



Licence number	L6246/1991/8
Licence holder	Water Corporation
ABN	28 003 434 917
Registered business address	John Tonkin Water Centre 629 Newcastle Street Leederville WA 6007
DWER file number	DER2013/001027-1
Duration	01/11/2013 to 31/10/2028
Date of issue	24/08/2023
Premises details	South Hedland Water Resource Recovery Facility Reserve 31687, Lot 2040 Golf Course Road SOUTH HEDLAND WA 6722 Legal description - Being Lots 356 on Plan 74206. Lots 6035, 341, 342, 343 and Part of Lot 344 on Plan 72901 and Part of Lot 6067 on Plan 220454 As depicted in Schedule 1

Prescribed premises category description (Schedule 1, <i>Environmental Protection Regulations 1987</i>)	Assessed production 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	Not more than 9,500 m ³ per day

This licence is granted to the licence holder, subject to the attached conditions, on 24 August 2023, by:

Grace Campbell

A/Senior Environmental Officer, Industry Regulation

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

[L6246/1991/8 \(Amended 24 August 2023\)](#)

Licence History

The licences and works approvals issued for the Premises since 1 November 2008 are:

Reference number	Date	Summary of changes
L6246/1991/7	01/11/2008	Licence re-issue
L6246/1991/7	24/03/2011	Licence amendment
L6246/1991/7	04/04/2013	Licence amendment for the operation of the onsite irrigation field
L6246/1991/8	01/11/2013	Licence reissue
L6246/1991/8	13/08/2015	Licence amendment to new format to include works completed under Works Approval's W5109/2011/1 and W5451/2013/1 (evaporation/infiltration bays, two anaerobic ponds and a Water Recycling Plant).
L6246/1991/8	29/04/2016	Department initiated notice of amendment to amend the duration of the licence to 31 October 2028.
L6246/1991/8	24/04/2019	Amendment Notice 1 - Construction of temporary bypass system to allow the continued supply of end use water to the Golf Course when the Tertiary Treatment Plant is undergoing maintenance or repairs and offline.
L6246/1991/8	24/08/2023	Licence amendment to the submission dates for the Environmental Report and Annual Audit Compliance Report (AACR).

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:

1. The Licence Holder must operate and maintain all flow meters to the manufacturer's specification or any relevant and effective internal management system.
2. The Licence Holder must immediately recover, or remove and dispose of spills of environmentally hazardous materials outside an engineered containment system.
3. The Licence Holder must take all reasonable and practicable measures to prevent stormwater run-off becoming contaminated by the activities and operations undertaken at the premises

Premises operation

4. The Licence Holder must record and investigate the exceedance of any descriptive or numerical limit in this section.
5. The Licence Holder must only allow waste to be accepted on to the Premises if:
 - (a) it is of a type listed in Table 1; and
 - (b) the quantity accepted is below any limit listed in Table 1; and
 - (c) it meets any specification listed in Table 1.

Table 1: Waste acceptance

Waste	Waste Code	Quantity Limit	Specification ¹
Putrescible and Organic wastes			
Sewage	N/A	9 500 m ³ /day	Accepted through sewer inflow(s) only and tankered waste only

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

6. The Licence Holder must ensure that the wastes accepted onto the Premises are only subjected to the processes set out in Table 2 and in accordance with any process requirements described in that table.

Table 2: Waste processing

Waste type	Process	Process requirements
Sewage	<ul style="list-style-type: none"> • Physical, biological and chemical treatment • Storage and disposal 	<ul style="list-style-type: none"> • Treatment of sewage waste shall be limited at or below the treatment capacity of 9 500 m³/day; and • TWW is permitted to be processed through the temporary bypass system for offsite reuse.

Sewage sludge	Storage and disposal	<ul style="list-style-type: none"> Collected leachate to be returned to treatment ponds; and Removal of sludge and biosolids in accordance with the document Western Australian guidelines for biosolids management, Department of Water and Environmental Regulation, (December 2012 or updated version), or to a licensed landfill facility.
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7. The Licence Holder must ensure that waste material is only stored and/or treated within vessels or compounds provided with the infrastructure detailed in Table 3.

