



Licence

Environmental Protection Act 1986, Part V

Licensee: Xanadu Wines Pty Ltd

Licence: L7411/2000/9

Registered office: 262-273 Lormier Street
MARGARET RIVER WA 6285

ACN: 114 234 865

Premises address: Xanadu Winery
318 Boodijidup Road
MARGARET RIVER WA 6285
Being Lot 821 on Plan 135631 as depicted in Schedule 1.

Issue date: Thursday, 19 June 2014

Commencement date: Wednesday, 9 July 2014

Expiry date: Monday, 8 July 2019

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	2100 kilolitres per annual period

Conditions

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

Date signed: 14 January 2016

.....
Jonathan Bailes
Manager Licensing (Process Industries)
Officer delegated under section 20
of the *Environmental Protection Act 1986*



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Introduction

This Introduction is not part of the Licence conditions.

DER's industry licensing role

The Department of Environment Regulation (DER) is a government department for the state of Western Australia in the portfolio of the Minister for Environment. DER's purpose is to advise on and implement strategies for a healthy environment for the benefit of all current and future Western Australians.

DER has responsibilities under Part V of the *Environmental Protection Act 1986* (the Act) for the licensing of prescribed premises. Through this process DER regulates to prevent, control and abate pollution and environmental harm to conserve and protect the environment. DER also monitors and audits compliance with works approvals and licence conditions, takes enforcement action as appropriate and develops and implements licensing and industry regulation policy.

Licence requirements

This Licence is issued under Part V of the Act. Conditions contained within the Licence relate to the prevention, reduction or control of emissions and discharges to the environment and to the monitoring and reporting of them.

Where other statutory instruments impose obligations on the Premises/Licensee the intention is not to replicate them in the licence conditions. You should therefore ensure that you are aware of all your statutory obligations under the Act and any other statutory instrument. Legislation can be accessed through the State Law Publisher website using the following link:

<http://www.slp.wa.gov.au/legislation/statutes.nsf/default.html>

For your Premises relevant statutory instruments include but are not limited to obligations under the:

- *Environmental Protection (Unauthorised Discharges) Regulations 2004* – these Regulations make it an offence to discharge certain materials such as contaminated stormwater into the environment other than in the circumstances set out in the Regulations.
- *Environmental Protection (Controlled Waste) Regulations 2004* - these Regulations place obligations on you if you produce, accept, transport or dispose of controlled waste.
- *Environmental Protection (Noise) Regulations 1997* – these Regulations require noise emissions from the Premises to comply with the assigned noise levels set out in the Regulations.

You must comply with your licence. Non-compliance with your licence is an offence and strict penalties exist for those who do not comply.



Licence holders are also reminded of the requirements of section 53 of the Act which places restrictions on making certain changes to prescribed premises unless the changes are in accordance with a works approval, licence, closure notice or environmental protection notice.

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

Xanadu Wines Pty Ltd (Xanadu) operate a winery approximately 2.5km south-west of Margaret River and 280 km south of Perth. Grapes are sourced from the 64 hectares (ha) of vineyards on-site.

The site consists of vineyards, a winery complex, wastewater treatment system and irrigation area, and two irrigation dams. The surrounding area is agricultural and woodland with land used as vineyards and grazing. There are several properties close to the premises boundary, in particular on the western edge of the site with several less than 100m from the boundary.

A minor perennial stream runs through the premises along the southern boundary, and there are two earth dams on site into which the stream flows.

Wastewater and stormwater are directed to an impervious collection sump tank (<10kL), before the treatment plant. The sump contains a stormwater diversion unit, which measures electrical conductivity and pH to determine if diversion to an on-site irrigation dam is acceptable. Wastewater diverted from the collection sump tank is directed to one of three underground aerated buffering tanks. A flocculent is added to remove suspended solids while the wastewater is aerated; in-line pH adjustment also takes place. Wastewater is then directed to a package wastewater treatment system, where clarification, chemical addition and aeration occur. Treated wastewater is then directed to a series of holding tanks, before irrigation of an adjacent paddock. Approximately 4,000kL per year of treated wastewater is irrigated over a designated 1.4ha of various plant species, including Elderberry, Bana Grass, Golden Wreath Wattle and Kikuyu grass.

