



Licence number	L9166/2018/1
Licence holder	CW Water Management Group Pty Ltd
ACN	167 178 627
Registered business address	26 Brown Street BUSSELTON WA 6280
DWER file number	DER2018/000550
Duration	7/12/2018 to 6/12/2038
Date of issue	7/12/2018
Date of amendment	27/04/2020
Premises details	Yelverton Bio Industries 388 Yelverton North Road YALLINGUP SIDING WA 6282 Legal description - Lot 10 on Plan 22177 As defined in Schedule 1 of the Licence

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production / design capacity
Category 61: Liquid waste facility	7000 kL per annual period

This licence is granted to the licence holder, subject to the attached conditions, on *27 March 2020*, by:

Melissa Chamberlain

**A/MANAGER WASTE INDUSTRIES
REGULATORY SERVICES**

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

Licence history

Date	Reference number	Summary of changes
7/12/2018	L9166/2018/1	Licence granted.
27/04/2020	L9166/2018/1	Licence amendment to P&DC and increase Total Nitrogen loading

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 means the version of the standard, guideline, or code of practice in force at the time of granting of this licence and includes any amendments to the standard, guideline or code of practice which may occur from time to time during the course of the licence;
- (e) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- (f) 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 authorization 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:

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
General	<ol style="list-style-type: none"> a) The acceptance and transfer of all liquid waste to be carried out in accordance with the <i>Environmental Protection (Controlled Waste) Regulations 2004</i>; b) All storage infrastructure and treatment tanks, transfer pipelines and conveyance infrastructure must be impermeable and free of leaks or defects; c) Stormwater must not be able to enter any liquid waste storage or treatment tanks, transfer pipelines and conveyance infrastructure; and d) Odour management must be conducted in accordance with the revised 'Operations, Odour and Nutrient Irrigation Management Plan (OONIMP) – Liquid Waste Treatment Facility' document. 	Schedule 1 Premises map
Liquid waste treatment facility	<p>To include the following processes within the liquid waste treatment facility:</p> <ol style="list-style-type: none"> a) Receiving and screening tank, with removal of biosolids for composting or for disposal to landfill; b) Aeration and sedimentation within three 32,000L oxygenated (compressed air) tanks, with settled sludge returned to the receiving tank; and c) The 'Fujiclean' ATU facility to include a contact filter bed process; <p>Receiving and screening tank must:</p> <ol style="list-style-type: none"> (a) consist of a covered unit, constructed above ground of concrete; (b) Include a primary 5 mm wedge wire static screen and secondary 1.4 mm wedge wire static screen; (c) Include a wash ring for odour management; (d) Allow for solid waste removed from screens to be deposited to area as defined within 'Schedule 1: Map' - biosolids (compost) 	Schedule 1 Premises map

Site infrastructure and equipment	Operational requirement	Infrastructure location
	<p>storage area.</p> <p>The settlement tanks must:</p> <ul style="list-style-type: none"> (e) Consist of above ground, impermeable tanks; (f) include a pH buffering and flocculant injection system; (g) include a cone at the base of each tank for removal of settled flocculants; (h) allow for the removal of settled biosolids via the cone to the biosolids storage area or removal from the premises by a controlled waste carrier for disposal to a licensed landfill; (i) direct residual wastewater removed from biosolids to be returned to treatment process; and (j) ensure that the handling and transfer of biosolids out of the liquid treatment facility does not cause any potential emission or discharge. <p>The 'Fujiclean' aerobic treatment system must:</p> <ul style="list-style-type: none"> (k) not exceed 13,689 L throughput per day; (l) include a contact filter bed process to reduce nutrient parameter loads; (m) consist of three treatment trains for the treatment of three separate waste streams (winery wash wastes, septage waste & overflow/stormwater); (n) include a liquid waste treatment area that is maintained to hold a maximum capacity of the liquid waste, at all times. 	
Biosolids/Compost	<p>Ensure compost and biosolids are managed as follows:</p> <ul style="list-style-type: none"> (a) to be stored and handled within a bunded, low permeability (1×10^{-9} m/s or less) hardstand area (nominally 100 m x 50 m); (b) All contaminated runoff to be contained in a runoff collection basin within the premises boundary which is lined to achieve a permeability of no greater than 1×10^{-9} m/s or equivalent; and (c) Ensure the runoff collection basin has capacity to store water from a 24-hour duration, 1 in 20 year ARI critical rainfall event without overflow. 	Schedule 1 Premises map
'Loading and Storage' area	<ul style="list-style-type: none"> a) Transfer of all liquids to occur within a concrete bunded 'Loading & Storage' area, on a concrete hardstand; b) Spill kits to be maintained and operated for the clean-up of any/all spills or leaks at the 	Schedule 1 Premises map

