Government of Western Australia
Department of Water and Environmental Regulation

Licence

Licence number	L7333/1997/10
Licence holder	Vasse Felix Pty Ltd
ACN	009 181 444
Registered business address	Suite 1, 464 Murray Street PERTH WA 6000
DWER file number	DEC7726/1
Duration	30/05/2014 to 29/05/2035
Date of amendment	19/12/2022
Premises details	Vasse Felix Winery 71 Tom Cullity Drive COWARAMUP WA 6284 Being Lot 101 on Diagram 82806 as depicted in Schedule 1

Prescribed premises category description (Schedule 1, ***Environmental Protection Regulations 1987***)	**Assessed production capacity**
Category 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.	2,100 kilolitres per year (wine produced)

This licence is granted to the licence holder, subject to the attached conditions, on 19 December 2022 by:

Caron Goodbourn
Digitally signed by Caron Goodbourn
Date: 2022.12.19 07:47:33 +08'00'

Manager, Process Industries
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Licence history

Date	Reference number	Summary of changes
22/05/2014	L7333/1997/10	Licence re-issue and format updated.
12/05/2016	L7333/1997/10	CEO initiated licence amendment to correct administrative errors
28/10/2022	L7333/1997/10	CEO initiated licence amendment following a review process initiated by concerns regarding the suitability of the wastewater treatment and disposal system at the premises. Key amendments include additional controls to manage the risk of impacts to receptors from the discharge of wastewater to the leach drains and update to licence format.
19/12/2022	L7333/1997/10	CEO initiated licence amendment to correct unintended errors.

Interpretation

In this licence:

(a) the words ‘including’, ‘includes’ and ‘include’ in conditions mean “including but not limited to”, and similar, as appropriate;

(b) where any word or phrase is given a defined meaning, any other part of speech or other grammatical form of that word or phrase has a corresponding meaning;

(c) where tables are used in a condition, each row in a table constitutes a separate condition;

(d) any reference to an Australian or other standard, guideline, or code of practice in this licence:

(e) if dated, refers to that particular version; and

(f) if not dated, refers to the latest version and therefore may be subject to change over time;

(g) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and

(h) unless specified otherwise, all definitions are in accordance with the EP Act.

NOTE: This licence requires specific conditions to be met but does not provide any implied authorisation for other emissions, discharges, or activities not specified in this licence.

Licence conditions

The licence holder must ensure that the following conditions are complied with:

Operation of infrastructure and equipment

1. The licence holder must ensure that the site infrastructure and equipment listed in Table 1 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 1.

Table 1 Infrastructure and equipment requirements

	Site infrastructure and equipment	Operational requirement	Infrastructure location
Wine production and storage			
1	Winery building: • 55 fermentation/storage tanks with a total capacity of 1,999 kL • Sloped concrete floor with grated sumps and drainage channels	• Maintain integrity of hardstand and drainage infrastructure (sumps and all drainage channels) to prevent leakage of product or wastewater to underlying soils; and • Direct all wastewaters generated from alcoholic beverage manufacturing operations, including wash down water and by-products wastewater to the WWTP.	As labelled in Figure 1, Schedule 1: Winery
2	Red barrel hall: • 11 tanks with a total capacity of 172 kL • Portable wine tanks and barrels • Sloped concrete floor with grated sumps and drainage channels		As labelled in Figure 1, Schedule 1: Red barrel hall
3	Outdoor wine tank farm: • 12 x 90 kL tanks for wine blending, transfer and storage • Sloped concrete floor with central drainage channel • Collection sump with valve to divert wastewater to WWTP or stormwater to dam		As labelled in Figure 1, Schedule 1: Wine blending/ transfer/ storage tanks
Wastewater treatment			
4	Wastewater drainage infrastructure: • Wastewater drainage pipelines from winery building, red barrel hall and outdoor wine tank farm to concrete settlement sump • Marc bay with sump and valve to divert wastewater to WWTP or stormwater to dam • Wastewater drainage pipeline from concrete main sump to WWTP • 3 kL concrete settlement sump • 3 kL concrete mixing sump (for pH adjustment) • 3 kL concrete main sump	• Maintain sumps, pipelines and drainage channels to prevent wastewater leaks to underlying soils.	Within and between the winery, red barrel hall, outdoor tank farm, marc bay and WWTP