Approximately 330 tonne of grape marc is expected to be produced on an annual basis, primarily during the vintage period (February to May). Marc is removed from the press and transferred to a limestone pad. The limestone pad is made up of crushed limestone and maintained annually through resurfacing. Marc, screening solids, lees, wastewater treatment sludge and other organic solid wastes are composted on the limestone pad. Leachate and runoff from the limestone pad are directed back to the wastewater treatment system. Composted material is taken off-site or spread back onto the vineyards.

This Licence is the result of an amendment sought by the Licensee to change the description of the marc pad, alter the averaging period of the pH limit for emissions to land, and allow the in-situ testing of pH.



The licences issued for the Premises since 05/07/2000 are:

Instrument log		
Instrument	Issued	Description
L7411/2000/1	05/07/2000	Licence re-issue
L7411/2000/2	25/07/2001	Licence re-issue
L7411/2000/3	05/07/2002	Licence re-issue
L7411/2000/4	07/07/2003	Licence re-issue
L7411/2000/5	08/07/2004	Licence re-issue
L7411/2000/6	09/07/2005	Licence re-issue
L7411/2000/7	09/07/2008	Licence re-issue
L7411/2000/8	09/07/2011	Licence re-issue
L7411/2000/9	19/06/2014	Licence reissue and format conversion
L7411/2000/9	14/01/2016	Licence amendment

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 4482.1-2005' means the Australian Standard AS 4482.1-2006 *Guide to the investigation and sampling of sites with potentially contaminated soil - Non-volatile and semi-volatile compounds*;

'AS 4482.2-1999' means the Australian Standard AS 4482.2-1999 *Guide to the sampling and investigation of potentially contaminated soil - Volatile substances*;

'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*;

'averaging period' means the time over which a limit 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:

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

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

'**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 L7411/2000/9 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;

'**mS/cm**' means millisiemens per centimetre;

'**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;

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

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

'**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.



- 1.1.5 Nothing in the Licence shall be taken to authorise any emission that is not mentioned in the Licence, where the emission amounts to:
- (a) pollution;
 - (b) unreasonable emission;
 - (c) discharge of waste in circumstances likely to cause pollution; or
 - (d) being contrary to any written law.

1.2 General conditions

- 1.2.1 The Licensee shall operate and maintain all pollution control and monitoring equipment to the manufacturer’s specification or any relevant and effective internal management system.
- 1.2.2 The Licensee shall immediately recover, or remove and dispose of spills of environmentally hazardous materials outside an engineered containment system.

1.3 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 1.3.1.

Table 1.3.1: Containment infrastructure		
Storage vessel or compound	Material	Infrastructure requirements
Storage sumps	Wastewater/stormwater	Concrete lined sump
Rotary screen	Wastewater	Concrete lined sump
Aerated buffering tanks	Wastewater	Concrete tanks
Clarifier	Wastewater	Stainless steel tank
Backwash tank	Treated wastewater	Polyethylene tank
Irrigation holding tanks	Treated wastewater	Polyethylene tank
Solid waste storage area and composting area	Marc, lees and other organic solid wastes	Bunded compacted limestone area with sealed drainage system capable of preventing surface run-off of leachate

- 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 1.3.2.



Table 1.3.2: Management of Waste		
Waste type	Disposal strategy	Operational requirements
Treated wastewater	Irrigation	The Licensee shall ensure irrigation meets the following requirements: <ul style="list-style-type: none"> i) irrigation does not occur in areas where the water table rises to within 1 meter of the surface during the irrigation period; ii) irrigation does not occur within 100m of a surface water body excluding dams within premises boundary; iii) bunding/cut-off drains are maintained adjacent to wastewater irrigation areas such that run-off only discharges to a designated location identified in the map of emission points in Schedule 1; iv) no irrigation generated run-off, spray drift or discharge occurs beyond the boundary of the Premises; v) treated wastewater is evenly distributed over the irrigation area; vi) no soil erosion occurs; vii) vegetation cover is maintained over the wastewater irrigation areas; and viii) irrigation does not occur on land that is water logged.
Marc, lees, wastewater treatment sludge and other organic solid wastes	Composting	Composted prior to spreading on land for use as a soil conditioner.
Composted waste	On-site application to land	Composted waste shall be disposed of evenly and shall not be applied to land within 50m from of any defined watercourse, wetland or external property boundary.