Site infrastructure and equipment	Operational requirement	Infrastructure location
	<p>premises;</p> <p>c) Used absorbency materials to be disposed of to a licensed facility; and</p> <p>d) Wash down of any vehicles associated with the liquid waste facility to occur within the loading and storage area.</p>	
Sumps	<p>a) To be kept free of debris/material and at full storage capacity; and</p> <p>b) All sediments removed from the sumps must be disposed of to a licensed facility.</p>	Schedule 1 Premises map
Groundwater monitoring bores 1-4	a) To be maintained in sound operating condition.	Schedule 1 Monitoring map
Piezometers 1-11		
Filtration and irrigation	<p>a) The licence holder must ensure that discharge to any of the eight irrigation areas (1, 2, 3, 4, 5, 6, 7 and 8) will only occur when groundwater separation is greater than two metres below ground level in that irrigation area;</p> <p>b) The licence holder must ensure that there is no discharge to areas 1, 2, 3, 4, 6, 7 and 8 during winter months (June – August);</p> <p>c) The licence holder must ensure that topsoil in areas 4 & 5, soils are amended to a depth of 500 mm to achieve a PBI greater than 100 within 5 years of when trees are replaced at the end of their viable production period;</p> <p>d) The filtration and irrigation system must consist of:</p> <ul style="list-style-type: none"> • 2 x 5,000 L Clarifier tanks and stands; • a sand filter and ultra violet disinfection unit; • Treated wastewater discharged to irrigation areas via subsurface drip feed system; and • Large/ heavy droplet surface irrigation pipework applied to the top of the biosolids (compost) storage area stockpiles, for the discharge of treated liquid waste. 	Schedule 1 Monitoring map

Waste acceptance

2. The licence holder must only accept onto the premises waste of a waste type, which does not exceed the corresponding quantity at which waste is received, and which meets the corresponding acceptance specification set out in Table 2.

Table 2: Types of waste authorised to be accepted onto the premises

Column 1	Column 2	Column 3	Column 4
Waste type	Acceptance specification	Quantity	Storage location
K200	Winery waste	7000 kL combined per annual period	See Schedule 1: Maps
K210	Septage waste		
K110	Grease waste		
D300	Non-toxic salts		

Specified actions

- 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

Column 1	Column 2	Column 3
Emission	Discharge point	Discharge point location
Treated liquid waste water	Irrigation infrastructure in areas 1, 2, 3, 4, 5, 6, 7 and 8 from outlet pipes of the final tanks of the liquid waste treatment system	See Schedule 1: Maps

- The Licence Holder must immediately clean any spills of liquid waste on the Premises.

Waste disposal requirements

- The Licence Holder must ensure that nutrient loading from irrigation does not exceed the limits specified in Columns 2 and 3, in Table 4.

Table 4: Treated wastewater- annual nutrient load

Column 1	Column 2	Column 3
Location	Phosphorous (kg/ha/yr)	Nitrogen (kg/ha/yr)
Irrigation area 1, 2, 3, 4, 5, 6, 7 and 8	8.3 kg/ha/yr	50 kg/ha/yr

6. The Licence Holder must:
- irrigate treated liquid waste water such that ponding or pooling does not occur;
 - ensure that any runoff does not leave the irrigation areas shown in green shading in Schedule 1 Premises map of irrigation areas; and
 - keep accurate and auditable records relating to the annual irrigation of the treated liquid waste water within each irrigation area at the Premises.

Monitoring

Treated Liquid Wastewater monitoring

7. The licence holder must undertake the monitoring in Table 5 at the location referred to in Column 2 of Table 5 for the parameters in column 4 using the method in column 5 of Table 5 at a frequency specified in column 3 of Table 5.

