



Mr Julian Langworthy
General Manager
Deep Woods Estate
PO Box 1982
WEST PERTH WA 6872

Dear Mr Langworthy

ENVIRONMENTAL PROTECTION ACT 1986: LICENCE GRANTED

Premises

Deep Woods Estate
Lot 10 on Diagram 75204 and Part of Lot 21 on Plan 20521 Yallingup Siding
Licence Number: L8849/2014/1

A licence under the *Environmental Protection Act 1986* (the Act) has been granted for the above premises. The Department of Environment Regulation will advertise the issuing of this licence in the public notices section of *The West Australian* newspaper.

The licence includes attached conditions. Under section 58(1) of the Act, it is an offence to contravene a condition of a licence. This offence carries a penalty of up to \$125,000 and a daily penalty of up to \$25,000.

In accordance with section 102(1)(c) of the Act, you have 21 days to appeal the conditions of the licence. Under section 102(3)(a) of the Act, any other person may also appeal the conditions of the licence. To lodge an appeal contact the Office of the Appeals Convenor on 6467 5190 or by email at admin@appealsconvenor.wa.gov.au.

Where a licence is issued for more than one year it requires payment of an annual fee and will cease to have effect if the fee is unpaid. It is the occupier's responsibility to lodge a fee application and pay the annual fee in sufficient time to avoid incurring a late payment fee and for processing to be completed before the licence anniversary date.

If you have any queries regarding the above information, please contact Amine Callegari on (08) 9724 6119.

Yours sincerely

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

19 March 2015



Licence

Environmental Protection Act 1986, Part V

Licensee: LTC Management Pty Ltd

Licence: L8849/2014/1

Registered office: Level 2
24 Outram Street
WEST PERTH WA 6005

ACN: 009 155 551

Premises address: Deep Woods Estate
871 Commonage Road
YALLINGUP WA 6282
Being Lot 10 on Diagram 75204 and Part of Lot 21 on Plan 20521 as depicted in Schedule 1

Issue date: Thursday, 19 March 2015

Commencement date: Monday, 23 March 2015

Expiry date: Sunday, 22 March 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	1400 kilolitres per annual period

Conditions

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

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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 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

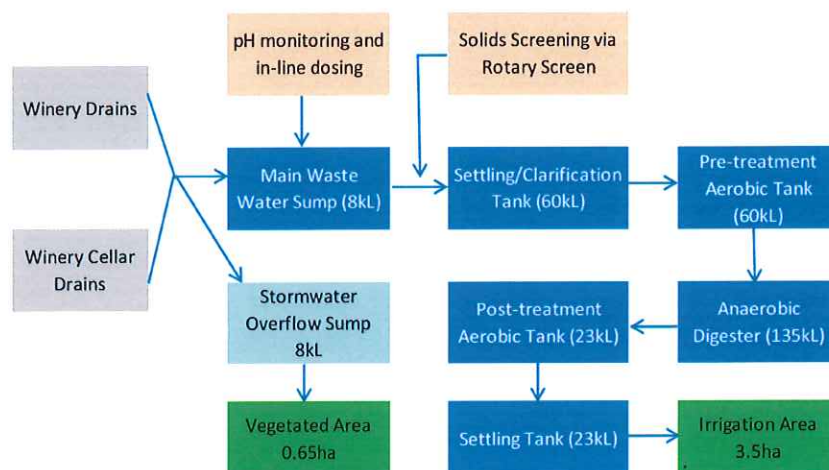
If your Premises has been assessed under Part IV of the Act you may have had conditions imposed by the Minister for Environment. You are required to comply with any conditions imposed by the Minister.

Premises description and Licence summary

Deep Woods Estate is situated within the locality of Yallingup Siding in the Shire of Busselton and consists of a vineyard, cellar door, wine processing facility, wastewater treatment system, water storage dam, a homestead and approximately 4 ha of remnant vegetation. The Estate is located within an agricultural land use zone with surrounding land uses including viticulture operations, tourism and rural residential. The nearest sensitive receptors are neighbouring wineries approximately 250m to the west and south east of the winery. There is also a rural residential development approximately 400m north west of the winery.

The winery was originally established in 1998 with a maximum crush capacity of 400 tonnes/year. In 2005 Deep Woods Estate was acquired by the Fogarty Wine Group (operating as LTC Management Pty Ltd). Grapes are sourced predominantly from on-site vines as well as other vineyards within the Margaret River wine region to produce their own brand of wines labelled "Deep Woods". In 2014 LTC Management applied for a works approval to upgrade their wastewater treatment system to enable the winery to increase production to a maximum crush capacity of 2 000 tonnes/year.

Winery infrastructure is located within a concrete hardstand area. Wastewater and stormwater from within the concreted hardstand is directed to a wastewater treatment system (WWTS) capable of treating up to 35 kL/day. The WWTS includes pH adjustment, solids screening, settlement and clarification, and aeration and anaerobic digestion to reduce Biological Oxygen Demand (BOD) to 150 mg/L, Nitrogen to 10 mg/L and Phosphorus to 5 mg/L. A schematic of the WWTS is included below:





The WWTS has been designed with the capability to divert stormwater to an overflow sump during high rainfall events (>20mm/day). Diverted uncontaminated stormwater will be used for irrigation. Diversion is prohibited during vintage (February to April) to ensure all potentially contaminated stormwater and wastewater is collected for treatment. Treated wastewater will be discharged through a cannon spray irrigation system onto a designated 3.5 ha area comprised of a paddock and a cricket oval.

