



Licence number	L8367/2009/3
Licence holder	Shire of Yilgarn
Registered business address	23 Antares Street Southern Cross WA 6426
DWER file number	DER2014/000471-1
Duration	16/11/2022 to 15/11/2042
Date of issue	14/11/2022
Premises details	Southern Cross Sewage Ponds Koolyanobbing Rd SOUTHERN CROSS WA 6426 Legal description – Being part of Lot 94 on Plan 188816, Crown Reserve 16597 as defined by the Coordinates in Schedule 2.

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production / design capacity
Category 54: Sewage facility: premises – (a) on which sewage is treated (excluding septic tanks); or (b) from which treated sewage is discharged onto land or into waters.	120 cubic metres per day

This licence is granted to the licence holder, subject to the attached conditions, on 14 November 2022, by:

Senior Environmental Officer, Industry Regulation
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Licence history

Date	Reference number	Summary of changes
12 November 2009	L8367/2009/1	New licence
13 November 2014	L8367/2009/2	Licence re-issue in REFIRE format and removal of discharge conditions.
29 November 2016	L8367/2009/2	Licence expiry date amended to 15 November 2022.
24 March 2017	L8367/2009/2	Licence amended to authorise the discharge of treated wastewater on recreational grounds within the townsite and remove Licence condition 4.1.1
13 November 2019	L8367/2009/2	Amendment was sought by the Licence Holder to increase the level of total suspended solids (TSS) in the discharged treated effluent permitted by the licence.
16 May 2022	L8367/2009/2	Amendment to reduce reporting burden.
14 November 2022	L8367/2009/3	Licence renewal in updated format.

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:
 - i) if dated, refers to that particular version; and
 - ii) if not dated, refers to the latest version and therefore may be subject to change over time;
- 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 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:

General

1. The licence holder must only accept onto the premises waste of a waste type, which does not exceed the corresponding rate at which waste is received, and which meets the corresponding acceptance specification set out in Table 1.

Table 1: Waste acceptance

Waste type	Rate at which waste is received	Acceptance specification ¹
Sewage	120 m ³ /day	Accepted through sewer inflow(s) only

Note 1: Additional requirements for the acceptance of controlled waste are set out in the Environmental Protection (Controlled Waste) Regulations 2004.

Infrastructure and equipment (operation)

2. The licence holder must ensure that the site infrastructure and equipment listed in Table 2 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 2.

Table 2: Infrastructure and equipment requirements

Site infrastructure and equipment	Operational requirement	Infrastructure location
Primary treatment ponds	Lined with compacted in-situ soils. Capacity to store a 24 hour duration, 1 in 20 year ARI critical rainfall event without overflow.	As shown in Schedule 1 – Figure 2
Secondary treatment ponds	Lined with compacted in-situ soils. Capacity to store a 24 hour duration, 1 in 20 year ARI critical rainfall event without overflow.	As shown in Schedule 1 – Figure 2
Sewage sludge compound	Temporary or permanent infrastructure to consist of a bunded hardstand or lined area (lined to achieve a permeability of less than 10 ⁻⁹ m/s or equivalent), capable of preventing surface run-off of leachate and sludge and which includes a leachate collection system.	As shown in Schedule 1 – Figure 2

Emissions and discharges

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

Table 3: Authorised discharge points

Emission	Discharge point	Discharge point location
Treated wastewater from wastewater treatment plant	Treated wastewater overflow pipe	SY1 as shown in Schedule 1 – Figure 3 and Figure 4.
	Treated wastewater pipeline to reuse scheme infrastructure	SY2 as shown in Schedule 1 – Figure 3.

4. Discharge from pond 4 overflow pipe is only authorised during extreme weather condition when the freeboard of the ponds is compromised.
5. The licence holder must ensure that treated wastewater discharged to the irrigation field does not exceed the parameter limits specified in Table 4.