	Site infrastructure and equipment	Operational requirement	Infrastructure location
5	Wastewater treatment plant (WWTP): • Physical solids screen and collection bin • 1 x 52 kL settling tank • 3 x 85 kL aeration tanks with air supplied via surface turbines • 1 x 3.5 kL inflow tank • 1 x 6.5 kL separation tank • 1 x 4.8 kL discharge tank • 2 x 3.4 kL sludge tanks • 1 x 12 kL sludge storage tank • Shelter with concrete hardstand with canopy for the inflow, separation and sludge tanks • Flow meter installed between separation and discharge tanks	• As of **24 October 2023,** the WWTP must only receive wastewater generated from alcoholic beverage manufacturing operations in the winery, red barrel hall, outdoor tank farm and marc bay; • Vegetation and floating debris (emergent or otherwise) is prevented from growing or accumulating in the aeration tanks; and • Maintain hardstand beneath 2 x 3.4 kL sludge tanks to capture spills; and • Flow meter to be maintained to enable accurate recording of WWTP outflow meter readings.	As labelled in Figure 1, Schedule 1: WWTP
Wastewater disposal			
6	1,800 m^2 leach drain field divided into two areas: • West area (Bank 1 and 2): Nine 30 m pipe leach drain modules and one 30 m concrete leach drain module (total 300 m) • East area (Bank 3 and 4): Six 30 m pipe leach drain modules and four 30 m concrete leach drain module (total 300 m) • Manual outflow device to leach drains • PVC pipework to distribute wastewater across leach drains	• As of 1 February 2024, no discharge to the east area (Bank 3 and 4) from 1 June to 31 October; • As of 1 February 2024, maximum daily discharge of 14,500 L/day to each area (west and east); • Until 31 January 2024, average daily discharge of ≤29,000 L/day (calculated from total monthly volume discharged) to leach drain field (combined west and east areas); • Record daily discharge volumes and times during vintage (1 February to 30 April), with no more than two missed readings per monthly period; and • Monthly inspection of the leach field surface and perimeter to identify seepage or flooding.	As labelled in Figure 1, Schedule 1: L1 leach field; and As labelled in Figure 2, Schedule 1: West area and East area
Solid waste disposal			
7	Marc bay: • 505 m^2 bunded, uncovered concrete hardstand • Grated sump with valve to divert wastewater to the WWTP or stormwater to the dam	• Maintain bunded hardstand to be free of damage that could result in loss of leachate and contaminated stormwater to underlying soils; and • All leachate captured in the marc bay and sludge dewatering bund	As labelled in Figure 1 and Figure 2, Schedule 1: Marc bay

	Site infrastructure and equipment	Operational requirement	Infrastructure location
8	Sludge dewatering bund (under construction): • Concrete bund designed to hold sludge dewatering bags, with grated sump to collect and drain leachate to the WWTP.	must be directed to the WWTP.	As labelled in Figure 2, Schedule 1: Proposed concrete bund

Works

2. The licence holder must construct and/or install the infrastructure listed in Table 2, in accordance with;

a) the corresponding design and construction requirement / installation requirement; and

b) at the corresponding infrastructure location; and

c) within the corresponding timeframe,

as set out in Table 2.

Table 2 Design and construction requirements / installation requirements

Infrastructure	Design and construction requirement / installation requirement	Infrastructure location	Completion date
Sludge dewatering bund	• Impermeable concrete base and walls to capture all leachate generated in the bund; and • Sump that drains to the wastewater treatment plant.	As labelled in Figure 2, Schedule 1: Proposed concrete bund	31 January 2023
Balance tank (replaces 1 x 85 kL aeration tank)	• Minimum operational storage capacity of 160 kL; and • Installed with an aeration system.	To be installed between settling tank and inflow tank	31 January 2023
Leach drain modules in the west area (Bank 1 and 2) of the leach drain field	• Replace all ten existing leach drain modules with leach drains installed at least 0.6 m above the highest water table level and covered by a minimum 0.3 m fill material. • Installed with an automated system to manage daily volume of wastewater discharged to each leach drain field area (west and east).	Leach drain field (west area)	31 January 2024

3. The licence holder must within 30 days of each item of infrastructure required by condition 2 being constructed:

a) undertake an audit of their compliance with the requirements of condition 2; and

b) prepare and submit to the CEO an audit report on that compliance.