- 1.3.4 The Licensee shall manage the wastewater treatment system such that:
- (a) overtopping of the wastewater treatment system does not occur;
 - (b) stormwater runoff is prevented from entering the wastewater treatment system;
 - (c) there is no discernible seepage 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 specified in any part of section 2 of this Licence.

2.2 Emissions to land

- 2.2.1 The Licensee shall ensure that where waste is emitted to land from the emission points in Table 2.2.1 and identified on the map of emission points in Schedule 1 it is done so in accordance with the conditions of this licence.



Table 2.2.1: Emissions to land

Emission point reference and location on Map of emission points	Description	Source including abatement
L1	Irrigation area	Winery wastewater treated via wastewater treatment system

2.2.2 The Licensee shall not cause or allow emissions to land greater than the limits listed in Table 2.2.2.

Table 2.2.2: Emission limits to land

Emission point reference	Parameter	Limit (including units)	Averaging period
L1	pH	5.5 – 8.5	Spot sample
	Load of total nitrogen	250 kg/ha/yr	Annually
	Load of total phosphorus	50 kg/ha/yr	
	Load of Biochemical Oxygen Demand (BOD)	30 kg/ha/day	Monthly

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 soil sampling is conducted in accordance with AS 4482.1-2005 and AS 4482.2-1999 as relevant; and
- (d) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in the relevant table.

3.1.2 The Licensee shall ensure that:

- (a) monthly monitoring is undertaken at least 15 days apart; and
- (b) six monthly monitoring is undertaken at least 5 months apart.

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

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

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

3.2 Monitoring of emissions to land

3.2.1 The Licensee shall undertake the monitoring in Table 3.2.1 according to the specifications in that table.



Table 3.2.1: Monitoring of emissions to land					
Emission point reference	Monitoring point reference and location on Map of monitoring locations	Parameter	Units	Averaging Period	Frequency
L1	DP1 – Outflow from process equipment to irrigation area	Volumetric flow rate (cumulative)	m ³	Monthly	Continuous
		pH ¹	-	Spot sample	Monthly while irrigating
		Electrical conductivity ¹	mS/cm		
		Total nitrogen	mg/L		
		Total phosphorus			
		Total dissolved solids (TDS)			
		Total suspended solids (TSS)			
Biochemical oxygen demand (BOD)					

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

3.3 Ambient environmental quality monitoring

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 ambient soil quality				
Monitoring point reference and location on Map of monitoring locations	Parameter	Units	Averaging period	Frequency
SSA1, SSA2 (marc pad)	pH	-	Spot sample	Six monthly
	Electrical conductivity	mS/cm		
	Ammoniacal nitrogen	mg/kg		
	Nitrate			
	Orthophosphorus			

4 Information

4.1 Records

4.1.1 All information and records required by the Licence shall:

- (a) be legible;
- (b) if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
- (c) except for records listed in 4.1.1(d) be retained for at least 6 years from the date the records were made or until the expiry of the Licence or any subsequent licence; and
- (d) for those following records, be retained until the expiry of the Licence and any subsequent licence:
 - (i) off-site environmental effects; or
 - (ii) matters which affect the condition of the land or waters.

4.1.2 The Licensee shall ensure that:

- (a) any person left in charge of the Premises is aware of the conditions of the Licence and has access at all times to the Licence or copies thereof; and
- (b) any person who performs tasks on the Premises is informed of all of the conditions of the Licence that relate to the tasks which that person is performing.



4.1.3 The Licensee shall complete an Annual Audit Compliance Report indicating the extent to which the Licensee has complied with the conditions of the Licence, and any previous licence issued under Part V of the Act for the Premises for the previous annual period.

4.1.4 The Licensee shall implement a complaints management system that as a minimum records the number and details of complaints received concerning the environmental impact of the activities undertaken at the Premises and any action taken in response to the complaint.

4.2 Reporting

4.2.1 The Licensee shall submit to the CEO an Annual Environmental Report by 1 August each year. The report shall contain the information listed in Table 4.2.1 in the format or form specified in that table.

