.8 Ambient environmental quality monitoring

There are no specified conditions relating to ambient environmental quality monitoring in this section.

3.9 Meteorological monitoring

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

4 Improvements

4.1 Improvement program

4.1.1 The Licensee shall complete the improvements in Table 4.1.1 by the date of completion in Table 4.1.1.

Table 4.1.2: Improvement program

Improvement reference	Improvement	Date of completion
IR1	The Licensee shall submit to the CEO a Nutrient and Irrigation Management Plan (NIMP). The NIMP shall include, but not be limited to, details of the: wastewater treatment system and process; composting and application of compost to land; irrigation of treated wastewater to artificial wetland; and treated wastewater storage pond and discharge to surface water.	31/12/2015

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 by 1 September 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 3.3.1	Monitoring of emissions to surface water	WR1
Table 3.5.1	Monitoring of emissions to land	LR1
Table 3.5.1	Volume of water used for irrigation	None specified
Table 2.5.2	Contaminant loading to land of parameters (total annual loading kg/ha/yr for nitrogen and phosphorus, average daily loading kg/ha/day for BOD).	None specified
Table 3.6.1	Monitoring of inputs and outputs	None specified
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 and Licence limits and/or targets

5.3 Notification

5.3.1 The Licensee shall ensure that the parameters listed in Table 5.3.1 are notified to the CEO 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]
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 usual 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		

Note 1: Notification requirements in the Licence shall not negate the requirement to comply with s72 of the Act
Note 2: Forms are in Schedule 2

