



Licence number	L5954/1991/12
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	DER2014/001048-1
Duration	8/10/2015 to 31/10/2035
Date of issue	24/08/2023
Premises details	Kalbarri Water Resource Recovery Facility Corner of Porter Street and Atkinson Crescent KALBARRI WA 6536 Legal description - Lot 11322 on Plan 183298

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 1,100 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)

Licence history

Reference number	Date	Summary of changes
L5954/1991/6	14/10/2002	Licence re-issue
L5954/1991/7	22/09/2003	Licence re-issue
L5954/1991/8	27/09/2004	Licence re-issue
L5954/1991/9	22/09/2006	Licence re-issue
L5954/1991/10	31/10/2008	Licence re-issue
L5954/1991/11	21/10/2010	Licence re-issue
W5207/2012/1	31/08/2012	Works approval for premises upgrade
L5954/1991/12	1/10/2015	Licence re-issue and conversion to new format
L5954/1991/12	14/12/2020	DWER initiated amendment to correct Premises details – Plan number. Licence converted into new format.
L5954/1991/12	22/08/2023	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:

Premises operation

1. The Licence Holder must only allow waste to be accepted on to the Premises if:
 - (b) 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
Putrescible and Organic wastes			
Sewage	K130	1,100 m ³ /day	Accepted through sewer inflow(s) only
Septage waste	K210		Tankered into the premises and discharged via the Pump Station receivable point, into the primary pond.

2. The Licence Holder must ensure that the wastes accepted onto the Premises are only subjected to the process(es) 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	Physical and biological treatment	Treatment of sewage waste must be maintained at or below the treatment capacity of 1,100 m ³ /day.
Sewage sludge	Storage	330m ³ or less at any one time.

3. 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	Grit and screenings	<ul style="list-style-type: none"> • Stored in a sealed bin on a hardstand area which returns sludge leachate to the start of the treatment process
Pond 1A (Primary Pond)	Wastewater	<ul style="list-style-type: none"> • Clay-lined to 300mm compacted soil; • Dispose of collected vegetation and floating debris from the treatment ponds to a licensed landfill.
Pond 2A (Secondary Pond)		
Ponds 3a, 3b, 4a, and 4b (Polishing ponds)		

Vessel or compound	Material	Requirements
Emergency overflow storage pond	Treated wastewater	<ul style="list-style-type: none"> In-situ soils and designed to infiltrate.
Sewage sludge compounds	Sewage sludge	<ul style="list-style-type: none"> 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; The sewage sludge drying beds and geobag laydown area should be managed such that: <ol style="list-style-type: none"> stormwater runoff is prevented from entering the compound; and discharges/leachate from the compound are directed back to the primary pond; and Biosolids and sludge to be disposed of in accordance with Western Australian Guidelines for Biosolids Management, Department of Environment and Conservation, December 2012 (as amended).

4. The Licence Holder must manage all wastewater treatment, and infiltration ponds such that:
- overtopping of the ponds does not occur;
 - there is no discernible seepage or loss from the ponds;
 - a freeboard at or greater than 300mm is maintained;
 - the integrity of the containment infrastructure is maintained;
 - trapped overflows are maintained on the outlet of ponds to prevent carry-over of surface floating matter; and
 - vegetation and floating debris (emergent or otherwise) is prevented from encroaching onto pond surfaces or inner pond embankments.
5. The Licence Holder must:
- implement security measures at the site to prevent as far as is practical unauthorised access to the site;
 - undertake regular inspections of all security measures and repair damage as soon as practicable; and
 - ensure the entrance gates are closed and locked when the site is closed or unmanned.

Emissions and discharges

6. 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.
7. 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 and monitoring locations in Schedule 1 it is done so in accordance with the conditions of this Licence.