4. The report required by condition 3, must include as a minimum the following:

a) certification by a suitably qualified professional that the items of infrastructure or component(s) thereof, as specified in condition 2, have been constructed in accordance with the relevant requirements specified in condition 2;

b) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 2; and

c) be signed by a person authorised to represent the licence holder and contains the printed name and position of that person.

Solid waste management

5. The licence holder must ensure that organic solid waste generated from wine processing (including marc, lees, screening solids and wastewater treatment sludge) is composted within the marc bay prior to spreading on land for use as a soil conditioner.

6. The solid waste or compost described in condition 5 applied to vineyards, must be spread evenly and during the period 1 May to 31 August of each calendar year shall not be applied to land within 50 m from of any defined watercourse, wetland or external property boundary.

Emissions and discharges

7. The licence holder must ensure that the emissions specified in Table 3, are discharged only from the corresponding discharge point and only at the corresponding discharge point location.

Table 3 Authorised discharge points

Emission	Discharge point	Discharge point location
L1	Leach drains	As shown in Schedule 1: Figure 1

8. The licence holder must ensure that emissions from the discharge point listed in Table 4 for the corresponding parameter do not exceed the corresponding limit when monitored in accordance with condition 10.

Table 4 Emission and discharge limits

Discharge point	Parameter	Limit	Averaging period
L1	Load of total biological oxygen demand (BOD)	1,680 kg/ha/month	Monthly
	pH	5.5 - 8.5	Spot sample

Monitoring

General monitoring

9. The licence holder must 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 groundwater sampling is conducted in accordance with AS/NZS 5667.11; and

d) all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured;

e) results of all monitoring activity required by condition 10 and 11 are recorded;

f) monthly monitoring is undertaken at least 15 days apart; and

g) six monthly monitoring is undertaken at least 5 months apart.

Monitoring of emissions to land

10. The licence holder must monitor emissions:

a) from each discharge point;

b) at the corresponding monitoring location;

c) for the corresponding parameter;

d) at the corresponding frequency;

e) for the corresponding averaging period;

f) in the corresponding unit; and

g) using the corresponding method,

as set out in Table 5.

Table 5 Emissions and discharge monitoring

Discharge point	Monitoring location	Parameter	Frequency	Averaging period	Unit
L1	M1 – Outflow from wastewater treatment system to leach drains	Volumetric flow rate (cumulative)	Continuous	Monthly	m^3
		pH	Monthly	Spot sample	-
		Electrical conductivity			mS/cm
		Biological oxygen demand			mg/l
		Total dissolved solids			
		Total suspended solids			
		Total nitrogen			
		Total phosphorus			

Groundwater monitoring

11. The licence holder must monitor groundwater for concentrations of the identified parameters in accordance with Table 6.

Table 6 Groundwater monitoring requirements

Monitoring point reference	Parameter	Units	Frequency	Averaging period
P1A[1] and P3A	Standing water level	m(BGL)	Two samples per year, as follows:	Spot sample
	pH	-		

Monitoring point reference	Parameter	Units	Frequency	Averaging period
	Electrical conductivity	mS/cm	1st sampling event: between 1 January -30 April 2nd sampling event: Between 1 August – 30 October	
	Total nitrogen[2]	mg/l		
	Total phosphorus[2]			
	Sodium			
	Magnesium			
	Calcium			
	Sodium adsorption ratio			
	Arsenic[3]			

Note 1: If bore P1A is dry during first sampling event, an attempt to re-sample must be made between during the period 1 March – 30 April. If the bore is still dry, no sample is required.

Note 2: Parameters do not require testing in bore P1A.

Note 3: If there are no detections of arsenic at or above the freshwater guideline value for 95% species protection from the date of this amendment to 30 June 2024, arsenic may be removed from the analytical suite in bore P3A from 1 July 2024.

Records and reporting

12. The licence holder must record the following information in relation to complaints received by the licence holder (whether received directly from a complainant or forwarded to them by the Department or another party) about any alleged emissions from the premises:

a) the name and contact details of the complainant, (if provided);

b) the time and date of the complaint;

c) the complete details of the complaint and any other concerns or other issues raised; and

d) the complete details and dates of any action taken by the licence holder to investigate or respond to any complaint.

13. The licence holder must:

a) undertake an audit of their compliance with the conditions of this licence during the preceding annual period; and

b) prepare and submit to the CEO by no later than 30 days after the end of that annual period an Annual Audit Compliance Report in the approved form.