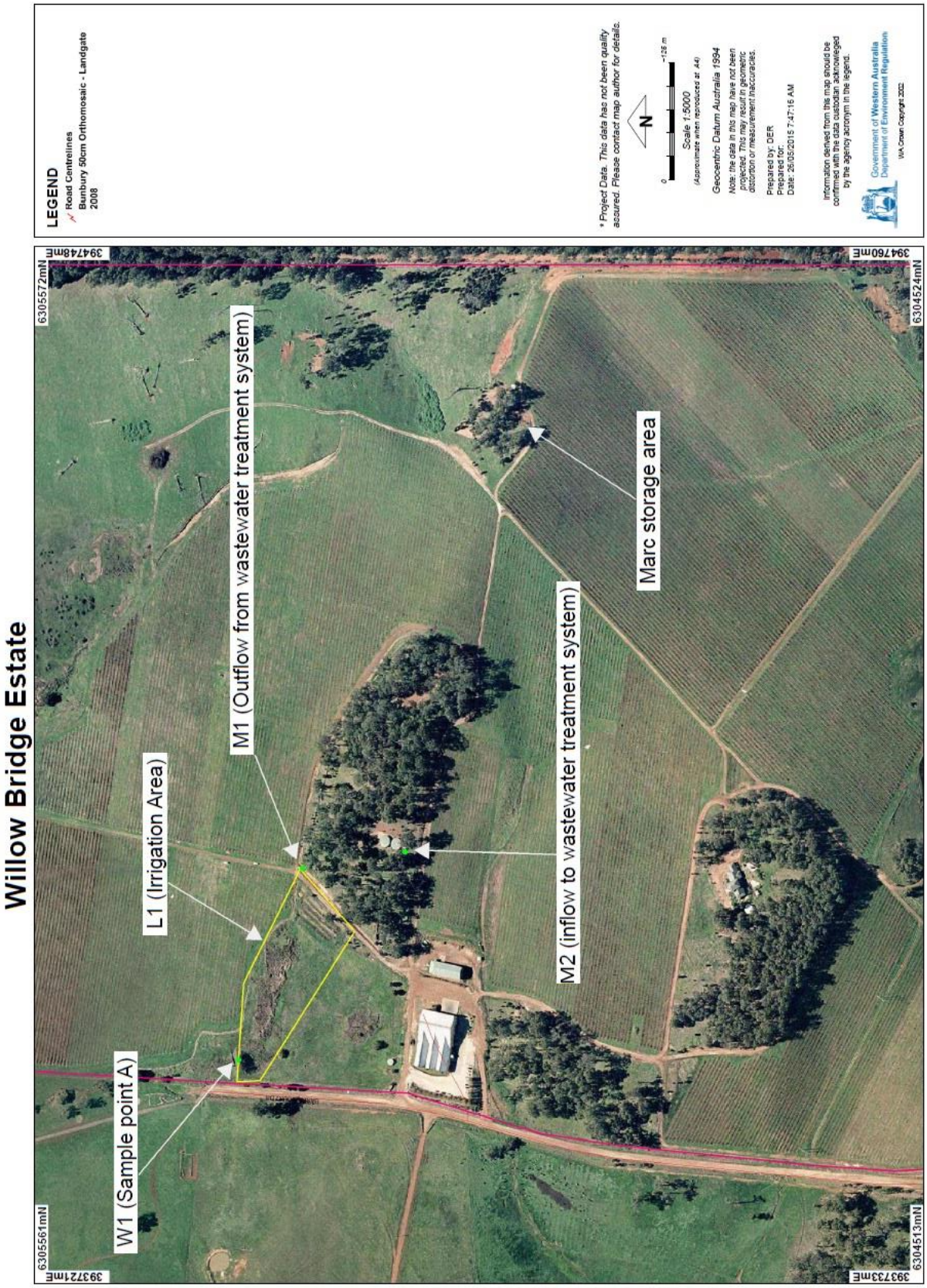
Schedule 1: Maps

Premises map

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

Map of emission points and monitoring locations

The locations of the emission points defined in Tables 2.3.1 and 2.5.1 and the locations of the monitoring points defined in Tables 3.3.1 and 3.5.1 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: Trading as:	ABN:
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?:
☐ Yes ☐ Reported to DER verbally Date _____ ☐ Reported to DER in writing Date _____ ☐ 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	□	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	□	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	□	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
	□	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)	□	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	□	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: _____

NAME:
(printed) _____

POSITION: _____

DATE: _____/_____/_____

SIGNATURE: _____

NAME:
(printed) _____

POSITION: _____

DATE: _____/_____/_____

SEAL (if signing under seal)

Licence: L7907/2004/8 Licensee: Gardincourt Estate Pty Ltd
Form: WR1 Period :
Name: Monitoring of point source emissions to surface water

Form WR1: Monitoring of point source emissions to surface water					
Emission point	**Parameter**	**Result**[1]	**Averaging period**	**Method**	**Sample date & times**
W1	pH		Spot sample		
W1	Electrical conductivity	mS/cm	Spot sample		
W1	Total Nitrogen	mg/L	Spot sample		
W1	Total phosphorus	mg/L	Spot sample		
W1	Total dissolved solids (TDS)	mg/L	Spot sample		
W1	Total suspended solids (TSS)	mg/L	Spot sample		
W1	Biochemical oxygen demand (BOD)	mg/L	Spot sample		

Note 1: All units are referenced to STP dry

Signed on behalf of Gardincourt Estate Pty Ltd: …….. Date: …….

Licence: L7907/2004/8
Form: LR1
Name: Monitoring of emissions to land

Licensee: Gardincourt Estate Pty Ltd
Period :

Form LR1: Monitoring of emissions to land

Emission point	Parameter	Result[1]	Averaging period	Method	Sample date & times
L1	pH		Spot sample		
L1	Electrical conductivity	mS/cm	Spot sample		
L1	Total Nitrogen	mg/L	Spot sample		
L1	Total Phosphorus	mg/L	Spot sample		
L1	Total Dissolved Solids (TDS)	mg/L	Spot sample		
L1	Total Suspended Solids (TSS)	mg/L	Spot sample		
L1	Biochemical oxygen demand (BOD)	mg/L	Spot sample		

Note 1: All units are referenced to STP dry

Signed on behalf of Gardincourt Estate Pty Ltd: …….. Date: …….

Licence: L7907/2004/8 Licensee: Gardincourt Estate Pty Ltd
Form: N1 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	
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 Gardincourt Estate Pty Ltd	
Date	

Government of Western Australia
Department of Environment Regulation

Decision Document

Environmental Protection Act 1986, Part V

Proponent: Gardincourt Estate Pty Ltd

Licence: L7907/2004/8

Registered office:	Suite 1 16 Prince Street BUSSELTON WA 6280
ACN:	075 573 465
Premises address:	Willow Bridge Estate 178 Gardincourt Drive HENTY WA 6236 Being Lots 4 and 6 on Plan 14175
Issue date:	Thursday, 25 June 2015
Commencement date:	Wednesday, 1 July 2015
Expiry date:	Tuesday, 30 June 2020

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:	Elizabeth Whisson Licensing Officer
Decision Document authorised by:	Jonathan Bailes Manager Licensing