Table 3: Containment infrastructure

Vessel or compound	Material	Requirements
Inlet works (Drum Screen)	Grit and Screenings	Stored in a sealed bin which is surrounded by a bunded hardstand area which returns sludge leachate to the start of the treatment process
Anaerobic Ponds 1 and 2	Wastewater	Geosynthetic clay lined to achieve a permeability of $<10^{-9}$ m/s or equivalent
Primary Ponds 1,2 and 3 (Aerated Ponds)	Wastewater	Lined with compacted in-situ soils
Secondary Ponds 1, 2 and 3 (Maturation Pond 1)	Wastewater	Lined with compacted in-situ soils
Treatment Pond 4	Wastewater	Lined with compacted in-situ soils
Compensating Basin 1	Treated wastewater	Lined with geotextile to achieve a permeability of $<10^{-9}$ m/s or equivalent
Compensating Basin 2 and 3	Treated wastewater	Unlined
Evaporation Basins	Treated wastewater	Unlined
Sewage sludge compound	Sewage sludge	Contained in sludge drying beds
2x 60kL storage tanks	Treated wastewater	On concrete slab foundations Within bunded area

8. The Licence Holder must manage all wastewater treatment and evaporation/infiltration ponds such that:
 - (a) overtopping of the ponds does not occur; and
 - (b) the integrity of the containment infrastructure is maintained;
 - (c) trapped overflows are maintained on the outlet of ponds to prevent carry-over of surface floating matter; and
 - (d) vegetation and floating debris (emergent or otherwise) is prevented from encroaching onto pond surfaces or inner pond embankments.
9. The Licence Holder must:
 - (a) implement security measures at the site to prevent as far as is practical unauthorised access to the site;
 - (b) undertake regular inspections of all security measures and repair damage as soon as practicable; and
 - (c) ensure the entrance gates are closed and locked when the site is closed or unmanned.
10. The Licence Holder must comply with the Contingency Discharge Management Plan, submitted to DWER on 31 March 2014.
11. The Licence Holder must comply with the Operational Vegetation Management Plan, submitted to DWER on 31 March 2014.
12. The Licence Holder must comply with the Odour Management Plan, submitted to DWER on 31 March 2014 and Table 1 submitted to DWER on 12 August 2014.
13. The Licence Holder must comply with the Operational Odour Management Plan and the Proponent response table submitted to DWER on 23 March 2015. The Licence Holder must inform the CEO one month prior of the implementation of the OOMP for the post-commissioning odour survey.

Emissions

14. The Licence Holder must ensure that where waste is emitted to land from the emission points in Table 4 [and identified on the map of emission points in Schedule 1] it is done so in accordance with the conditions of this Licence.

Table 4: Emissions to land

Emission point reference	Description	Source including abatement
L1	TWW not used for offsite reuse discharged into Compensating Basins 2 & 3	TWW pumped from Compensating Basin 1 to Compensating Basins 2 & 3.
L2	TWW not used for offsite reuse discharged into Evaporation Basins	TWW pumped from Compensating Basin 1 to Evaporation Bays

Monitoring

15. The Licence Holder must ensure that:
 - (a) all water samples are collected and preserved in accordance with AS/NZS 5667.1 unless indicated otherwise in the relevant table;
 - (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 unless indicated otherwise in the relevant table.
16. The Licence Holder must ensure that:
- (a) monthly monitoring is undertaken at least 15 days apart;
 - (b) quarterly monitoring is undertaken at least 45 days apart; and
 - (c) six monthly monitoring is undertaken at least 5 months apart.
17. The Licence Holder must record production or throughput data and any other process parameters relevant to any non-continuous or CEMS monitoring undertaken.
18. The Licence Holder must 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.
19. The Licence Holder must, 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.