Table 4: Irrigation emission limits

Discharge point	Parameter	Discharge limits	Units
SY2 as shown in Schedule 1 – Figure 3.	Total Nitrogen	300	kg/ha/year
	Total Phosphorous	60	kg/ha/year
	Escherichia coli	1000	cfu/100mL
	Total Suspended Solids	50	mg/L
	pH	6.5 – 8.5	mg/L
	Chlorine	0.2 – 2.0	mg/L

6. The licence holder must ensure treated wastewater is discharged to land (via irrigation) only at the locations specified in Table 5, in accordance with the corresponding discharge requirements.

Table 5: Authorised discharge of treated wastewater via irrigation

Discharge point	Discharge (via irrigation) requirements
Irrigation areas (i.e. sports oval, Constellation Park and Dog Park) as illustrated in Schedule 1 – Figure 5.	<ul style="list-style-type: none"> Ensure there is no ponding or pooling of water in the irrigation area; and, No run-off of treated effluent outside the irrigation area is to occur.

Operations

7. The licence holder must ensure that the waste types specified in Table 6 are only subjected to the corresponding process(es), subject to the corresponding process limits and/or specifications.

Table 6: Waste processing

Waste type	Process(es)	Process limits and/or specifications
Sewage	Physical, biological and chemical treatment	Primary and secondary aerobic treatment of sewage waste.

8. The licence holder must manage the wastewater treatment vessels such that:
- (a) overtopping of the ponds does not occur;
 - (b) a freeboard equal to, or greater than, 300mm is maintained;
 - (c) stormwater runoff is prevented from entering the vessels;
 - (d) there is no discernible seepage loss from the ponds; and,
 - (e) vegetation and floating debris (emergent or otherwise) is prevented from growing or accumulating in the pond wastewater or on the inner pond embankments.

Monitoring

9. The licence holder must ensure that all monitoring equipment used to comply with condition(s) 11 is operated and calibrated in accordance with the manufacturer's specifications.
10. In the event that requirements for calibration of monitoring equipment cannot be practicably met, or a discrepancy exists in the interpretation of the requirements, the licence holder must bring these issues to the attention of the CEO accompanied with a report comprising details of any modifications to the methods.
11. 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 7.

Table 7: Emissions and discharge monitoring

Discharge point	Monitoring location	Parameter	Frequency	Averaging period	Unit	Method (sampling)
Treated wastewater overflow pipe	SY1 as shown in Schedule 1 – Figure 3.	Volumetric flow rate (cumulative)	Monthly	Continuous	m³/day	N/A
		pH¹	Quarterly when discharging	Spot sample	-	AS/NZS 5667.1; AS/NZS 5667.10; and, AS/NZS 2031;
		Biochemical Oxygen Demand			mg/L	
		Total Dissolved Solids				
		Total Suspended Solids				
		Total Nitrogen				
		Total Phosphorus				
		Escherichia coli			Cfu/100ml	
Treated wastewater pipeline to reuse scheme infrastructure	SY2 as shown in Schedule 1 – Figure 3.	Volumetric flow rate (cumulative)	Monthly	Continuous	m³/day	N/A
		pH¹	Quarterly when discharging	Spot sample	-	AS/NZS 5667.1; AS/NZS 5667.10; and, AS/NZS 2031.
		Biochemical Oxygen Demand			mg/L	
		Total Dissolved Solids				
		Total Suspended Solids				
		Total Nitrogen				
		Total Phosphorus				
		Escherichia coli			Cfu/100ml	

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

- 12.** The licence holder must record the results of all monitoring activity required by condition 11.
- 13.** The licence holder must ensure that all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in Table 7.
- 14.** The licence holder must ensure that quarterly monitoring is undertaken in each quarterly period such that there are at least 45 days in between the days on which samples are taken in successive quarters.