Table 4.2.1: Annual Environmental Report		
Condition or table (if relevant)	Parameter	Format or form¹
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken	None specified
Table 1.3.2	Quantity of composted material applied to the premises, including the application rate (in m ³ /ha)	
Table 3.2.1	Monitoring of emissions to land	
	Contaminant loading to land of parameters (total annual loading kg/ha/year for nitrogen and phosphorus, average daily loading kg/ha/day for BOD).	
	Monthly volumes of water used for irrigation	
Table 3.3.1	Monitoring of ambient soil quality	
-	Kilolitres of alcoholic beverage manufactured per annual period	
-	Tonnes of grapes crushed per annual period	
4.1.3	Compliance	Annual Audit Compliance Report (AACR)
4.1.4	Complaints summary	None specified

Note 1: Forms are in Schedule 2

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

4.3 Notification

4.3.1 The Licensee shall ensure that the parameters listed in Table 4.3.1 are notified to the CEO in accordance with the notification requirements of the table.



Table 4.3.1: Notification requirements			
Condition or table (if relevant)	Parameter	Notification requirement¹	Format or form²
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

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

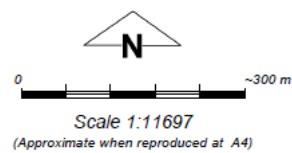
Note 2: Forms are in Schedule 2



Schedule 1: Maps

Premises map

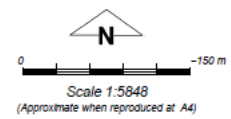
The Premises is shown in the map below. The pink line depicts the Premises boundary.





Map of emission points

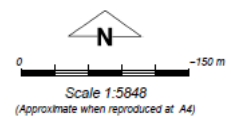
The locations of the emission points defined in Tables 2.2.1 and 2.2.2 are shown below.





Map of monitoring locations

The locations of the monitoring points defined in Tables 3.2.1 and 3.3.1 are shown below.





Schedule 2: Reporting & notification forms

These forms are provided for the proponent to report monitoring and other data required by the Licence. They can be requested in an electronic format.

ANNUAL AUDIT COMPLIANCE REPORT PROFORMA

SECTION A LICENCE DETAILS

Licence Number:	Licence File Number:
Company Name:	ABN:
Trading as:	
Reporting period: _____ to _____	

STATEMENT OF COMPLIANCE WITH LICENCE CONDITIONS

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

Yes Please proceed to Section C

No Please proceed to Section B

Each page must be initialled by the person(s) who signs Section C of this Annual Audit Compliance Report (AACR).

Initial:



SECTION B

DETAILS OF NON-COMPLIANCE WITH LICENCE CONDITION.

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

a) Licence condition not complied with:	
b) Date(s) when the non compliance occurred, if applicable:	
c) Was this non compliance reported to DER?:	
<input type="checkbox"/> Yes <input type="checkbox"/> Reported to DER verbally Date _____ <input type="checkbox"/> Reported to DER in writing Date _____	<input type="checkbox"/> No
d) Has DER taken, or finalised any action in relation to the non compliance?:	
e) Summary of particulars of the non compliance, and what was the environmental impact:	
f) If relevant, the precise location where the non compliance occurred (attach map or diagram):	
g) Cause of non compliance:	
h) Action taken, or that will be taken to mitigate any adverse effects of the non compliance:	
i) Action taken or that will be taken to prevent recurrence of the non compliance:	

Each page must be initialled by the person(s) who signs Section C of this AACR

Initial:



SECTION C

SIGNATURE AND CERTIFICATION

This Annual Audit Compliance Report (AACR) may only be signed by a person(s) with legal authority to sign it. The ways in which the AACR must be signed and certified, and the people who may sign the statement, are set out below.

Please tick the box next to the category that describes how this AACR is being signed. If you are uncertain about who is entitled to sign or which category to tick, please contact the licensing officer for your premises.

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

It is an offence under section 112 of the *Environmental Protection Act 1986* for a person to give information on this form that to their knowledge is false or misleading in a material particular. There is a maximum penalty of \$50,000 for an individual or body corporate.

I/We declare that the information in this annual audit compliance report is correct and not false or misleading in a material particular.

SIGNATURE: _____

SIGNATURE: _____

NAME:
(printed) _____

NAME:
(printed) _____

POSITION: _____

POSITION: _____

DATE: ____/____/____

DATE: ____/____/____

SEAL (if signing under seal)



Licence: L7411/2000/9
Form: N1

Licensee: Xanadu Wines Pty Ltd
Date of breach:

Notification of detection of the breach of a limit.

These pages outline the information that the operator must provide. Units of measurement used in information supplied under Part A and B requirements shall be appropriate to the circumstances of the emission. Where appropriate, a comparison should be made of actual emissions and authorised emission limits.