Marc, lees, screening solids and other organic wastes generated by the winery and wastewater treatment activities are collected and stored on a designated concrete bunded area (marc storage area) prior to collection by a licensed contractor for offsite disposal. The bunded area includes a drainage sump which directs collected leachate back into the WWTS. Sludge collected in the anaerobic tank will be periodically extracted by a licensed contractor for offsite disposal.

All wastewater treatment occurs within tanks therefore the main odour source for the premises is expected to be the marc storage area. Due to the relatively small amount of solid waste being generated odour emissions are not expected to be significant.

This Licence is for the operation of the existing winery with an upgraded wastewater treatment and irrigation system established under works approval W5707/2014/1.

The licences and works approvals issued for the Premises since 09/10/2014 are:

Instrument log		
Instrument	Issued	Description
W5707/2014/1	9/10/2014	New works approval for upgrading the premises wastewater treatment and irrigation system to increase production capacity
L8849/2014/1	19/03/2015	New licence

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 April until 31 March 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 5667.10' 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
Email: industry.regulation@der.wa.gov.au;

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

'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;

'fugitive emissions' means all emissions not arising from point sources identified in Section 2.5;

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



'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 L8849/2014/1 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 substances are stored in accordance with the code of practice for the storage and handling of dangerous goods.



- 1.2.4 The Licensee shall immediately recover, or remove and dispose of spills of environmentally hazardous materials outside an engineered containment system.
- 1.2.5 The Licensee shall:
- implement all practical measures to prevent stormwater run-off becoming contaminated by the activities on the Premises; and
 - 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.

- 1.2.6 The Licensee shall maintain permanent markers along the boundary of the Premises so it can be identified on the ground.

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
Wastewater collection sump	Wastewater	Concrete lined sump
Settling/clarification, aerobic and anaerobic tanks		Sealed impermeable tanks
Marc storage area	Marc, lees, screening solids and other organic solid wastes	A bunded hardstand area capable of preventing surface run-off of leachate and with a drainage system that can return leachate to the settling/clarification tank.

- 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	<p>The Licensee shall ensure irrigation meets the following requirements:</p> <ul style="list-style-type: none">• Irrigation shall only occur in the designated irrigation area identified in the map of emission points in Schedule 1;• no irrigation generated run-off, spray drift or discharge occurs beyond the boundary of the designated irrigation area;• treated wastewater is evenly distributed over the irrigation area;• no soil erosion occurs;• vegetation cover is maintained over the wastewater irrigation area; and• irrigation does not occur on land that is water logged.



- 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) stormwater diversion into the stormwater overflow sump does not occur during vintage;
 - (d) there is no discernible seepage loss from the wastewater treatment system; and
 - (e) 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.

2.2-2.4 Point source emissions to air, surface water and groundwater

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

2.5 Emissions to land

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

Table 2.5.1: Emissions to land

Emission point reference and location on Map of emission points	Emission point reference	Description	Source including abatement
L1	Irrigation area	Discharge from irrigation pump station to on-site irrigation field	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	$5.5 \leq 9$ (range)	Spot sample
	Load of total nitrogen	≤ 300 kg/ha	Annual
	Load of total phosphorus	≤ 50 kg/ha	
	Load of biochemical oxygen demand (BOD)	≤ 30 kg/ha	Daily



2.5.3 The Licensee shall target emissions to land to meet the levels specified in Table 2.5.3.

Table 2.5.3: Emission targets to land			
Emission point reference	Parameter	Target (including units)	Averaging period
L1	pH	$6 \leq 8.5$ (range)	Spot sample
	Total nitrogen	≤ 20 mg/L	
	Total phosphorus	≤ 5 mg/L	
	Total suspended solids (TSS)	≤ 100 mg/L	
	BOD	≤ 150 mg/L	

2.6 Fugitive emissions

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

2.7 Odour

2.7.1 The Licensee shall ensure that odour emitted from the Premises does not unreasonably interfere with the health, welfare, convenience, comfort or amenity of any person who is not on the Premises.

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; and
- (c) 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 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 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.

3.2-3.4 Monitoring of point source emissions to air, surface water and groundwater

There are no specified conditions relating to monitoring of point source emissions to air, surface water or 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	Parameter	Units	Averaging Period	Frequency
L1	M1 – inflow to the wastewater treatment system	Volumetric flow rate	m ³ /day	Monthly	Continuous
	M2 – discharge from the irrigation pump station	pH ¹	pH unit	Spot sample	Monthly while irrigating
		Electrical conductivity (EC)	mS/cm		
		Total dissolved solids (TDS)	mg/L		
		Total nitrogen			
		Total phosphorus			
		Total suspended solids (TSS)			
		BOD			

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

3.6 Monitoring of inputs and outputs

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

Table 3.6.1: Monitoring of inputs and outputs				
Input/Output	Parameter	Units	Averaging period	Frequency
Grapes	Grapes crushed	tonnes	Annual	Each batch crushed
Alcoholic beverage	Alcoholic beverage produced	kilolitres	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

- 4.1.1 The Licensee shall complete the improvements in Table 4.1.1 by the date of completion in Table 4.1.1.
- 4.1.2 The Licensee, for improvements not specifically requiring a written submission, shall write to the CEO stating whether and how the Licensee is compliant with the improvement within one week of the completion date specified in Table 4.1.1.

