Licence number L8779/2012/2

Licence holder Soft Star Pty Limited

**ACN** 080 645 398

Registered business address Level 5, 115 Pitt Street

SYDNEY NSW 2000

**DWER file number** 2013/002270-1

**Duration** 04/04/2022 to 03/04/2042

**Date of issue** 29/03/2022

Premises details Christmas Island Resort Wastewater Treatment

1 Golf Course Casino Road

Waterfall Bay

CHRISTMAS ISLAND WA 6798

Legal description -

Lot 3051 on Deposited Plan 46328 Volume 3140

Folio 601

Lot 3052 on Deposited Plan 46328 Volume 3140

Folio 602

As defined in Schedule 1

	ribed premises category description dule 1, Environmental Protection Regulations 1987)	Assessed production / design capacity
Categ	ory 54 – Sewage facility: premises –	125 cubic metres per day
(a)	on which sewage is treated (excluding septic tanks); or	
(b)	from which treated sewage is discharged onto land or into waters.	

This licence is granted to the licence holder, subject to the attached conditions, on 29 March 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
04/04/2014	L8779/2013/1	Licence granted.
29/04/2016	L8779/2013/1	Amendment notice to extend expiry date from 3 April 2019 to 3 April 2022.
29/03/2022	L8779/2013/2	Licence renewal.

# 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:

## 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
Inlet works	Baffle in place to capture solids for removal.	
Process tank, Decant/ Balance tank, and Chlorination tank	<ul> <li>Constructed above ground, impermeable concrete tank;</li> <li>overtopping of the vessels does not occur;</li> <li>stormwater runoff is prevented from entering the vessels;</li> <li>a freeboard of ≥300mm is maintained;</li> <li>there is no discernible seepage loss from the vessels;</li> <li>maintain the facilities such that all treated effluent is discharged to the discharge point of the ocean outfall; and</li> <li>vegetation and floating debris (emergent or otherwise) is prevented from growing or accumulating in the vessels.</li> </ul>	Schedule 1 – Figure 1
Sewage sludge compound	<ul> <li>Sludge stored on 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;</li> <li>Sludge leachate is returned to the IDEA (Process) tank; and</li> <li>Biosolids are disposed of to a licensed landfill.</li> </ul>	
Washdown bay	Concrete bay with leachate and waste returning to the inlet of the aeration tank.	
Security measures	<ul> <li>Implement security measures at the premises to prevent unauthorised access;</li> <li>Undertake regular inspections of all security measures and repair damage as soon as practicable; and</li> <li>Ensure the entrance gates are closed and locked when the premises is closed or unmanned.</li> </ul>	

### Department of Water and Environmental Regulation

### **Premises Operation**

- **2.** The licence holder must only accept onto the premises waste of a type that:
  - (a) it is of a type listed in Table 2; and
  - (b) the quantity accepted is below any limit listed in Table 2; and
  - (c) it meets any specification listed in Table 2.

**Table 2: Waste acceptance** 

Waste type	Waste code	Quantity limit	Acceptance specification
Sewage	K130	125 m³/day	Accepted through sewer inflow(s) or tankered to the WWTP during emergency events or maintenance work only.

3. The licence holder must ensure that the waste accepted onto the Premises is only subjected to the processes set out in Table 3 and in accordance with any process requirements described in Table 3.

Table 3: Waste processing

Waste type	Process	Process requirements
Sewage	Physical, biological and chemical treatment	<ul> <li>pH of wastewater to be targeted at 6.5 to 8.5; and</li> <li>Treatment of sewage waste shall be targeted at or below the treatment capacity of 125 m3/day.</li> </ul>
Sewage sludge	Storage and disposal	<ul> <li>21m³ at any one time;</li> <li>Wasted from intermittent aeration tank to dry bed;</li> <li>Waste activated sludge leachate returned to the IDEA (Process) tank inlet; and</li> <li>Removal of sludge to a licenced landfill.</li> </ul>

#### **Dust emissions**

**4.** The licence holder must ensure that no visible dust generated from the primary activities crosses the boundary of the premises.

#### **Emissions**

#### Point source emissions to surface water

5. The licence holder must ensure that the emission specified in Table 4, is discharged only from the corresponding discharge point and only at the corresponding discharge point location.

**Table 4: Authorised discharge points** 

Emission	Discharge point	Discharge point location
Treated wastewater	P1 – Treated wastewater discharge point to ocean via ocean outfall pipeline	As shown in Schedule 1 – Figure 1

#### **Surface water emission targets**

6. The licence holder must ensure that the emission from the discharge point listed in Table 5 for the corresponding parameter do not exceed the corresponding target when monitored in accordance with condition 9.