Records and reporting

- 15.** 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.
- 16.** 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 1 September each year an Annual Audit Compliance Report in the approved form.
- 17.** 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 2 and condition 8 of this licence;
 - (c) monitoring programmes undertaken in accordance with condition 9, 11, 13 and 14 of this licence; and
 - (d) complaints received under condition 15 of this licence.
- 18.** The books specified under condition 17 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.
- 19.** The licence holder must submit to the CEO by no later than 1 September every two years, a Biennial Environmental Report for the two preceding annual periods, for the conditions listed in Table 8 and which provides information in accordance with the corresponding requirement set out in Table 8.

Table 8: Biennial Environmental Report

Condition	Requirement
Not applicable	Summary of any discharge of waste which occurs as a result of an emergency, accident or malfunction of any pollution control equipment or which is not authorised by the licence and any action taken.
Condition 11	Monitoring results of emissions to land.
Condition 11	Three monthly and annual average loads of each contaminant in the effluent discharged from the overflow pipe at the WWTP and that used for irrigation on each of the Southern Cross Sporting Oval, Dog Park and Constellation Oval using flow weighted data, reported in kilograms per day.
Condition 15	Complaints summary

- 20.** The licence holder must ensure that the Biennial Environmental Report also contains:
- (a) any relevant process, production or operational data; and,
 - (b) an assessment of the information contained within the report against previous monitoring results-
- 21.** The licence holder must ensure that the parameters listed in Table 9 are notified to the CEO in accordance with the notification requirements detailed in Table 9.

Table 9: Notification requirements

Condition	Parameter	Notification requirement ¹
Not applicable	Removal of sewage sludge from a treatment pond, wastewater treatment vessel, sewage sludge storage pond or Geobag	No less than 14 days in advance of these works ² .
5	Breach of any limit specified in the licence	As soon as practicable but no later than 5pm of the next working day after becoming aware of the limit breach.
10	Calibration report	As soon as practicable.

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

Note 2: The following information shall be included: (i) when desludging is proposed to occur; (ii) the desludging method; (iii) action to mitigate potential odour impacts; and, (iv) the method by which the community will be advised of the desludging activities.

Definitions

In this licence, the terms in Table 10 have the meanings defined.

Table 10: Definitions

Term	Definition
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 2031	means the Australian Standard AS/NZS 2031 Selection of containers and preservation of water samples for microbiological analysis.
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.
bund or bunding	means an impervious structure surrounding an area ensuring containment of all materials within and has a hydraulic conductivity of less than 1×10^{-9} metres per second (m/s).
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
controlled waste	as defined in <i>Environmental Protection (Controlled Waste) Regulations 2004</i> .
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.
EP Act	<i>Environmental Protection Act 1986 (WA)</i>
EP Regulations	<i>Environmental Protection Regulations 1987 (WA)</i>

Term	Definition
freeboard	means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point.
geobag	means a geotextile dewatering bag that allows solids to dewater over time while containing the solid component.
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.
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.
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 the premises map(s) Figure 1 in Schedule 1 to this licence.
quarterly period	means the 4 inclusive periods from 1 July to 30 September, 1 October to 31 December and in the following year, 1 January to 31 March and 1 April to 30 June.
spot sample	means a discrete sample representative at the time and place at which the sample is taken.
wastewater treatment vessels	means any vessel or tank containment infrastructure associated with the treatment of wastewater.