Table 4.1.1: Improvement program		
Improvement reference	Improvement	Date of completion
IR1	The Licensee shall submit to the CEO a Nutrient Irrigation Management Plan (NIMP) in accordance with the Department of Water 2010, Water quality protection note 33 – nutrient and irrigation management plans. Irrigation shall be undertaken in accordance with the NIMP.	30/09/2015
IR2	The Licensee shall construct a purposely built acoustic enclosure around the winery refrigeration unit and all of its components. The enclosure shall be designed and constructed to reduce noise emissions at nearby noise sensitive premises to below assigned levels in accordance with the <i>Environmental Protection (Noise) Regulations 1997</i> .	04/05/2015
IR3	The Licensee shall submit a construction report to the CEO following completion of the winery refrigeration unit acoustic enclosure. The report shall include the design and construction details of the completed acoustic enclosure and an assessment of noise levels at the nearest noise sensitive premises.	18/05/2015

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 within 28 calendar days after the end of the annual period. The report shall contain the information listed in Table 5.2.1 in the format or form specified in that table.

Table 5.2.1: Annual Environmental Report		
Condition or table (if relevant)	Parameter	Format or form ¹
-	Summary of any failure or malfunction of any pollution control equipment and any environmental incidents that have occurred during the annual period and any action taken	None specified
Table 2.5.2	Contaminant loading to land of parameters (total annual loading kg/ha/yr for nitrogen and phosphorus, monthly average daily loading kg/ha/day for BOD).	
Table 3.5.1	Volume of treated wastewater irrigated to land	Table and graph
	Monitoring of emissions to land	LR1
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 targets
- 5.2.3 The Licensee shall submit the information in Table 5.2.2 to the CEO according to the specifications in that table.

Table 5.2.2: Non-annual reporting requirements				
Condition or table (if relevant)	Parameter	Reporting period	Reporting date (after end of the reporting period)	Format or form ¹
Table 2.5.3	Target exceedances	Six monthly	28 calendar days	ET1
-	Copies of original monitoring reports submitted to the Licensee by third parties	Not Applicable	Within 14 days of the CEOs request	As received by the Licensee from third parties

Note 1: Forms are in Schedule 2



5.3 Notification

- 5.3.1 The Licensee shall ensure that the parameters listed in Table 5.3.1 are notified to the CEO 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	N1
	Any failure or malfunction of any pollution control equipment or any incident, which has caused, is causing or may cause pollution	Part B: As soon as practicable	
3.1.5	Calibration report	As soon as practicable.	None specified

Note 1: No notification requirement in the Licence shall negate the requirement to comply with s72 of the Act.