Monitoring of emissions to land

20. The Licence Holder must undertake the monitoring in Table 5 according to the specifications in that table.

Table 5: Monitoring of emissions to land

Monitoring point reference	Parameter	Units	Frequency
M1	Volumetric flow rate (cumulative) ¹	m³/day	Continuous
	pH ¹	pH units	Quarterly
	Biochemical Oxygen Demand	mg/L	
	Total Suspended Solids		
	Total Dissolved Solids		
	Total Nitrogen		
	Ammonium Nitrogen		
	Nitrate + Nitrite Nitrogen		
	Total Phosphorus		
	<i>E.coli</i> ²	cfu/100 mL	

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

Monitoring of inputs and outputs

21. The Licence Holder must undertake the monitoring in Table 6 according to the specifications in that table.

Table 6: Monitoring of inputs and outputs

Input/ Output	Monitoring point reference	Parameter	Units	Averaging period	Frequency
Sewage - Inlet Flow	Inflow meter	Volumetric flow rate (cumulative)	m ³ /day	Monthly	Continuous
TWW discharged to WRP	M1	Volumetric flow rate (cumulative)	m ³ /day	Monthly	Continuous
TWW discharged to Compensating Basins 2 & 3 and Evaporation/Infiltration Basins	M2	Volumetric flow rate (cumulative)	m ³ /day	Monthly	Continuous

Ambient environmental quality monitoring

22. The Licence Holder must undertake the monitoring in Table 7 according to the specifications in that table.

Table 7: Monitoring of ambient groundwater quality

Monitoring point reference and location	Parameter	Units	Averaging period	Frequency
Bore 15/12 Bore 16/12 Bore 17/12 Bore 18/12 Bore 19/12 Bore 20/12 Bore 21/12	Standing Water Level ¹	m(AHD) mbgl	Spot sample	Six monthly
	pH ¹	pH Units		
	Total Dissolved Solids	mg/L		
	Total Nitrogen			
	Ammonium Nitrogen			
	Nitrate + Nitrite-Nitrogen			
	Total Phosphorus			

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

Records and reporting

23. All information and records required by the Licence must:

- (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 23(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.

- 24.** 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 an Annual Audit Compliance Report (AACR) in the approved form by 1 October each year.
- 25.** The Licence Holder must implement a complaints management system that as a minimum records the number and details of complaints received concerning the environmental impact of the activities.
- 26.** The Licence Holder must:
- (a) prepare an environmental report that provides information in accordance with Table 8 for the preceding annual period, and
 - (b) submit the environmental report to the CEO by 1 October each year.

Table 8: Environmental Report

Condition or table (if relevant)	Parameter	Format or form
-	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 5	Monitoring of emissions to land	None specified
Table 6	Monitoring of inputs and outputs	None specified
	Methodology and calculations used to estimate the daily volumetric flow rate of treated wastewater pumped to evaporation basins and results of those calculations.	None specified
Table 7	Monitoring of ambient groundwater quality	None specified
24	Compliance	AACR
25	Complaints summary	None specified

- 27.** The Licence Holder must ensure that the Environmental Report also contains:
- (a) any relevant process, production or operational data recorded under condition 17; and
 - (b) an assessment of the information contained within the report against previous monitoring results and Licence limits.
- 28.** The Licence Holder must submit the information in Table 9 to the CEO according to the specifications in that table.

Table 9: Non-annual reporting requirements

Condition or table (if relevant)	Parameter	Reporting period	Reporting date (after end of the reporting period)	Format or form
-	Copies of original monitoring reports submitted to the Licence Holder by third parties	Not Applicable	Within 14 days of the CEOs request	As received by the Licence Holder from third parties

29. The Licence Holder must ensure that the parameters listed in Table 10 are notified to the CEO and in accordance with the notification requirements of the table.