Contents

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 ☐ New Licence ☒ Licence amendment ☐ Works Approval amendment ☐	
Activities that cause the premises to become prescribed premises	**Category number(s)**	**Assessed design capacity**
	25: Alcoholic beverage manufacturing	1 000 kilolitres per year
Application verified Application fee paid	Date: 20/04/2015 Date: 24/04/2015	
Works Approval has been complied with Compliance Certificate received	Yes☐ No☐ N/A☒ Yes☐ No☐ N/A☒	
Commercial-in-confidence claim	Yes☐ No☒	
Commercial-in-confidence claim outcome		
Is the proposal a Major Resource Project?	Yes☐ No☒	
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the *Environmental Protection Act 1986*?	Yes☐ No☒	Referral decision No: Managed under Part V ☐ Assessed under Part IV ☐
Is the proposal subject to Ministerial Conditions?	Yes☐ No☒	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 *Environmental Protection Act 1986*)?	Yes☐ No☒ Department of Water consulted Yes ☐ No ☒	
Is the Premises within an Environmental Protection Policy (EPP) Area Yes☒ No☐ *Environmental Protection (South West Agricultural Zone Wetlands) Policy 1998*		
Is the Premises subject to any EPP requirements? Yes☐ No☒ There is no alteration or discharge to waters associated with this proposal and the premises does not include any registered wetland or portion of a registered water body or watercourse relevant to the EPP.		

3 Executive summary of proposal and assessment

Willow Bridge Estate is located in south west Western Australia in the Geographe Wine Region. The winery is situated in the Ferguson Valley, which is 20 minutes from the coastal city of Bunbury and approximately 2 hours south of Perth. The winery is located on Gardincourt Drive in Henty in the Shire of Dardanup.

The winery is surrounded by other viticulture and open grazing country with patches of remnant vegetation. Neighbouring activities include horticultural activities such as grazing of cattle and sheep. Soil type consists of clay loam with areas of gravel/sand. The closest residence, except for the licensee's residence, is approximately 500 m west of the irrigation area.

The winery crushes approximately 500 tonnes of grapes per year, producing 1.4 to 2.3 megalitres of wastewater and up to 125 tonnes of marc per year. The main environmental risk posed by the site activity is associated with the nutrient rich wastewater generated by the wine making process.

Wastewater is treated in a main aeration tank which overflows to two small settling tanks that have poly pipes connected to transfer overflow of treated wastewater to the beginning of their irrigation zone. Uncontaminated stormwater can be diverted away from the treatment system when required. Sludge is periodically removed from the tanks and taken to the marc storage area.

Treated wastewater from the wastewater treatment system is gravity fed to an artificial wetland where it is initially discharged through a series of drainage channels. A storage pond down gradient of the irrigation area has the potential to receive treated wastewater during heavy rainfall events. The pond has an overflow into an ephemeral creek which flows into the adjacent property.

Wine marc is stored temporarily on a bunded compacted limestone hardstand pad. The pad has a 300 mm compacted limestone base, is approximately 15 x 20 m and is bunded with the same material. The pad slopes to the rear where leachate generated from the marc is captured by a slotted drain pipe connected to a 6 m^3 concrete sump. Collected leachate is periodically pumped out into a vessel and discharged to the start of the wastewater treatment system.

For this reissue DER has reassessed the acceptability and impacts of all emissions and discharges from the Premises and has revisited existing emission control levels.

4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987* and DER's Operational Procedure on Assessing Emissions and Discharges from Prescribed Premises. Where other references have been used in making the decision they are detailed in the decision document.

DECISION TABLE				
Works Approval / Licence section	**Condition number W = Works Approval L= Licence**	**OSC or NSC**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
General conditions	L1.2.5	OSC	**Operation** Emission Description *Emission: S*tormwater contaminated by wine making and associated activities leaving the premises during rainfall events. *Impact:* Contamination of surrounding land and surface water drainage systems with nutrient rich stormwater. *Controls:* The Licensee directs contaminated stormwater through a wastewater treatment system (WWTS) during operation of the winery. Uncontaminated stormwater is diverted away from the WWTS. Clean stormwater is able to be diverted away from the WWTS outside of vintage periods to prevent overloading the system. Risk Assessment *Consequence*: Moderate *Likelihood:* Possible *Risk Rating:* Moderate Regulatory Controls OSC 1.2.5(a) has been included to minimise the risk of stormwater being contaminated from activities on the site. OSC 1.2.5(b) has been included to ensure all contaminated or potentially contaminated stormwater is treated prior to discharge to the authorised irrigation area.	General provisions of the *Environmental Protection Act 1986* *Environmental Protection (Unauthorised Discharges) Regulations 2004*