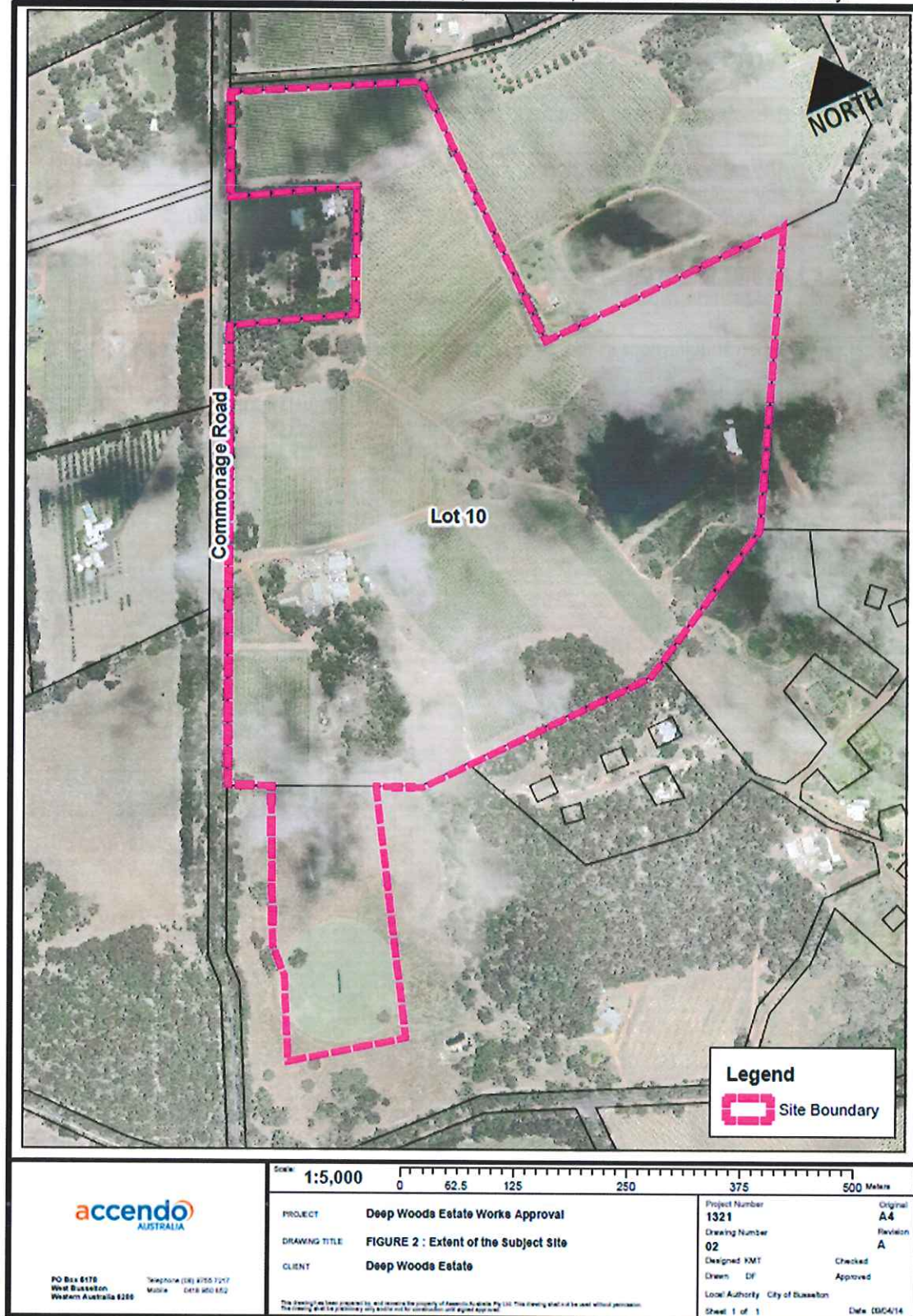
Note 2: Forms are in Schedule 2



Schedule 1: Maps

Premises map

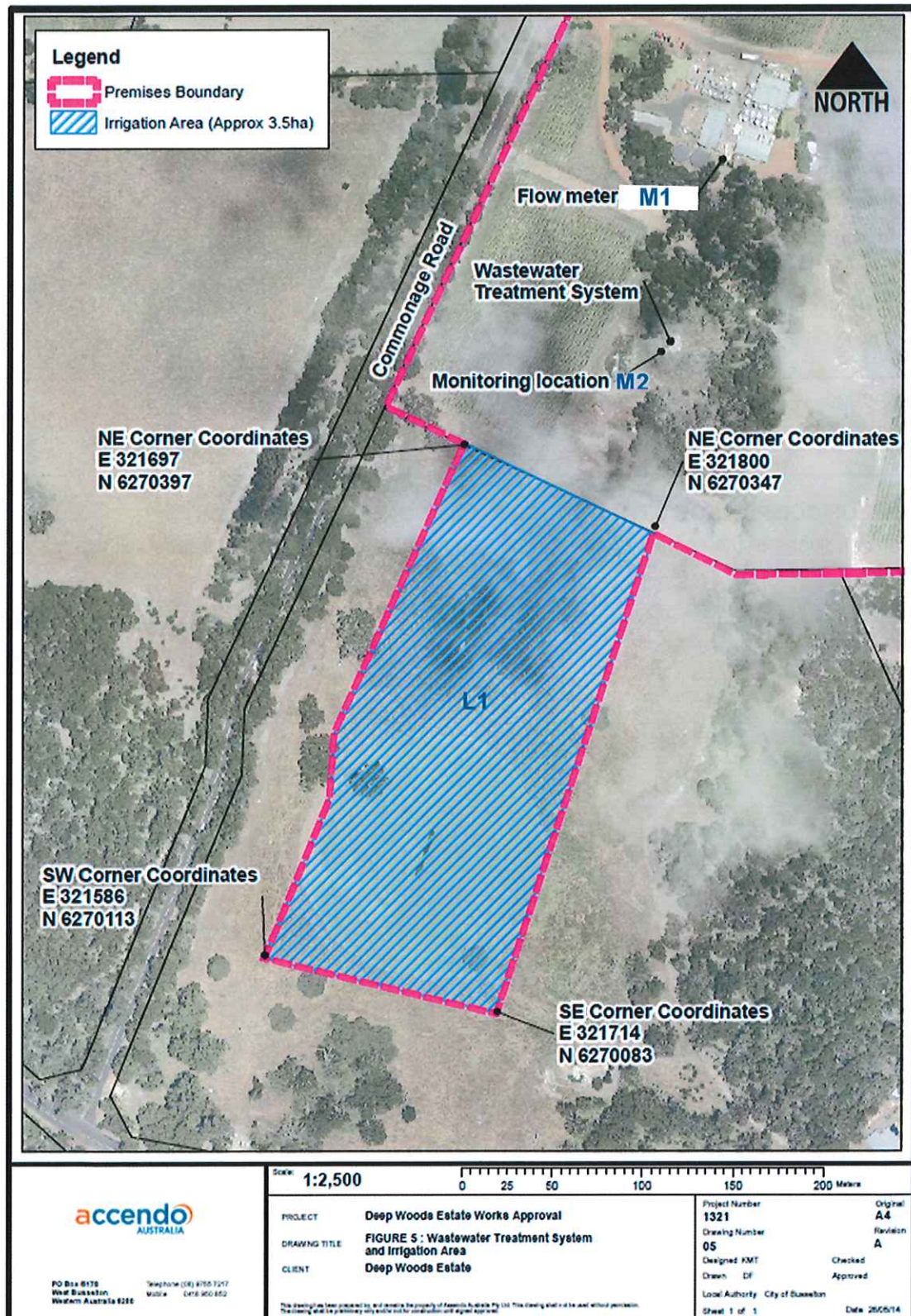
The Premises is shown in the map below. The pink line depicts the Premises boundary.