Table 5: Wastewater monitoring table

Column 1	Column 2	Column 3	Column 4	Column 5
Emission	Location*	Averaging Frequency	Parameters	Method
Treated liquid waste water	Wastewater Treatment Area - Outlet pipe of the final tank of the liquid waste treatment system (Off take discharge point for the irrigation areas 1, 2, 3, 4, 5, 6, 7 and 8)	Monthly	<ul style="list-style-type: none"> • pH¹; • Total Phosphorus; • Total Nitrogen; • Biochemical Oxygen Demand; • Suspended Solid; • Total Chlorine; • E.coli². 	AS5667.10. 1998

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

Note 2: Actual units are to be reported except where the result is greater than the highest detectable level of 24,000 cfu/100mL. In this case the reporting of the highest detectable level is permitted

Groundwater monitoring

8. The licence holder must undertake the monitoring in Table 6 at the location referred to in Column 1 of Table 6 for the parameters specified in column 2 of Table 6 for the averaging period specified in column 3 of Table 6 and in accordance with the method specified in column 4 of Table 6.

Table 6: Groundwater monitoring table

Column 1	Column 2	Column 3	Column 4
Location	Parameter	Averaging period	Method
Piezometers 1-11	Standing Water Level (mBGL)	Quarterly	AS5667.10. 1998
Groundwater monitoring bores WMB1, WMB2, WMB3 and WMB4	Total Dissolved Solids	Quarterly	
	Total Nitrogen		
	Total Phosphorous		
	Total Residual Chlorine ¹		
	pH ¹		
	BOD	Annually	
	Aluminium, Arsenic, Cadmium, Chromium, Cobalt, Copper, Fluoride, Iron, Lead, Manganese, Mercury, Molybdenum, Nickel, Vanadium, Zinc.	Annually	

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

Monitoring of inputs and outputs

9. The Licensee must undertake the monitoring in Table 7 according to the specifications in that table.

Table 7: Monitoring of inputs and outputs

Column 1	Column 2	Column 3	Column 4	Column 5
Input/Output	Parameter	Units	Averaging Period	Frequency
WQ1 - for each liquid waste type received	Volumetric flow rate (cumulative)	kL/ tonnes	Monthly	Each batch/ type of liquid waste arriving at premises.
WQ1 – treated liquid waste discharged from the treatment facility	Volumetric flow rate (cumulative)	kL/ tonnes	Monthly	Each batch of treated liquid waste discharged to the irrigation areas 1-8.

Biosolids from liquid waste treatment facility	Biosolids discharged to the biosolids (compost) area	m ³	Monthly	Each batch discharged from the liquid waste treatment facility to the biosolids (compost) area.
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Process monitoring

10. The Licensee shall undertake the monitoring in Table 8 according to the specifications in that table.

Table 8: Process monitoring

Monitoring point reference	Process description	Parameters	Units	Frequency	Method
Irrigation areas 1-8	Inspection of irrigation areas 1-8	Pooling or ponding of wastewater	Visual	Weekly, after irrigation.	N/A

11. The licence holder must ensure that all water samples are collected in accordance with AS/NZS 5667.11.
12. The licence holder must ensure that all water samples required in condition 7 and 8 are submitted to a laboratory with current NATA registration for the analysis specified.
13. The Licence Holder must submit to the CEO an Annual Environment Report with the Annual Audit Compliance Report required under condition 18.
14. The Licence holder must ensure that the Annual Environmental Report contains:
- an assessment of the monitoring results against Licence limits for the period;
 - cumulative monthly volumes of treated effluent discharged to the irrigation areas;
 - calculation of the annual nutrient loading rates applied to the irrigation areas during the annual period;
 - an assessment of actual plant growth against the total nutrient plant uptake;
 - discussion of total nutrient application rates in relation to the estimated volume of nutrients exported (from harvested biomass) from the premises during the annual period; and
 - a breakdown in nutrient application during winter months to match growth rates as determined by plant tissue analysis for the first two years of operation.

Records and reporting

- 15.** 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) any maintenance of infrastructure that is performed in the course of complying with condition 1 of this licence;
 - (c) monitoring programmes undertaken in accordance with conditions 7, 8, 9 and 10 of this licence; and
 - (d) complaints received under condition 17 of this licence.
- 16.** The books specified under condition 15 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.
- 17.** 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.
- 18.** 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 31 January after the end of that annual period an Annual Audit Compliance Report in the approved form.

Definitions

In this licence, the terms in Table 9 have the meanings defined.

Table 9: 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 10 December until 9 December of the immediately following year.
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 <i>Environmental Protection Act 1986</i> Locked Bag 10 Joondalup DC WA 6919 or: info@dwer.wa.gov.au
Department	means the department established under section 35 of the <i>Public Sector Management Act 1994 (WA)</i> 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	<i>Environmental Protection Act 1986 (WA)</i>
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</i>
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.
Premises	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the premises map in Schedule 1 to this licence.
prescribed premises	has the same meaning given to that term under the EP Act.