END OF CONDITIONS

Schedule 1: Maps and diagrams

Premises map



Figure 1: Map of the boundary of the prescribed premises

Premises infrastructure location map



Figure 2: Location of premises infrastructure

Process flow diagram and emission points

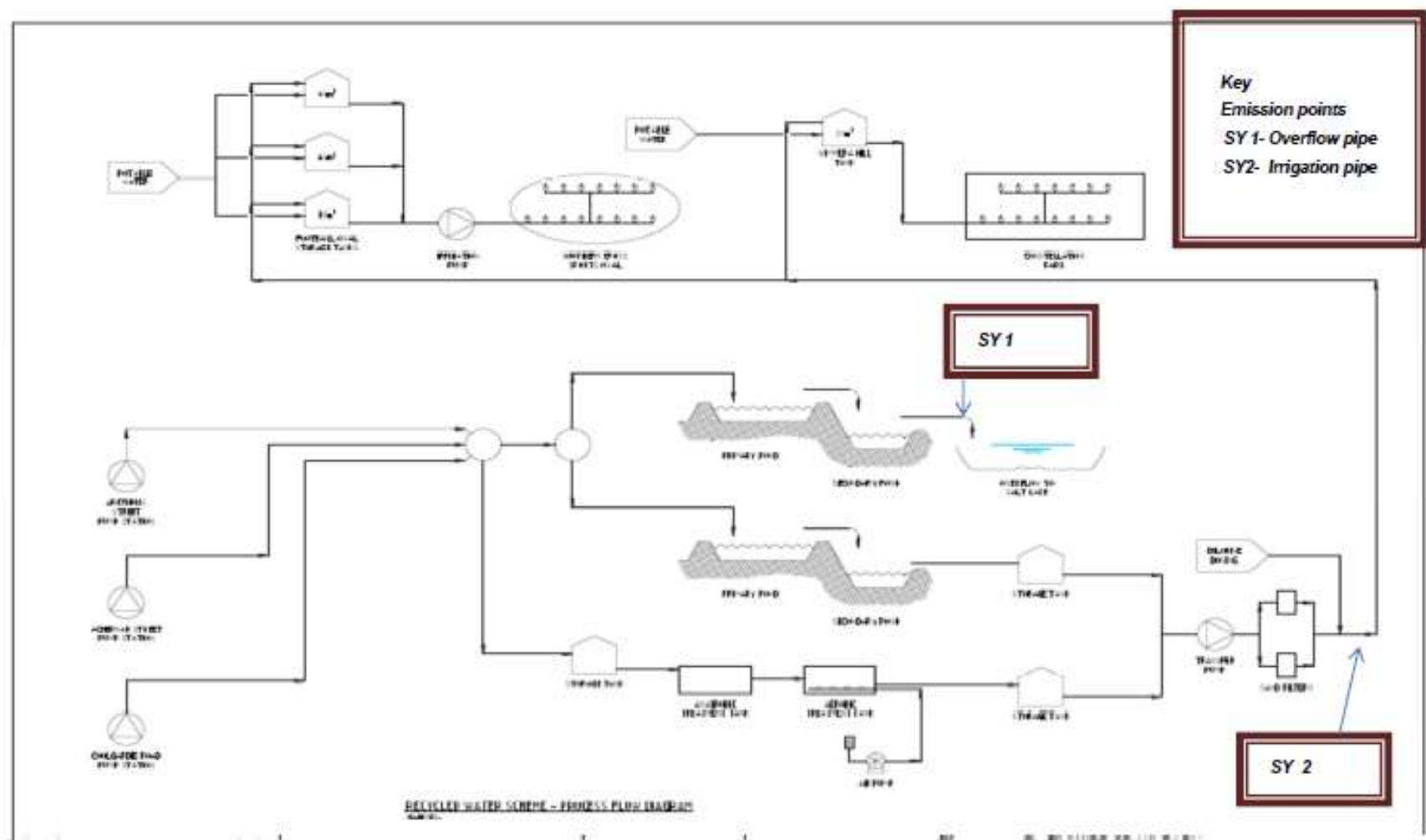


Figure 3: Process flow diagram showing location of treated wastewater emission points

Treated wastewater overflow pipe



Figure 4: Location of treated wastewater overflow pipe

Treated wastewater reuse infrastructure and locations



Figure 5: Location of treated wastewater reuse infrastructure and locations

Schedule 2: Premises boundary

The corners of the premises boundary are the coordinates listed in Table 11.

Table 11: Premises boundary coordinates (GDA2020)

	Easting	Northing
1.	119.335937	-31.219345
2.	119.337753	-31.219352
3.	119.337753	-31.219607
4.	119.338083	-31.219791
5.	119.338102	-31.220424
6.	119.335865	-31.220427