Map of emission points

The locations of the emission point defined in Table 2.5.1 and monitoring locations defined in Table 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:	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 noncompliance occurred (attach map or diagram):	
g) Cause of noncompliance:	
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 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)	<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: _____

NAME:
(printed) _____

POSITION: _____

DATE: ____/____/____

Seal (if signing under seal)

SIGNATURE: _____

NAME:
(printed) _____

POSITION: _____

DATE: ____/____/____

Licence: L8849/2014/1
 Form: LR1
 Name: Monitoring of emissions to land
 Licensee: LTC Management Pty Ltd
 Period:

Form LR1: Monitoring of emissions to land				
Emission point	Parameter	Result	Averaging Periods	Method
L1	pH		Spot sample	
	Electrical conductivity	mS/cm		
	Total nitrogen	mg/L		
	Total phosphorus	mg/L		
	Total dissolved solids	mg/L		
	Total suspended solids	mg/L		
	Biological oxygen demand	mg/L		

Signed on behalf of LTC Management Pty Ltd: Date:



Licence:
Form:
Name:

L8849/2014/1
ET1
Target exceedances

Licensor: LTC Management Pty Ltd
Period:

Form ET1: Target exceedances

Please provide an analysis of the target exceedances for the period, including but not limited to:

- (a) the emission point
- (b) the root cause analysis for the exceedances;
- (c) any common or contributory factors;
- (d) a description of remedial measures taken or planned to be taken, including those taken to prevent recurrence of the exceedances;

Signed on behalf of LTC Management Pty Ltd: Date:



Licence: L8849/2014/1
Form: N1

Licensee: LTC Management Pty Ltd
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 LTC Management Pty Ltd	
Date	



Decision Document

Environmental Protection Act 1986, Part V

Proponent: LTC Management Pty Ltd

Licence: L8849/2014/1

Registered office: Level 2
24 Outram Street
WEST PERTH WA 6005

ACN: 009 155 551

Premises address: Deep Woods Estate
871 Commonage Road
YALLINGUP WA 6282
Being Lot 10 on Diagram 75204 and Part of Lot 21 on Plan 20521.

Issue date: Thursday, 19 March 2015

Commencement date: Monday, 23 March 2015

Expiry date: Sunday, 22 March 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 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: Amine Callegari
Licensing Officer

Decision Document authorised by: Jonathan Bailes
Manager Licensing



Contents

Decision Document	1
Contents	2
1 Purpose of this Document	2
2 Administrative summary	3
3 Executive summary of proposal and assessment	4
4 Decision table	5
5 Advertisement and consultation table	14
6 Risk Assessment	15

1 Purpose of this Document

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

Works approval and licence conditions

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

Standard conditions (SC)

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

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

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

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

Optional standard conditions (OSC)

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

Non standard conditions (NSC)

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



2 Administrative summary

Administrative details		
Application type	Works Approval <input type="checkbox"/> New Licence <input checked="" type="checkbox"/> Licence amendment <input type="checkbox"/> Works Approval amendment <input type="checkbox"/>	
Activities that cause the premises to become prescribed premises	Category number(s)	Assessed design capacity
	25: Alcoholic beverage manufacturing	1400 kL per annual period
Application verified	Date: 6/10/2014	
Application fee paid	Date: 21/10/2014	
Works Approval has been complied with	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	
Compliance Certificate received	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	
Commercial-in-confidence claim	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Commercial-in-confidence claim outcome		
Is the proposal a Major Resource Project?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Was the proposal referred to the Environmental Protection Authority (EPA) under Part IV of the <i>Environmental Protection Act 1986</i> ?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Referral decision No: Managed under Part V <input type="checkbox"/> Assessed under Part IV <input type="checkbox"/>
Is the proposal subject to Ministerial Conditions?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	Ministerial statement No: EPA Report No:
Does the proposal involve a discharge of waste into a designated area (as defined in section 57 of the <i>Environmental Protection Act 1986</i>)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Department of Water consulted Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	
Is the Premises within an Environmental Protection Policy (EPP) Area Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		
Is the Premises subject to any EPP requirements? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>		

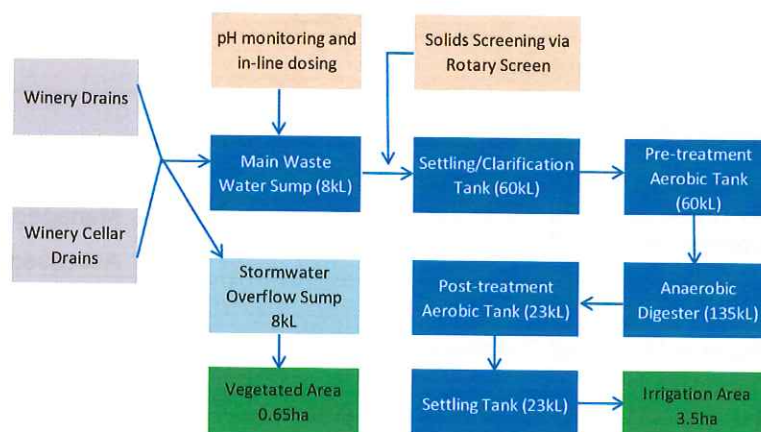


3 Executive summary of proposal and assessment

LTC Management Pty Ltd (LTC Management) operates Deep Woods Estate winery and vineyard. The Estate is situated within the locality of Yallingup Siding in the Shire of Busselton and consists of a vineyard, cellar door, wine processing facility, wastewater treatment system, water storage dam, a homestead and approximately 4 ha of remnant vegetation. The Estate is located within an agricultural land use zone with surrounding land uses including viticulture operations, tourism and rural residential. The nearest sensitive receptors are neighbouring wineries approximately 250m to the west and south east of the winery. There is also a rural residential development approximately 400m north west of the winery.