14. The licence holder must maintain accurate and auditable books including the following records, information, reports, and data required by this licence:

a) the calculation of fees payable in respect of this licence;

b) the works conducted in accordance with condition 2 of this licence;

c) any maintenance of infrastructure that is performed in the course of complying with condition 1 of this licence;

d) monitoring programmes undertaken in accordance with conditions 10 and 11 of this licence; and

e) complaints received under condition 12 of this licence.

15. The books specified under condition 14 must:

a) be legible;

b) if amended, be amended in such a way that the original version(s) and any subsequent amendments remain legible and are capable of retrieval;

c) be retained by the licence holder for the duration of the licence; and

d) be available to be produced to an inspector or the CEO as required.

16. The licence holder must submit to the CEO by no later than 30 days after the end of each annual period, an Annual Environmental Report for that annual period for the conditions listed in Table 7, and which provides information in accordance with the corresponding requirement set out in Table 7.

Table 7 Annual Environmental Report

Condition	Requirement
-	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
5, 6	Monthly quantity (m^3) of solid waste or compost applied to the vines on the premises, including the application rate (in m^3/ha)
10	Wastewater monitoring: a) Volume (in m^3 or kL) of treated wastewater applied daily to the west and east leach drain areas from 1 February to 30 April, and monthly cumulative volumes for the annual period presented in table format; b) Treated wastewater monitoring data in tabulated and graphical form including the sampling date; c) Tabulated monthly BOD loadings (kg/ha/month) applied to the leach drain area, calculated by multiplying the measured BOD concentration in wastewater of a given month by the total volume discharged to land in that month; and d) Review, assessment, and interpretation of the data including comparison to historical trends.
11	Groundwater monitoring: a) Data; and b) Review, assessment, and interpretation of the data including comparison to historical trends.
12	Complaints summary
13	Annual Audit Compliance Report

Definitions

In this licence, the terms in Table 8 have the meanings defined.

Table 8: Definitions

Term	Definition
ACN	Australian Company Number
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates may be available on the Department's website).
annual period	a 12 month period commencing from 1 July until 30 June of the immediately following year.
AS/NZS 5667.1	means the Australian Standard *AS/NZS 5667.11 Water quality - sampling - guidance on the design of sampling programs, sampling techniques and the preservation and handling of samples*
AS/NZS 5667.10	means the Australian Standard *AS/NZS 5667.11 Water quality - sampling - guidance on sampling of waste waters*
AS/NZS 5667.11	means the Australian Standard *AS/NZS 5667.11 Water quality - sampling - guidance on sampling groundwater*
averaging period	means the time over which a limit is measured or a monitoring result is obtained
Bank	means each set of five leach drain modules as depicted in Figure 2, Schedule 1
books	has the same meaning given to that term under the EP Act.
CEO	means Chief Executive Officer of the Department. "submit to / notify the CEO" (or similar), means either: Director General Department administering the *Environmental Protection Act 1986* Locked Bag 10 Joondalup DC WA 6919 or: info@dwer.wa.gov.au
Compost	means an organic product that has undergone aerobic and thermophilic biological transformation through the composting process to achieve pasteurisation and reduce phytotoxic compounds and has achieved a level of maturity.
Department	means the department established under section 35 of the *Public Sector Management Act 1994* (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.
discharge	has the same meaning given to that term under the EP Act.
emission	has the same meaning given to that term under the EP Act.
EP Act	*Environmental Protection Act 1986* (WA)
EP Regulations	*Environmental Protection Regulations 1987* (WA)
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

Term	Definition
	fermentation tanks;
licence	refers to this document, which evidences the grant of a licence by the CEO under section 57 of the EP Act, subject to the specified conditions contained within.
licence holder	refers to the occupier of the premises, being the person specified on the front of the licence as the person to whom this licence has been granted.
marc	means grape material (mainly skin, pulp and seeds) which is left over after grape crushing and pressing
mbgl	meters below ground level
monthly period	means a one-month period commencing from the first day of a month until the last day of that same month
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	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on Figure 1 in Schedule 1 to this licence
prescribed premises	has the same meaning given to that term under the EP Act.
six monthly	means the 2 inclusive periods from 1 July to 30 December and in the following year 1 January to 30 June
spot sample	means a discrete sample representative at the time and place at which the sample is taken
waste	has the same meaning given to that term under the EP Act.