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Amendment date: 27 March 2020

IR-T06 Licence template (v5.0) (September 2019)

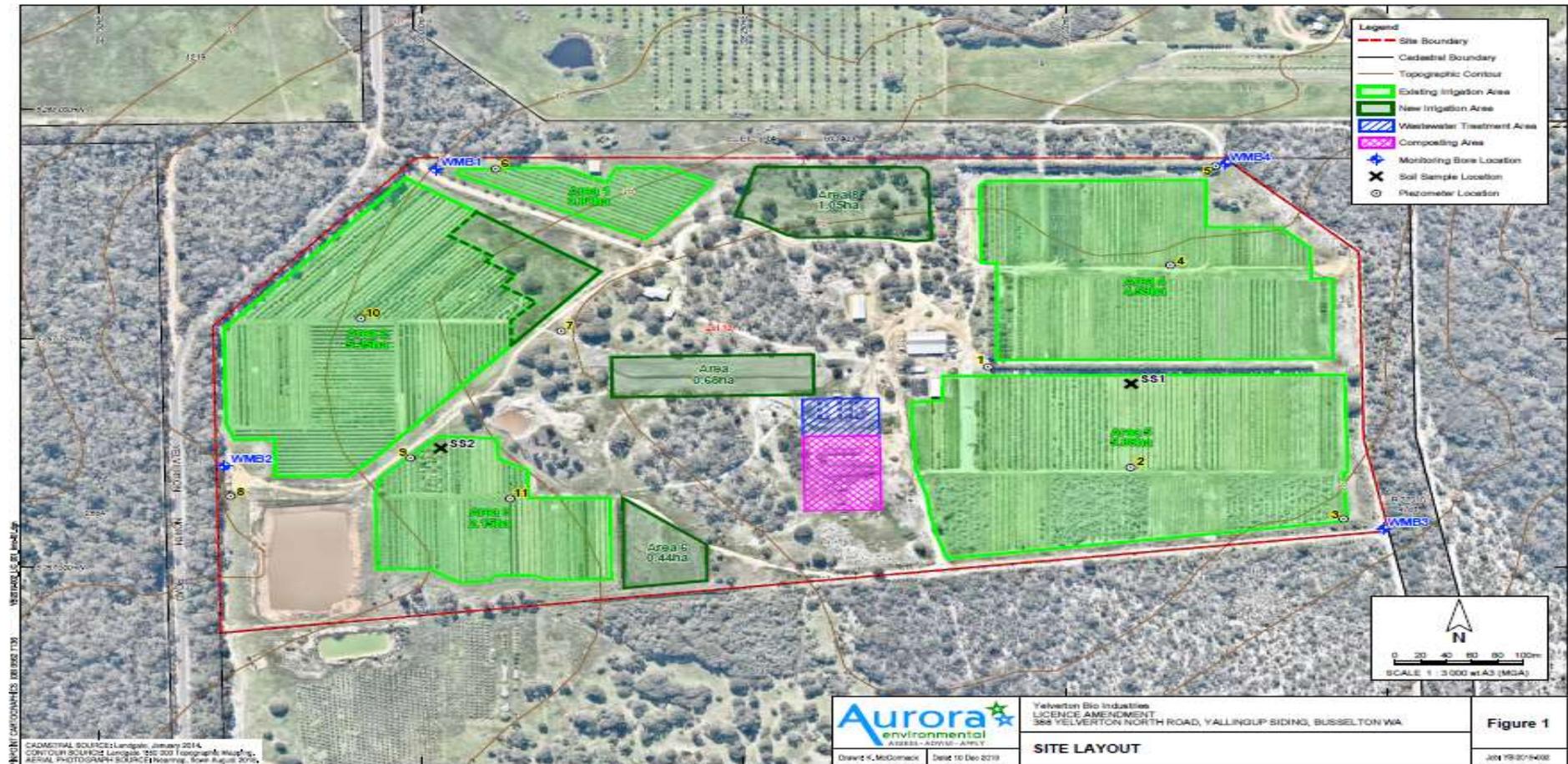
Term	Definition
P&DC	Production and Design Capacity
Waste	has the same meaning given to that term under the EP Act.

END OF CONDITIONS

Schedule 1: Maps

Premises map

The boundary of the prescribed premises is shown in the map below. The red line depicts the premises boundary



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Amendment date: 27 March 2020

IR-T06 Licence template (v5.0) (September 2019)

Map of monitoring and emission points



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IR-T06 Licence template (v5.0) (September 2019)