Table 5: Emission and discharge targets

Discharge point	Parameter	Target (including units)	Reference	
	Total suspended solids (TSS)	< 20 mg/L		
	рН	6.5 – 8.5		
	Oil and grease	< 20 mg/L		
P1 -	Total nitrogen	< 20 mg/L	(As shown in	
Treated wastewater discharge point to ocean via ocean outfall pipeline	Total phosphorous	8 mg/L	Schedule 1 - Figure 1)	
via occari canan pipomic	Biological Oxygen Demand	<15 mg/L		
	Residual chlorine	< 0.5 mg/L		
	Surfactant (MBAS)	< 0.02		
	Escherichia coli <sup>2</sup>	< 200cfu/100ml		

Note 1: In situ 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.

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- 7. The licence holder must, within 7 days of becoming aware of any non-compliance with condition 6 of this licence, notify the CEO in writing of that non-compliance and include in that notification the following information:
  - a) which condition was not complied with;

- b) the time and date when the non-compliance occurred;
- c) if any environmental impact occurred as a result of the non-compliance and if so what that impact is and where the impact occurred;
- d) the details and result of any investigation undertaken into the cause of the non-compliance;
- e) what action has been taken and the date on which it was taken to prevent the non-compliance occurring again; and
- f) what action will be taken and the date by which it will be taken to prevent the non-compliance occurring again.

### **Monitoring**

- **8.** The licence holder must monitor surface water for concentrations of the identified parameters listed in Table 6:
  - at the corresponding monitoring location;
  - (a) in the corresponding unit;
  - (b) at no less than the corresponding frequency; and
  - (c) using the corresponding method.

Table 6: Monitoring of surface water quality

Monitoring location	Parameters	Unit	Frequency	Method	
	pH <sup>1</sup>	рН			
	Total Nitrogen	mg/L			
	Total Phosphorus	mg/L			
	Escherichia coli²	cfu/100ml			
	Ammonia-nitrogen				
	Total dissolved solids		Monthly	Spot sample	
M1 – WWTP plant discharge monitoring	5-Day Biochemical Oxygen Demand				
point	Total Suspended Solids	mg/L			
	Ammonium-nitrogen				
	Nitrate+nitrite- nitrogen				
	Residual chlorine <sup>1</sup>				
	Oil and grease	ma/l	Siv monthly	Spot	
	Surfactant (MBAS)	mg/L	Six monthly	sample	

Monitoring location	Parameters	Unit	Frequency	Method
	Lead			
	Cadmium			Spot sample
	Copper	mg/L & kg/day	Annual	
	Zinc	kg/day		
	Mercury			

Note 1:In-situ 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.

- **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;
  - (d) all microbiological samples are collected and preserved in accordance with AS/NZS 2031; and
  - (e) 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.
- 10. The licence holder must ensure that surface water monitoring is undertaken in each monthly period such that there are at least 15 days in between the days on which samples are taken in successive months.
- 11. The licence holder must ensure that all monitoring equipment used to comply with conditions 6 and 8 is operated and calibrated in accordance with the manufacturer's specifications.

**12.** The licence holder must undertake the monitoring in Table 7 according to the specifications in that table.

**Table 7: Monitoring of inputs and outputs** 

Input/Output	Monitoring Point Reference	Parameter	Units	Averaging period	Frequency
Sewage – Inlet flow	Inflow meter (W1)				
Treated wastewater discharged to ocean outfall pipeline	Outflow meter (W2)	Volumetric flow rate (cumulative)	m³/day	Continuous	Monthly

Note 1: Refer to Figure 1 for monitoring point references

#### **13.** The licence holder must

- (a) undertake the monitoring in Table 8 according to the specifications in that table; and
- (b) maintain suitable devices for measuring monthly cumulative volumes (in cubic metres per day) of wastewater at the premises.

**Table 8: Process monitoring** 

Monitoring Point Reference	Process description	Parameter	Units	Averaging period	Frequency	Method
P1 - Outfall pipeline	Visual inspection of the entire length of the outfall pipeline	N/A	N/A	Spot sample	Weekly	None specified
Maintenance checks	Wastewater Treatment Plant inspections	N/A	N/A	Routine	Daily	None specified
Sludge age	Assessment of biosolids in preparation for disposal to landfill	Biosolids	N/A	Spot sample	Weekly	None specified

# **Records and reporting**

14. 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.
- **15.** 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.
- 16. The licence holder must submit to the CEO by no later than 60 days after the end of each annual period, an Annual Environmental Report for that annual period for the conditions listed in Table 9, and which provides information in accordance with the corresponding requirement set out in Table 9.

**Table 9: Annual Environmental Report** 

Condition	Requirement		
8	Monitoring of point source emissions to surface waters.		
12	Monitoring of inputs and outputs.		
	Methodology and calculations used to estimate the daily volumetric flow rate of treated wastewater pumped to marine outfall and results of those calculations.		
13	Summary of all process monitoring, methodology used and any corrective action undertaken.		
14	Complaints summary		

- 17. The licence holder must ensure that the Annual Environmental Report also contains:
  - (a) any relevant process, production or operational data recorded under condition 11; and
  - (b) an assessment of the information contained within the report against previous monitoring results from the previous three annual periods.