The winery was originally constructed in 1998. Recent upgrades (under works approval W5707/2014/1) have increased the maximum crush capacity of the winery to 2 000 tonnes/year triggering the requirement for this licence. The main activities on the premises include the production and bottling of wine and the treatment and discharge of winery effluent. Grapes are sourced predominantly from on-site vines as well as other vineyards within the Margaret River wine region.

The main emission from the premises is treated wastewater. The wastewater treatment system (WWTS) comprises a collection sump, solids screening, settlement and clarification tank, aeration tanks, an anaerobic digestion tank and settling/storage tank. The WWTS is capable of treating up to 35 kL/day and is designed to reduce Biological Oxygen Demand (BOD) to 150 mg/L, Nitrogen to 10 mg/L and Phosphorus to 5 mg/L. A schematic of the WWTS is included below



Treated wastewater is discharged through a cannon spray irrigation system to a 3.5ha paddock and cricket oval on the neighbouring property. A legal agreement exists between the land owners to authorise this activity. Irrigation will be managed to ensure nutrient loading rates are within those specified in Water Quality Protection Note 22 (Department of Water 2008).

Marc, lees, screening solids and other organic wastes produced during the wine making and wastewater treatment process are collected and stored within a designated marc storage area prior to offsite disposal. The marc storage area has been designed and constructed to prevent the release of leachate and stored waste to the environment. Sludge collected in the anaerobic tank will be periodically extracted by a licensed contractor for offsite disposal.

Odour emissions are not expected to be significant. All wastewater treatment occurs within enclosed tanks therefore the main odour source is expected to be the marc storage area. Periodic removal of stored wastes will ensure odour emissions are minimised. Noise has become an emission of significance since the replacement of compressors on the winery refrigeration unit. Noise attenuation requirements have been included in the Licence to address this issue.

4 Decision table

All applications are assessed in line with the *Environmental Protection Act 1986*, the *Environmental Protection Regulations 1987*, DEC's Policy Statement - Limits and targets for prescribed premises (2006), and DER's Operational Procedure on Assessing Emissions and Discharges from Prescribed Premises. Where other references have been used in making the decision they are detailed in the decision document.

DECISION TABLE				
Works Approval / Licence section	Condition number W = Works Approval L = Licence	OSC or NSC	Justification (including risk description & decision methodology where relevant)	Reference documents
General conditions	L1.2.5 L1.2.6 L1.3.1 – L1.3.2 L1.3.4	OSC	<p>Operation</p> <p><u>Emission Description</u> <i>Emission:</i> Stormwater and winery wastewater with potentially elevated levels of nitrogen, phosphorus, suspended solids, low pH and elevated biological oxygen demand as a result of contact with wine production residues and wastes. <i>Impact:</i> Contamination of surrounding land and surface water systems due to elevated nutrient levels. The closest watercourse is approximately 300m east of the winery and WWTS. Contaminated stormwater and wastewater is not expected to impact on groundwater due to the small scale of this operation and the depth to groundwater being >50m. <i>Controls:</i> Winery operations are undertaken within a concreted hardstand area which drains all wastewater to the WWTS. Stormwater falling outside the operational area is diverted away to prevent it becoming contaminated. Stormwater falling within the operational area is directed to the WWTS for treatment prior to discharge. Clean stormwater is able to be diverted from the WWTS outside of vintage periods to prevent overloading the system. The marc storage area is a concrete bunded area designed and constructed to contain all solid and liquid wastes deposited, prevent stormwater inflow and outflow, and direct collected leachate back to the WWTS clarifier for treatment.</p>	Application supporting documentation



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
			<p><u>Risk Assessment</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Possible <i>Risk Rating:</i> Moderate</p> <p><u>Regulatory Controls</u> OSC 1.2.5 has been included to ensure appropriate control and management of stormwater is maintained at the Premises such that volumes of contaminated stormwater are minimised and contaminated stormwater is treated as such prior to discharge. OSC 1.3.1 is included in the licence to ensure all wastewaters are directed into the WWTs and are not released to the environment. OSC 1.3.2 is included to specify containment infrastructure requirements for wastewater (and organic wastes) to minimise the risk of release to the environment. OSC 1.3.4 is included in the licence to specify management requirements for the WWTs to ensure it is managed in a manner which reduces the risk of, release to the environment, overloading and damage to the system.</p> <p><u>Residual Risk</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Low</p> <p>NB: Treated wastewater irrigation controls appear in condition 1.3.3, however these have been assessed under the 'Emissions to land' section.</p> <p>OSC 1.2.6 has been included to ensure the Premises boundary is marked on the ground so that it is readily identifiable as it comprises one whole cadastral block and part of a neighbouring block.</p>	