END OF CONDITIONS

Schedule 1: Maps

Figure 1: Prescribed premises boundary, monitoring points and key site infrastructure including the winery, red barrel hall, tank farm, marc bay, wastewater treatment plant and leach drain field

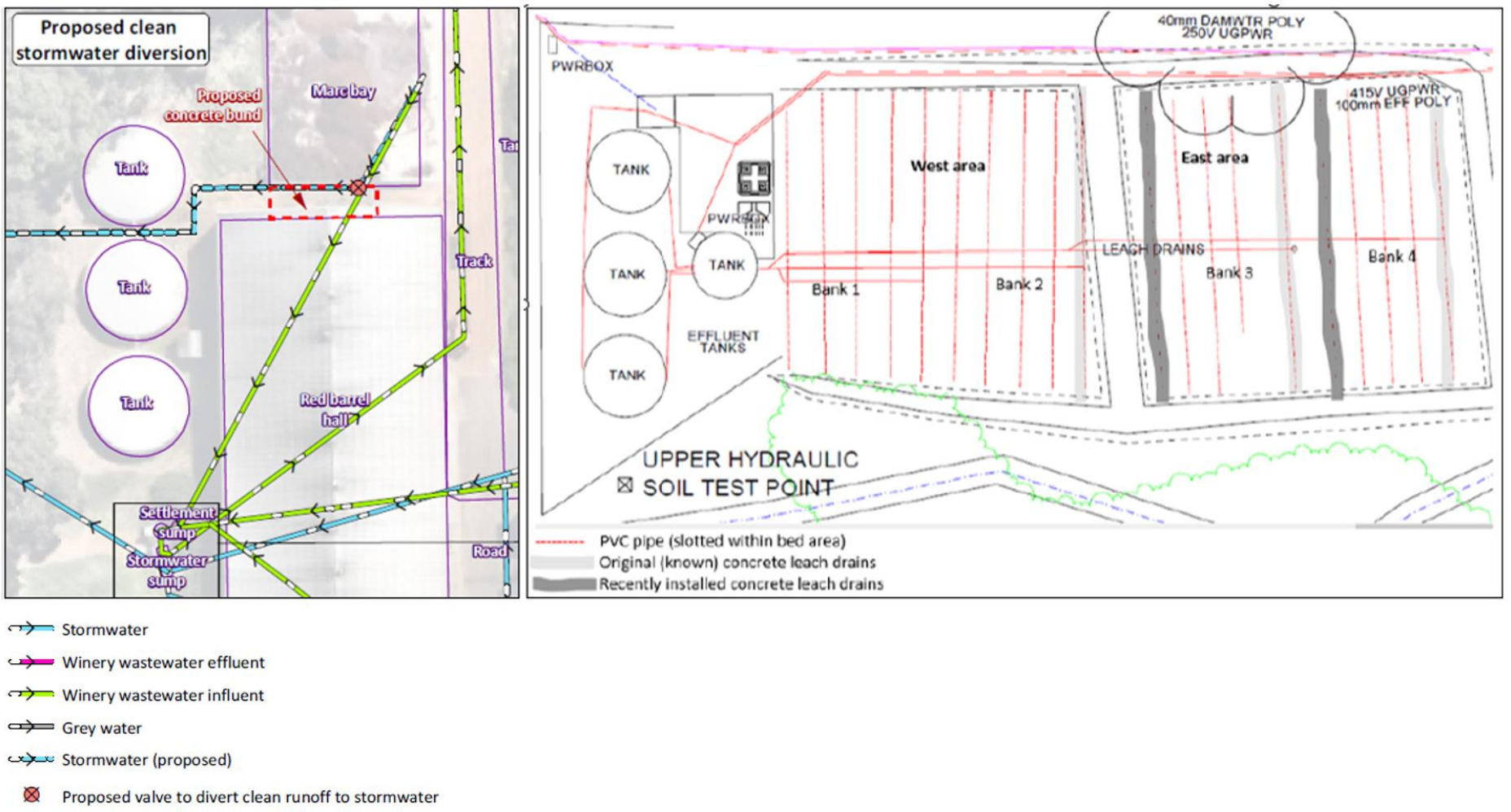

Figure 2 Leach drain field layout and location of new sludge dewatering bund (proposed concrete bund)