Part A

Licence Number	
Name of operator	
Location of Premises	
Time and date of the detection	

Notification requirements for the breach of a limit

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

Part B

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

Name	
Post	
Signature on behalf of Xanadu Wines Pty Ltd	
Date	



Decision Document

Environmental Protection Act 1986, Part V

Proponent: Xanadu Wines Pty Ltd

Licence: L7411/2000/9

Registered office: 262-273 Lormier Street
MARGARET RIVER WA 6285

ACN: 114 234 865

Premises address: Xanadu Winery
318 Boodjijidup Road
MARGARET RIVER WA 6285
Being Lot 821 on Plan 135631 as depicted in Schedule 1.

Issue date: Thursday, 19 June 2014

Commencement date: Wednesday, 9 July 2014

Expiry date: Monday, 8 July 2019

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: Terrel MacGregor
Licensing Officer

Decision Document authorised by: Jonathan Bailes
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
	25	2100 kilolitres per annual period
Application verified	Date: N/A	
Application fee paid	Date: N/A	
Works Approval has been complied with	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
Compliance Certificate received	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
Commercial-in-confidence claim	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Commercial-in-confidence claim outcome		
Is the proposal a Major Resource Project?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the <i>Environmental Protection Act 1986</i> ?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input type="checkbox"/>
Is the proposal subject to Ministerial Conditions?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Ministerial statement No: EPA Report No:
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986</i>)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Department of Water consulted Yes <input 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

Xanadu Wines Pty Ltd (Xanadu) operate a winery approximately 2.5km south-west of Margaret River and 280 km south of Perth. Grapes are sourced from the 64 hectares (ha) of vineyards on-site.

The site consists of vineyards, a winery complex, wastewater treatment system and irrigation area, and two irrigation dams. The surrounding area is agricultural and woodland with land used as vineyards and grazing. There are several properties close to the premises boundary, in particular on the western edge of the site with several less than 100m from the boundary.

A minor perennial stream runs through the premises along the southern boundary, and there are two earth dams on site into which the stream flows.

Wastewater and stormwater are directed to an impervious collection sump tank (<10kL), before the treatment plant. The sump contains a stormwater diversion unit, which measures electrical conductivity and pH to determine if diversion to an on-site irrigation dam is acceptable. Wastewater diverted from the collection sump tank is directed to one of three underground aerated buffering tanks. A flocculent is added to remove suspended solids while the wastewater is aerated; in-line pH adjustment also takes place. Wastewater is then directed to a package wastewater treatment system, where clarification, chemical addition and aeration occur. Treated wastewater is then directed to a series of holding tanks, before irrigation of an adjacent paddock. Approximately 4,000kL per year of treated wastewater is irrigated over a designated 1.4ha of various plant species, including Elderberry, Bana Grass, Golden Wreath Wattle and Kikuyu grass.

Approximately 330 tonne of grape marc is expected to be produced on an annual basis, primarily during the vintage period (February to May). Marc is removed from the press and transferred to a limestone pad. The limestone pad is made up of crushed limestone and maintained annually through resurfacing. Marc, screening solids, lees, wastewater treatment sludge and other organic solid wastes are composted on the limestone pad. Leachate and runoff from the limestone pad are directed back to the wastewater treatment system. Composted material is taken off-site or spread back onto the vineyards.

This licence is the result of an amendment sought by the licensee to increase the annual throughput, change the description of the marc pad, alter the averaging period of the pH limit for emissions to land, and allow the in-situ testing of pH. The request to increase the premises throughput from 2100 kL to 3000 kL has not been assessed during this amendment following a review of the supporting information and discussions with the licensee regarding nutrient loading rates of the existing irrigation area.

Minor amendments to the licence have been made in accordance with administrative changes implemented within DER as published on DER's website.

DER has considered whether the risk profile of emissions and discharges from the premises has significantly changed since the previous licence was granted. No significant changes have occurred and, therefore, DER has not amended conditions relating to emissions and discharges.