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
			<p><u>Emission Description</u> <i>Emission:</i> Storage and disposal of organic winery production wastes and leachate. <i>Impact:</i> Contamination of surrounding land and surface water systems due to elevated nutrient levels in winery production wastes. There is not expected to be an impact on groundwater due to the small scale of this operation and the depth to groundwater being >50m. <i>Controls:</i> A designated 12m x 12m concrete bunded marc storage area has been constructed adjacent to the WWTS for storage of organic winery waste prior to offsite disposal by a licensed contractor. The design of the area ensures no stormwater inflow or outflow and containment of all stored waste. A collection sump has been included to collect leachate and pump it back into the WWTS clarifier for treatment.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Low</p> <p><u>Regulatory Controls</u> OSC 1.3.2 is included to ensure that all organic winery waste including marc, lees and screening solids, are stored in the designated marc storage area and that the storage area meets specified design requirements to prevent release to the environment.</p> <p><u>Residual Risk</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Rare <i>Risk Rating:</i> Low</p>	



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
Emissions general	L2.1.1	OSC	Numerical limits and targets have been set through OSC 2.5.2 and 2.5.3 of the licence 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	L2.2 and L3.2	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 and L3.3	N/A	Operation No point source emissions to surface water are known to occur from the winery. Therefore, no specified conditions relating to point source emissions to surface water or the monitoring of such emissions are required on the licence.	Application supporting documentation
Point source emissions to groundwater including monitoring	L2.4 and L3.4	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.	Application supporting documentation.
Emissions to land including monitoring	L1.3.3 L2.5.1-L2.5.3 L3.5.1	OSC	Operation DER's assessment and decision making are detailed in Appendix A.	Application supporting documentation Water Quality Protection Note No. 22: Irrigation with Nutrient Rich Wastewater (Department of Water July 2008)



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
				<i>Environmental Protection (Unauthorised Discharges) Regulations 2004</i> ANZECC Australian and New Zealand Guidelines for Fresh and Marine Water Quality 2000
Fugitive emissions	L2.6	N/A	Operation No fugitive dust emissions are known to occur from the winery therefore no licence conditions are required.	N/A
Odour	L2.7.1	OSC	Operation <u>Emission Description</u> <i>Emission:</i> Odour emissions from the WWTS, irrigation area and marc storage area due to the breakdown of organics and elevated nutrient levels. <i>Impact:</i> Nuisance impacts on neighbouring residences. The closest residence is approximately 320m north-west of the WWTS and there are a number of other rural residences within a 500m radius of the Premises. No complaints relating to odour from the Premises have been received by the DER. <i>Controls:</i> The upgraded WWTS has been designed to reduce BOD and nutrient levels more than the previous WWTS. It is an enclosed system comprising sealed tanks with breather valves. Marc and other organic winery and screening wastes produced during vintage are collected and stored in a designated area adjacent to the WWTS. The collected waste is routinely removed by waste contractors for offsite disposal. Sludge from the WWTS remains in situ within the	Application supporting documentation



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
			<p>anaerobic digester until it is collected by a controlled waste carrier for offsite disposal.</p> <p><u>Risk Assessment</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Moderate</p> <p><u>Regulatory Controls</u> OSC 2.7.1 is included in the licence to ensure the Licensee manages odour emissions so they do not impact on nearby receptors. Limits and targets for nutrients and BOD in OSC 2.5.2 and 2.5.3 will also assist in ensuring odour emissions are minimised from the WWTS and irrigation.</p> <p><u>Residual Risk</u> <i>Consequence:</i> Insignificant <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Low</p>	
Noise	N/A	N/A	<p><u>Operation</u> <u>Emission Description</u> <i>Emission:</i> Noise emissions from operation of the winery refrigeration unit and WWTS. A noise assessment identified the winery refrigeration unit as the dominant noise source for the Premises. Noise emissions from the WWTS are low in comparison to the overall noise emissions from the Premises. <i>Impact:</i> Nuisance impacts on neighbouring residences. The closest is 320m north-west of the WWTS and there are a number of other rural residences within a 500m radius of the Premises. The DER has received two complaints since compressors on the winery refrigeration unit were replaced. <i>Controls:</i> The winery refrigeration unit is the dominant noise source for the Premises. Foam baffle box covers have been installed over the compressors to reduce noise emissions.</p>	<p>Application supporting documentation – Marshall Day Acoustics Noise Survey Initial Report February 2015</p> <p><i>Environmental Protection (Noise) Regulations 1997</i></p>