**18.** The licence holder must ensure that the parameters listed in Table 10 are notified to the CEO in accordance with the notification requirements of Table 10.

**Table 10: Notification requirements** 

Condition or table	Parameter	Notification requirement	Format or form
-	Taking process equipment offline for maintenance works that may result in increased odour emissions.	No less than 72 hours in advance of works.	None specified
-	Removal of sewage sludge from a treatment pond, wastewater treatment	No less than 14 days in advance of works. The following information shall be included:	
	vessel, sewage sludge storage pond or Geobag.	(a) When desludging is proposed to occur;	
		(b) The desludging method;	
		(c) Action to mitigate potential odour impacts; and	
		(d) The method by which the community will be advised of the desludging activities.	

- **19.** 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 6 and 8 of this licence; and
  - (d) complaints received under condition 14 of this licence.
- **20.** The books specified under condition 19 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.

# **Definitions**

In this licence, the terms in Table 11 have the meanings defined.

**Table 11: 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 January until 31 December of the immediately following year.	
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</i> (WA) and designated as responsible for the administration of the EP Act, which includes Part V Division 3.	
EP Act	Environmental Protection Act 1986 (WA)	
EP Regulations	Environmental Protection Regulations 1987 (WA)	
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 (Figure 1) in Schedule 1 to this licence.	
waste code	means the waste code assigned to a type of controlled waste for purposes of waste tracking and reporting as specified in the Departments' "Controlled Waste Category List" (July 2014), as amended from time to time.	
wastewater treatment vessels	means any vessel or tank containment infrastructure associated with the treatment of wastewater.	

### **END OF CONDITIONS**

# Schedule 1: Maps

## **Premises map**

The boundary of the prescribed premises is shown in the map below (Figure 1).

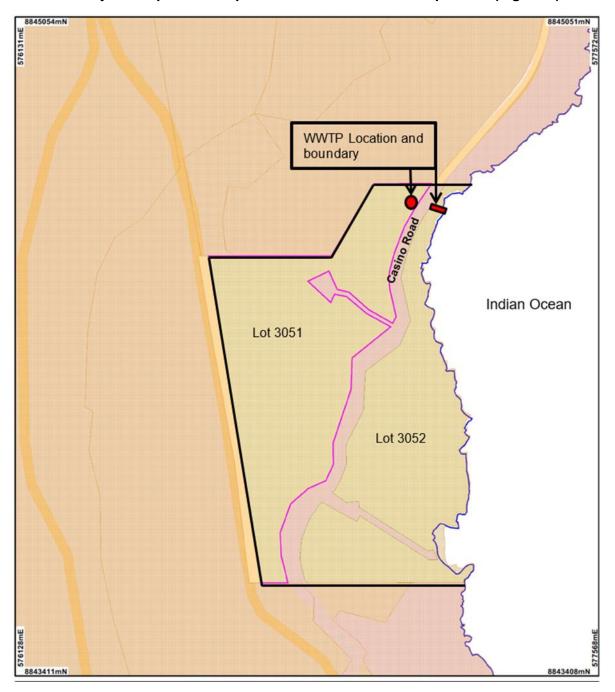


Figure 1: Map of the boundary of the prescribed premises



Figure 2: Map of the premises layout

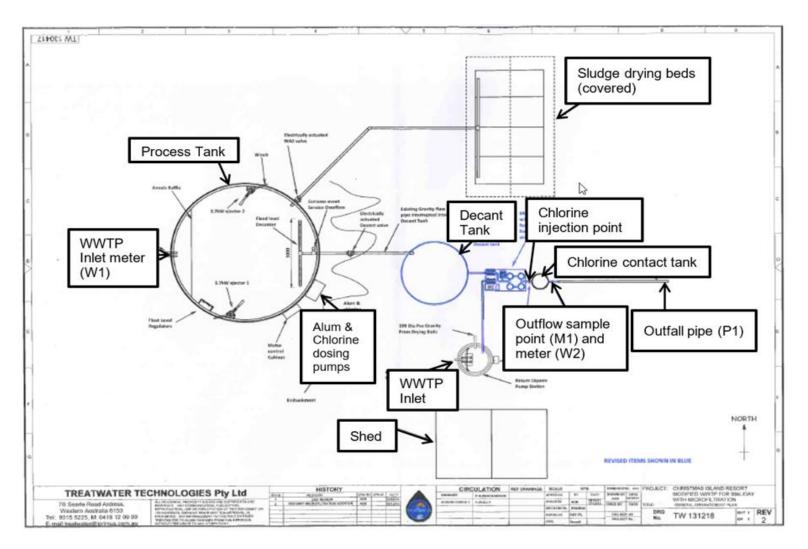


Figure 3: Map of emission points and monitoring points