DECISION TABLE				
Works Approval / Licence section	**Condition number W = Works Approval L= Licence**	**OSC or NSC**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
			Residual Risk *Consequence:* Moderate *Likelihood:* Possible *Risk Rating:* Moderate	
Premises operation	L1.3.1 L1.3.2 L1.3.3 L1.3.4	OSC OSC OSC OSC	**Operation** Emission Description *Emission:* Winery wastewater contaminated by wine making and associated activities. *Impact:* Contamination of surrounding land and surface water systems due to elevated nutrient levels. The closest watercourse, Henty Brook, is located approximately 500 m south of the premises boundary (1.3 km south of WWTS). *Controls*: Winery operations are undertaken within a concreted hardstand area which drains all wastewater to the WWTS during operation. The marc storage area is a compacted crushed limestone hardstand area designed and constructed to contain all solid and liquid wastes deposited and directs collected leachate into a 6 m^3 concrete sump. This sump is periodically pumped out (less than once a year) into a vessel with the leachate then being discharged back into the WWTS for treatment. Risk Assessment *Consequence*: Moderate *Likelihood:* Possible *Risk Rating:* Moderate Regulatory Controls OSC 1.3.1 is included in the licence to ensure all winery wastewaters are directed into the WWTS and are not released into the environment. OSC 1.3.2 is included to specify containment infrastructure requirements for wastewater (and organic waste) to minimise the risk of release to the environment. The WWTS tanks have been added to this condition.	General provisions of the *Environmental Protection Act 1986* *Environmental Protection (Unauthorised Discharges) Regulations 2004*

DECISION TABLE				
Works Approval / Licence section	**Condition number W = Works Approval L= Licence**	**OSC or NSC**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
			OSC1.3.3 is included in the licence to ensure leachate from the marc storage area is directed back to the start of the WWTS for treatment. OSC 1.3.4 is included in the licence to specify management requirements for the WWTS to ensure it is managed in a manner that reduces the risk of release to the environment, overloading, and damage to the system. Residual Risk *Consequence:* Moderate *Likelihood:* Possible *Risk Rating:* Moderate Note: Treated wastewater irrigation controls appear in condition 1.3.3; however, these have been assessed under the "Emissions to Land" section.	
Emissions general	L2.1.1	OSC	Limits will be set through condition 2.5.2 of the licence and therefore OSC 2.1.1 regarding recording and investigation of exceedances of limits or targets has been included.	N/A
Point source emissions to air including monitoring	N/A	N/A	**Operation** No significant point source emissions to air are known to occur from the winery; therefore, no specified conditions relating to point source emissions to air or the monitoring of such emissions are required on the licence.	N/A
Point source emissions to surface water including monitoring	L2.3.1 L3.3.1	OSC OSC	DER's assessment and decision making are detailed in Appendix A.	General provisions of the *Environmental Protection Act 1986* *Environmental Protection (Unauthorised Discharges) Regulations 2004*

DECISION TABLE				
Works Approval / Licence section	**Condition number W = Works Approval L= Licence**	**OSC or NSC**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
Point source emissions to groundwater including monitoring	N/A	N/A	**Operation** No point source emissions to groundwater are known to occur from the winery; therefore, no specified conditions relating to point source emissions to groundwater or the monitoring of such emissions are required on the licence.	N/A
Emissions to land including monitoring	L1.3.3 L2.5.1 L2.5.2 L3.5.1	OSC OSC OSC OSC	**Operation** DER's assessment and decision making are detailed in Appendix A.	*Environmental Protection (Unauthorised Discharges) Regulations 2004* General provisions of the *Environmental Protection Act 1986*
Fugitive emissions	N/A	N/A	**Operation** No fugitive dust emissions are known to occur from the winery; therefore, no specified conditions relating to dust are required on the licence.	N/A
Odour	N/A	N/A	**Operation** <u>Emission Description</u> *Emission:* Odour emissions from the Wastewater Treatment System (WWTS), irrigation area and marc storage area due to the breakdown of organics and elevated nutrient levels. *Impact:* Nuisance impacts on neighbouring residences. The closest residence, apart from the Licensee's residence, is approximately 500 m west of the winery and there are a several other rural residences within a 1.3 km radius of the WWTS. No complaints relating to odour from the Premises have been received by DER or the Licensee.	EPA Guidance Statement No.3: *Separation Distances between Industrial and Sensitive Land Uses*