Table 10: Notification requirements

Condition or table (if relevant)	Parameter	Notification requirement ¹	Format or form ²
-	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 vessel, sewage sludge storage pond or Geobag	No less than 14 days in advance of works ³	
-	Direct discharge to the environment, excluding infiltration, within 48 hours of becoming aware that such a discharge will occur, or has occurred	No less than 48 hours	
-	Breach of any limit specified in the Licence	Part A: As soon as practicable but no later than 5pm of the next working day Part B: As soon as practicable	N1
19	Calibration report	As soon as practicable.	None specified

Note 1: Notification requirement in the Licence shall not negate the requirement to comply with s72 of the Act.

Note 2: Forms are in Schedule 2.

Note 3: The following information shall be included: (i) when desludging is proposed to occur and (ii) the desludging method, and (iii) action to mitigate potential odour impacts.

Definitions

In this licence, the terms in Table 12 have the meanings defined.

Table 12: Definitions

Term	Definition
ABN	Australian Business Number.
Act	means the <i>Environmental Protection Act 1986</i> ;
AHD	Australian height datum.
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	means the inclusive period from 30 June until 1 July in the following year
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 <i>Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples</i> ;
AS/NZS 5667.10	means the Australian Standard AS/NZS 5667.10 <i>Water Quality – Sampling – Guidance on sampling of waste waters</i>
AS/NZS 5667.11	means the Australian Standard AS/NZS 5667.11 <i>Water Quality – Sampling – Guidance on sampling of groundwaters</i>
averaging period	means the time over which a limit or target is measured or a monitoring result is obtained.
CEMS	means continuous emissions monitoring system;
CEMS Code	means the current version of the Continuous Emission Monitoring System (CEMS) Code for Stationary Source Air Emissions, Department of Water and Environmental Regulation;
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
cfu/100mL	means coliform forming units per 100 millilitres;
controlled waste	has the definition in <i>Environmental Protection (Controlled Waste) Regulation 2004</i> ;

Term	Definition
DWER	means Department of Water and Environmental Regulation;.
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;
in-situ soils	means soils that are in place and have not been moved from their original place of deposition;
leachate	means liquid released by or water that has percolated through waste and which contains some of its constituents;
Licence'	means this Licence numbered L6796/1991/13 and issued under the Act;
Licence Holder	means the person or organisation named as Licence Holder on page 1 of the Licence;
m ³	means cubic metres;
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
normal operating conditions	means any operation of a particular process (including abatement equipment) excluding start-up, shut-down and upset conditions, in relation to stack sampling or monitoring;
Premises	means the area defined in the Premises Map in Schedule 1 and listed as the Premises address on page 1 of the Licence
process equipment	means any wastewater or sludge containment infrastructure or wastewater treatment vessel;
quarterly	means the 4 inclusive periods from 1 July to 30 September, 1 October to 31 December, 1 January to 31 March and 1 April to 30 June in the following year;
Schedule 1	means Schedule 1 of this Licence unless otherwise stated;
Schedule 2	means Schedule 2 of this Licence unless otherwise stated;
shut-down	means the period when plant or equipment is brought from normal operating conditions to inactivity;
six monthly	means the 2 inclusive periods from 1 July to 31 December and 1 January to June 30 in the following year;
spot sample	means a discrete sample representative at the time and place at which the sample is taken;
start-up	means the period when plant or equipment is brought from inactivity to normal operating conditions;

Term	Definition
TTP	means tertiary treatment plant;
TWW	means treated waste water;
usual working day	means 0800 – 1700 hours, Monday to Friday excluding public holidays in Western Australia;
Waste Code	means the Waste Code assigned to a type of controlled waste for purposes of waste tracking and reporting as specified in the Department of Water and Environmental Regulation “Controlled Waste Category List” (July 2014), as amended from time to time;
WRRF	means water resource recovery facility;
wastewater treatment vessels	means any vessel or tank containment infrastructure associated with the treatment of wastewater; and
µS/cm	means microsiemens per centimetre