4 Decision table

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

DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L = Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
Premises production or design capacity	N/A	<p>As a part of this licence amendment, the licensee sought to increase the approved premises production capacity from 2100 kL to 3000 kL of wine produced per annual period. DER has assessed the supporting information and concluded that the nutrient loading limit for BOD is being exceeded under the current production rates (e.g. BOD application exceeded the licence limit in May 2015 with a monthly average of 30.5kg/ha/day).</p> <p>Historical correspondence between DER and the licensee has highlighted errors in the method used by the licensee for calculating loading rates for assessment against licence limits. Exceedances of the BOD loading rate were identified during a compliance inspection in 2012 and highlighted during the licence reissue in 2014.</p> <p>Following discussion with the licensee regarding the above, the licensee confirmed that the increase in throughput was not required at the current time, and this aspect was withdrawn from the application. The licensee will continue to review the performance of the wastewater treatment plant and subsequent quality of irrigated water. Additional areas for irrigation may also be considered. BOD loading rates will continue to be monitored and reported in accordance with licence conditions.</p> <p>Should the licensee require an increase to the throughput at a later time, a new application for the increase will be submitted for assessment.</p>	<p>Applicant supporting documents</p> <ul style="list-style-type: none"> • P4 Form – increase production capacity • P4 Form – pH and hardstand • Licence amendment P4 continued <p>Xanadu Winery Pty Ltd 2014/2015 Annual Environmental Report</p> <p>Inspection letter and report 28 December 2012</p> <p>Email correspondence between Aaron Leeder, Raphaella De Oliveira and Jamie Piotrowski on 7 January 2013.</p>



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	L1.1.5 L1.2.3	<p>The definition for 'hardstand' has been removed from the licence. This definition related to the marc pad infrastructure requirements that are not applicable. See premises operation for further details.</p> <p>Condition 1.1.5 (formerly condition 1.2.2) has been moved into the general interpretation section of the licence in accordance with the current DER template.</p> <p>Condition 1.2.3 has been removed as requirements for the storage of material are detailed in condition 1.3.1.</p>	<p>Applicant supporting documents</p> <p>DER website - "Administrative changes implemented within the Department of Environment Regulation"</p> <p><i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i></p>
Premises operation	L1.3.1	<p>The containment infrastructure table (Table 1.3.1) has been updated to include infrastructure in which waste material is stored and/or treated in. This includes the storage sumps, rotary screen, aerated buffering tank, clarifier, backwash tank, irrigation holding tanks and solid waste storage area and composting area.</p> <p>The term 'hardstand' has been removed from the definitions section and infrastructure requirements for the solid waste storage area in Table 1.3.1. This term was added in error to the licence during the 2014 reissue and new format conversion. The marc pad consists of compacted limestone and does not meet the specification for hardstand as defined by DER. The pad is resurfaced each year and soil sampling is carried out biannually to ensure that solids and leachate are not discharging from the pad into the soil and groundwater.</p>	<p>Applicant supporting documents</p> <p><i>Environmental Protection Act 1986</i></p>



DECISION TABLE			
Works Approval / Licence section	Condition number W = Works Approval L= Licence	Justification (including risk description & decision methodology where relevant)	Reference documents
Emissions general		All 'no condition' conditions for point source emissions to air, surface water, groundwater, fugitive emissions, odour and noise have been removed from the licence.	DER website - <i>"Administrative changes implemented within the Department of Environment Regulation"</i>
Emissions to land including monitoring		The averaging period of pH stated in Table 2.5.2 has been changed from continuous to spot sample. The averaging period was added in error during the 2014 reissue. A spot sample averaging period is appropriate for the monthly monitoring of irrigated wastewater.	Applicant supporting documents
Monitoring general		All 'no condition' conditions for monitoring for point source emissions to air, surface water, monitoring of inputs, outputs, process monitoring and meteorological monitoring have been removed from the licence. In-field non-NATA accredited analysis of pH for wastewater has been permitted in the licence. This is based on the Licensee's limited ability to get samples to the analytical laboratory within the required timeframe. The Licensee has handheld pH monitoring equipment that is used regularly and calibrated with each use in accordance with the manufacturer's specifications.	Applicant supporting documents DER website - <i>"Administrative changes implemented within the Department of Environment Regulation"</i>
Information		To ensure that the actual throughput is provided in AER, the reporting of kL of alcoholic beverage manufactured per annual period and tonnes of grapes crushed per annual period has been included in table 5.2.1. The requirement to use form LR1 has been removed as the data is provided in the Licensee's own format AER template.	N/A



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
24/12/2015	Proponent sent a copy of draft instrument	Minor comments received regarding administrative details.	Changes made to instrument as per proponent comments.

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