DECISION TABLE				
Works Approval / Licence section	**Condition number W = Works Approval L= Licence**	**OSC or NSC**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
			Controls: The WWTS is designed to reduce BOD and nutrient levels and consists of a catchment tank, settling tank, main aeration tank and two small settling tanks. The tanks are open top; however they are covered in shadecloth. Marc and other organic winery wastes, except for white grape skins and stalks (these are fed to cattle on the property), produced during vintage are collected and stored in a designated marc storage area approximately 900 m from the nearest residential area. The collected waste is currently routinely removed by waste contractors for offsite disposal. Risk Assessment *Consequence*: Insignificant *Likelihood:* Unlikely *Risk Rating:* Low Regulatory Controls The Environment Protection Authority's Guidance Statement No. 3: *Separation Distances between Industrial and Sensitive Land Uses* suggests a buffer distance of at least 500 m from a winery. This premises meets the suggested buffer distance. Odour has been assessed as low risk; therefore no specified conditions relating to odour are required in the licence. Residual Risk *Consequence*: Insignificant *Likelihood:* Unlikely *Risk Rating:* Low	

DECISION TABLE				
Works Approval / Licence section	**Condition number W = Works Approval L= Licence**	**OSC or NSC**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
Noise			**Operation** Emission Description *Emission:* Noise emissions from operation of winery refrigeration unit and WWTS. *Impact:* Nuisance impacts on neighbouring residences; the closest is 700 m west of the WWTS. *Controls:* The winery is at least 500 m from the nearest sensitive premises. The WWTS has one aerator. Risk Assessment *Consequence*: Insignificant *Likelihood:* Unlikely *Risk Rating:* Low Regulatory Controls The Environment Protection Authority's Guidance Statement No. 3: *Separation Distances between Industrial and Sensitive Land Uses* suggests a buffer distance of at least 500 m from a winery. This premises meets the suggested buffer distance. Noise has been assessed as low risk; therefore, no specified conditions relating to noise is required in the licence. Additionally, the Licensee must comply with the requirements of the *Environmental Protection (Noise) Regulations 1997*. Residual Risk *Consequence*: Insignificant *Likelihood:* Unlikely *Risk Rating:* Low	EPA Guidance Statement No.3: *Separation Distances between Industrial and Sensitive Land Uses* *Environmental Protection (Noise) Regulations 1997*

DECISION TABLE				
Works Approval / Licence section	**Condition number W = Works Approval L= Licence**	**OSC or NSC**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
Monitoring general	L3.1.1 L3.1.2 L3.1.3 L3.1.4 L3.1.5	OSC OSC OSC OSC OSC	Monitoring of emissions to surface water and emissions to land are included in the licence; therefore general monitoring conditions relating to collection, preservation and testing of samples (OSC3.1.1), monitoring intervals (OSC3.1.2), recording of data (OSC3.1.3), and monitoring equipment calibration requirements (OSC 3.1.4 – 3.1.5) have been included in the licence.	General provisions of the *Environmental Protection Act 1986*
Monitoring of inputs and outputs	L3.6.1	OSC	**Operation** OSC 3.6.1 has been added to this licence due to there being a relationship between the tonnes of grapes crushed, the volume of alcoholic beverage produced and the volume of wastewater generated. Monitoring of inputs and outputs will allow a comparison with the approved premises production capacity.	N/A
Process monitoring	N/A	N/A	**Operation** There are no process monitoring requirements at the Premises that require licence conditions.	N/A
Ambient quality monitoring	N/A	N/A	**Operation** There are no known emissions from the premises requiring ambient quality monitoring. Due to the relatively small scale of the premises and irrigation area, ambient groundwater quality monitoring is not required. The limits set for the quality of irrigation water are specified to ensure minimal impact on soil therefore ambient soil monitoring is not required.	N/A
Meteorological monitoring	N/A	N/A	**Operation** There are no known emissions from the premises that require meteorological monitoring conditions.	N/A
Improvements	L4.1.1 L4.1.2	OSC OSC	**Operation** The Licensee has not yet developed a nutrient irrigation management plan (NIMP). A documented NIMP will ensure site specific factors are considered and ensure impacts on the irrigation area, surface water and surrounding areas are minimised (refer to risk assessment in Appendix A).	N/A