END OF CONDITIONS

Schedule 1: Maps

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

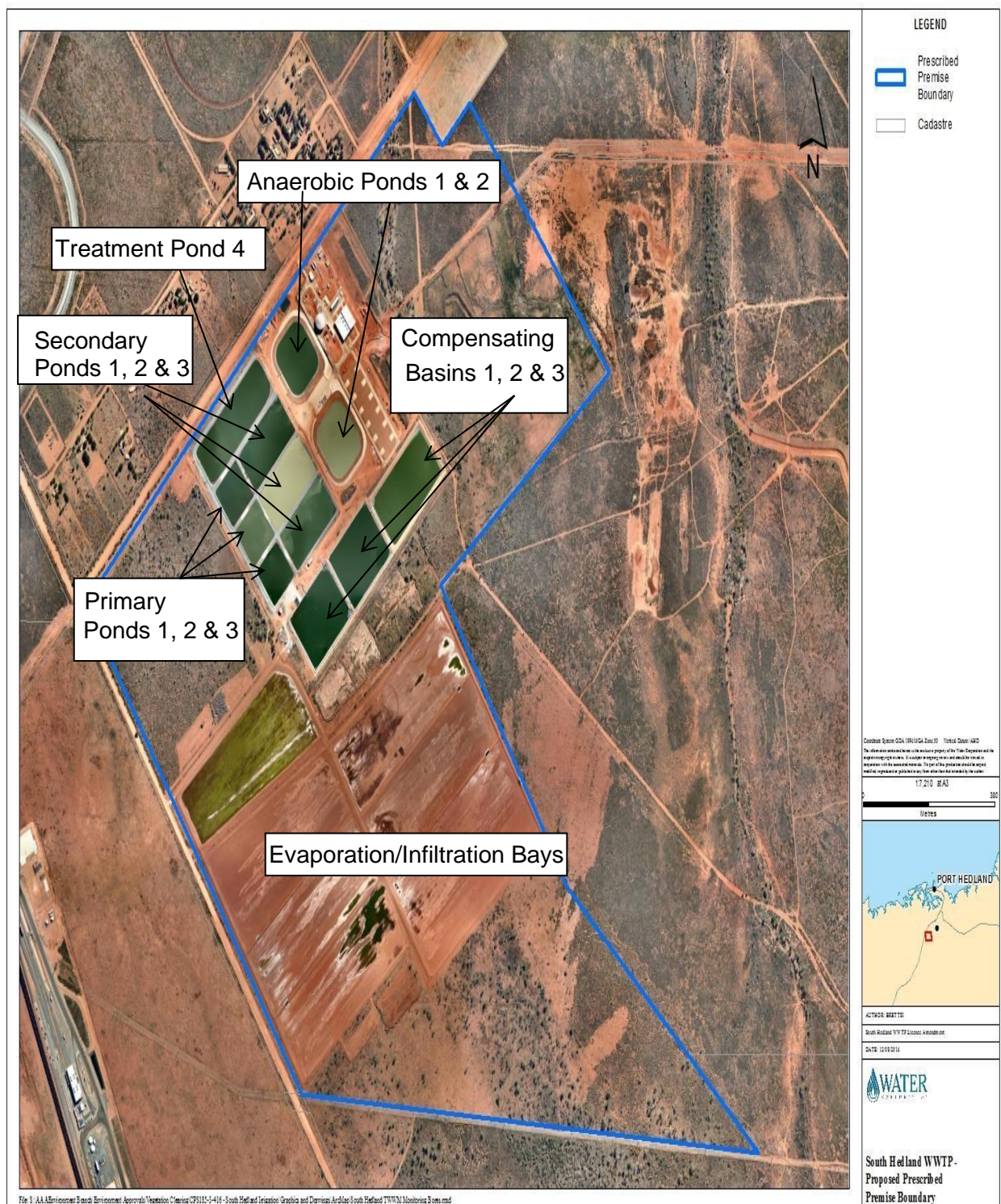


Figure 1: Premises map

Map of monitoring locations

The locations of the emission points defined in Table 4 and monitoring points defined in Table 5 are shown below.