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
			<p><u>Risk Assessment</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Likely <i>Risk Rating:</i> Moderate</p> <p><u>Regulatory Controls</u> A noise consultant was engaged to undertake a noise survey which found that measured noise emissions exceed the assigned night time levels at the closest noise sensitive premises ($L_{A5 \text{ max}}$ of 42dB). In order to reduce noise emissions to within the assigned levels a purpose built acoustic enclosure for the winery refrigeration unit is required. OSC 4.1.1 IR2 and IR3 are included on the licence to ensure the required infrastructure is constructed in a timely fashion, and the infrastructure is verifiably capable of reducing noise emissions to the assigned levels.</p> <p><u>Residual Risk</u> <i>Consequence:</i> Minor <i>Likelihood:</i> Unlikely <i>Risk Rating:</i> Moderate</p>	
Monitoring general	L3.1.1 – L3.1.5	OSC	<p>Operation Monitoring of emissions to land is included in the licence so general monitoring conditions relating to collection, preservation and testing of samples (OSC 3.1.1), monitoring intervals (OSC 3.1.2), recording of data (OSC 3.1.3), and monitoring equipment calibration requirements (OSC 3.1.4-3.1.5) have been included.</p>	N/A
Monitoring of inputs and outputs	L3.6.1	OSC	<p>Operation OSC 3.6.1 has been included due to there being a relationship between 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.</p>	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
Process monitoring	L3.7	N/A	Operation There are no process monitoring requirements at the Premises that require licence conditions.	N/A
Ambient quality monitoring	L3.8	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, and the depth to groundwater, ambient groundwater quality monitoring is not required. The targets and 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	L3.9	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	Operation The Licensee has not yet developed a nutrient irrigation management plan (NIMP) which was a commitment made in the works approval application for the upgraded WWTS. OSC 4.1.1 IR1 has been included to require a NIMP to be developed and implemented for the Premises.	Application supporting documentation
Information	L5.2.2-5.2.3 L5.3.1	OSC	Inclusion of IR2 on the licence is discussed in the 'Noise' section. 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 the performance of the WWTS to be assessed over time. As the licence contains targets OSC 5.2.3 has been included to ensure DER is informed of target exceedances. OSC 5.3.1 has been included on the licence to ensure the DER is made aware of any breaches of limits or malfunctions of the wastewater treatment system or any other pollution control equipment within a timely manner.	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
Licence Duration	N/A	N/A	It is recommended that the licence be issued for a period of 5 years due to the generally low risk nature of the operation.	N/A



5 Advertisement and consultation table

Date	Event	Comments received/Notes	How comments were taken into consideration
03/11/2014	Application advertised in West Australian (or other relevant newspaper)	None	N/A
30/10/2014	Application referred to the City of Busselton	Confirmation provided that Deep Woods Estate has received application planning, building and health approvals.	N/A
16/03/2015	Proponent sent a copy of draft instrument	Timeframe for verification noise assessment following completion of construction of the acoustic enclosure may not be achievable.	IR2 split into two conditions, one condition requiring completion of acoustic enclosure construction by a specified date and the second requiring submission of a construction report and noise assessment at a later date.



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

Emissions to land including monitoring

The Licensee proposes to irrigate up to 4000 kL of treated wastewater per annum over a 3.5 ha grassed cricket oval and paddock located on the neighbouring property. The Licensee has an agreement with the neighbouring landholder authorising this activity for the duration of the licence. The WWTS is expected to reduce nutrient levels to 10 mg/L nitrogen, 5 mg/L phosphorous, 150 mg/L biological oxygen demand (BOD) and a pH range of 6.5-8. Based on the expected water quality and irrigation rate the predicted loading rates will be 11.4 kg/ha/yr nitrogen, 5.7 kg/ha/yr phosphorous and 0.5 kg/ha/day BOD. Predicted loading rates are well within the nutrient application criteria in Department of Water, Water Quality Protection Note 22: Irrigation with nutrient rich wastewater (WQPN 22 for a Risk Category C operation. A water balance conducted for the irrigation area indicates that a 3.5 ha area of pasture in the Margaret River region requires up to 8610 kL of water per annum which exceeds the maximum predicted volume of 4000 kL of treated wastewater per annum.

Emission Risk Assessment – Operations

Emission Description

Emission: Irrigation of treated winery wastewater.

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 >50m 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 will predominantly occur in summer. Application rates will not exceed 24 mm/hr which is the maximum infiltration rate for the soil type in the irrigation area (loamy clays with gravelly loam at depth). Treated wastewater will not be irrigated during rainfall events, onto flooded areas or if soil moisture conditions are likely to cause runoff and ponding.

Risk Assessment

Consequence: Minor

Likelihood: Possible,

Risk Rating: Moderate

Regulatory Controls

OSC 2.5.1 has been included on the licence to define the authorised irrigation area. DER has imposed emission limits and targets on the quality of treated wastewater being irrigated through OSCs 2.5.2 and 2.5.3. The limits specified have been based on the maximum sustainable nutrient load defined in WQPN 22 for the soil type specific to the irrigation area (Risk Category C). pH limits have selected to ensure irrigation water is within allowable pH levels in accordance with the *Environmental Protection (Unauthorised Discharges) Regulations 2004*.

Treated wastewater quality targets have been determined taking into account the capability of the WWTS, ANZECC Guidelines for Primary Industry (2000) and concentrations which may result in exceedances of loading limits if continued for a prolonged period. Monitoring requirements have been imposed through OSC 3.5.1 to demonstrate compliance with the emission limits and allow comparison with the emission targets. Additional salinity parameters have been included as this can impact on performance of the WWTS or indicate there is a problem in the treatment cycle. Monitoring of flows through the WWTS is also included to ensure the system is not being overloaded and to enable irrigation loading rates can be calculated.



The licensee has committed to developing a Nutrient Irrigation Management Plan in their licence application to ensure irrigation is undertaken.

OSC 1.3.3 has been included to specify irrigation operational requirements. The operational requirements specified are designed to minimise the likelihood of potential impacts occurring. In addition to this, OSC 4.1.1 IR1 has been including requiring the submission of a Nutrient Irrigation Management Plan (NIMP). The licensee has committed to developing a NIMP in the works approval application for the upgraded WWTS. A documented NIMP will ensure site specific factors are considered when planning and undertaking irrigation to ensure impacts on the irrigation area and surrounding areas are minimised.

Residual Risk

Consequence: Insignificant

Likelihood: Unlikely

Risk Rating: Low