DECISION TABLE				
Works Approval / Licence section	**Condition number W = Works Approval L= Licence**	**OSC or NSC**	**Justification (including risk description & decision methodology where relevant)**	**Reference documents**
Information	L5.2.2 L5.3.1	OSC OSC	**Operation** Annual reporting requirements have been specified in the licence in SC 5.2.1. OSC 5.2.2 has also been included to ensure the annual report contains relevant production data and trend analysis to enable performance of the WWTS to be assessed over time. OSC 5.3.1 has been included on the licence to ensure that DER is made aware of any breaches of limits or malfunctions of the WWTS or any other pollution control equipment within a timely manner.	N/A
Licence Duration	N/A	N/A	This licence has been issued for a period of 5 years due to the overall low risk nature of the operation.	N/A

5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
04/05/2015	Application advertised in West Australian (or other relevant newspaper)	None received	N/A
18/06/2015	Proponent sent a copy of draft instrument	No comments	N/A

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

Appendix A

Point source emissions to surface water and emissions to land including monitoring
The Licensee directs wastewater to the WWTS for treatment prior to discharge to the irrigation area. The WWTS accepts between 1.4 and 2.3 megalitres of wastewater per annum, measured by a flow meter as wastewater enters the main aeration tank. After treatment in the aeration tank wastewater flows via gravity to two settling tanks connected in series and is then gravity fed to the artificial wetland irrigation area. The irrigation area is approximately 0.84 ha, consisting of a number of zig-zag drainage channels with reeds that eventually flow into a treated water storage dam at the end of the irrigation area. The storage dam can overflow following periods of high rainfall into an ephemeral creek that directs water towards Henty Brook approximately 2.2 km downstream.

Emission Risk Assessment – Operations
Emission Description
Emission: Irrigation of treated winery wastewater, organic solid waste storage and overflow of storage dam to ephemeral creek.
Impact: Contamination of surrounding land and surface water with excess nutrients (primarily nitrogen and phosphorus). There is also potential for odour, ponding, water logging and erosion to occur within and beyond the irrigation area if appropriate controls are not implemented. The depth to groundwater is at least 2 m, therefore there is not expected to be any impact on groundwater due to the relatively small scale of the operation.
Controls: Wastewater is treated through the WWTS prior to irrigation. Irrigation predominately occurs in summer. Clean stormwater is directed away from the WWTS. Organic solid wastes, including marc, lees and screening solids, are stored on a designated compacted crushed limestone area with bunding and a sealed drainage system prior to periodic collection by a licensed contractor for offsite disposal.

Risk Assessment
Consequence: Minor
Likelihood: Possible
Risk Rating: Moderate

Regulatory Controls
DER has imposed emission limits on the quality of treated wastewater being irrigated through OSC 2.5.2. The limits specified are based on the maximum sustainable nutrient load defined in Water Quality Protection Note No. 22 (Department of Water) for the soil type specific for the irrigation area (Risk Category C). pH limits have been selected to ensure irrigation water is within allowable pH levels in accordance with the *Environmental Protection (Unauthorised Discharges) Regulations 2004*.

Monitoring requirements for emissions to land have been imposed through OSC 3.5.1 to demonstrate compliance with emission limits. Additional salinity and suspended solids parameters have been included as these can impact on performance of the WWTS or indicate there is a problem in the treatment cycle. Monitoring of flows into the WWTS is also included to ensure the system is not being overloaded and to enable irrigation loading rates to be calculated. Monitoring is only required during months that irrigation occurs.

Monitoring requirements for emissions to surface water have been imposed through OSC 3.3.1 to monitor potential impacts of the treated wastewater on the environment. Monitoring is only required during months that the storage pond overflows to the ephemeral creek.

OSC1.3.3 has been included to specify irrigation and organic solid waste operational requirements. The operational requirements specified are designed to minimise the likelihood of potential impacts occurring. In addition to this, OSC 4.1.1 has been included requiring the submission of a Nutrient and

Irrigation Management Plan (NIMP). A documented NIMP will ensure site specific factors are considered and ensure impacts on the irrigation area, surface water and surrounding areas are minimised.

Residual Risk
Consequence: Minor
Likelihood: Unlikely
Risk Rating: Moderate