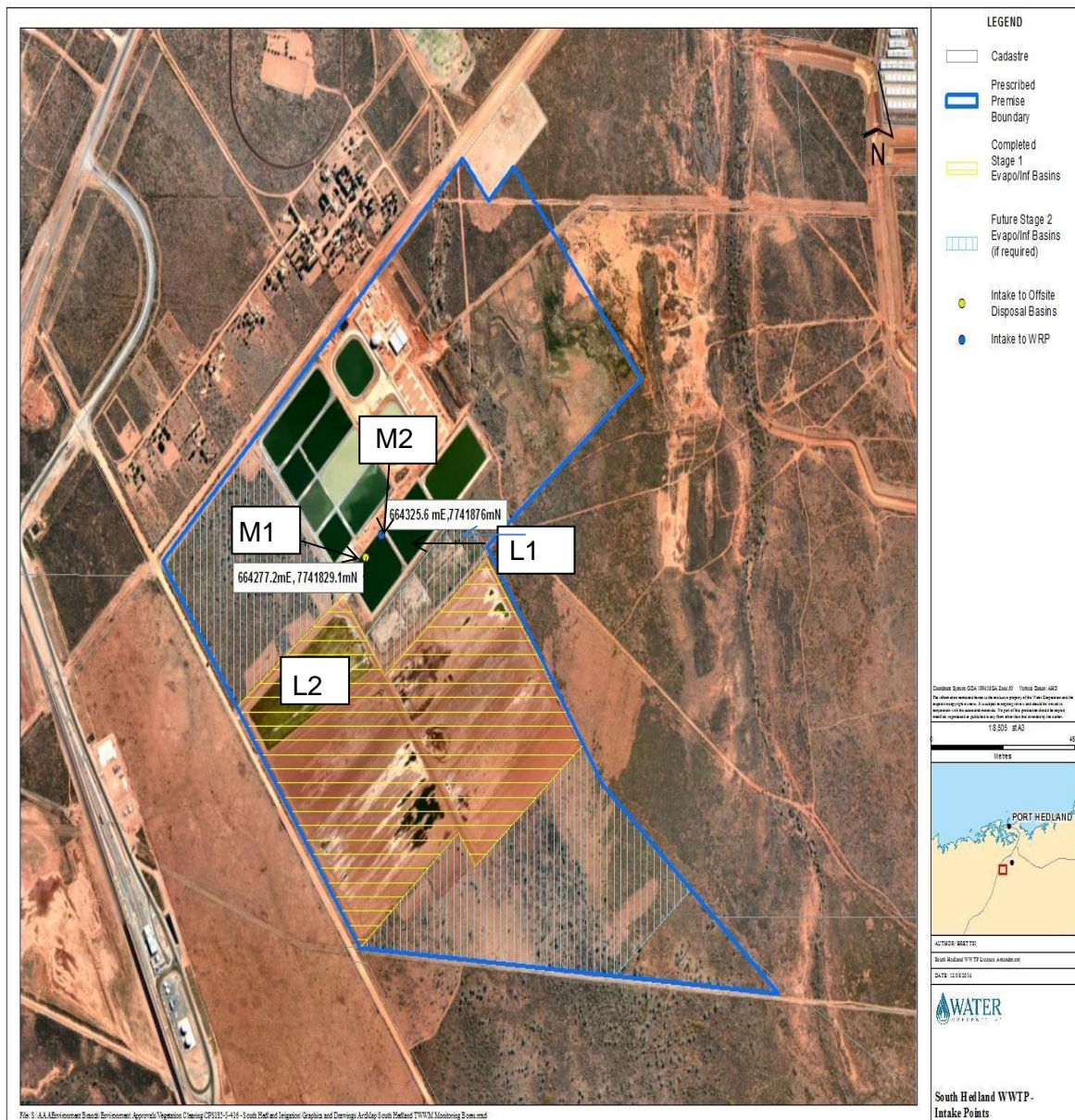


Figure 2: Emission points and monitoring locations

Schedule 2: Notification Forms

Licence: L6246/1991/8 Licence Holder: Water Corporation
Form: N1 Date of breach:

Notification of detection of a breach of a limit

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	

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 Water Corporation	
Date	