Table 4: Emissions to land

Emission point reference	Emission point reference on Map of emission points	Description	Source including abatement
Emergency overflow storage pond 1.	L1	Discharge from polishing Ponds (3a, 3b, 4a and 4b).	Treated wastewater from WRRF during emergency events only.
Reuse at Kalbarri '18' hole golf course.	L2	Discharge from premises to Shire for reuse.	Treated wastewater chlorinated prior to discharge.

Monitoring

8. 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 a laboratory with current NATA accreditation for the parameters to be measured unless indicated otherwise in relevant table.
9. The Licence Holder must ensure that :
 - (a) monthly monitoring is undertaken at least 15 days apart; and
 - (b) quarterly monitoring is undertaken at least 45 days apart.
10. The Licence Holder must record production or throughput data and any other process parameters relevant to any non-continuous monitoring undertaken.
11. 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.
12. 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.
13. The Licence Holder must undertake the monitoring in Table 5 according to the specifications in that table.

Table 5: Monitoring of emissions to land

Emission point reference	Monitoring point reference	Parameter	Units	Averaging Period	Frequency
L1 and L2	Final Effluent monitoring location (S4000080); Post Chlorination monitoring location (S4008750)	Volumetric flow rate (cumulative)	m ³ /day	Monthly	Monthly
		pH ¹	pH	Spot Sample	Quarterly
		Chlorine ¹	mg/L		
		Biochemical Oxygen Demand			
		Total Dissolved Solids			
		Total Suspended Solids			
		Total Nitrogen			
		Total Phosphorus			
		Ammonium-Nitrogen			
		Nitrate-Nitrogen			
		Nitrite-Nitrogen			
		<i>Escherichia coli</i> ²			

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.

14. 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 and location	Parameter	Units	Averaging period	Frequency
Sewage	Main sewer inlet flow meter (S4004992) (M1)	Volumetric flow rate (cumulative)	m ³ /day	Monthly	Continuous
Treated wastewater	Final effluent discharge flow meter (S4004945) (M2)				
Septage	Tankered waste receivable point (M3)				Each load received at the premises.
Sewage sludge	Sewage sludge compound (M4)	-	m ³ /day	Spot sample	Quarterly

15. The Licence Holder must undertake the monitoring in Table 7 according to the specifications in that table and record and investigate results that do not meet any guideline limits.

Table 7: Monitoring of ambient groundwater quality

Monitoring point reference	Parameter ³	Units	Averaging period	Frequency
Groundwater bores: 1/97, 2/97, 3/97, 5/97 and 6/97	Standing water level ¹	m(AHD) and mBGL	Spot sample	Quarterly
	pH ¹	pH		
	Total nitrogen	mg/L		
	Total phosphorus			
	Total dissolved solids			
	Ammonia			
	Nitrate			
	Nitrite			
	Biochemical Oxygen Demand			
	<i>Escherichia coli</i> ²			

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.

Note 3: Based on the Australian and New Zealand Guidelines for Fresh and Marine Water Quality, 2000, Table 5.2.3.

Records and reporting

16. All information and records required by the Licence must:
- (b) be legible;
 - (c) if amended, be amended in such a way that the original and subsequent amendments remain legible or are capable of retrieval;
 - (d) except for records listed in 16(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
 - (e) for the 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.
17. 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 in the approved form by 1 October each year.
18. The Licence Holder must:

- (a) implement a complaints management system that must record the following information (if known or provided) about complaints received at the Premises concerning any environmental impact of the activities undertaken at the Premises:
 - (i) name and address of the complainants (if consented);
 - (ii) date and time of complaint;
 - (iii) date and time of alleged incident;
 - (iv) alleged source of the incident;
 - (v) general description of the alleged incident, including any environmental or health impacts reported by the complainant;
 - (vi) wind direction, wind speed and temperature at time of alleged incident;
 - (vii) likely source of the alleged incident; and
 - (viii) actions taken by Licence Holder to address complaint, including the outcome of any investigation(s) and action(s) to verify any impacts.
- (b) complete an annual analysis and review of complaints recorded under 19(a) to identify any common factors and root cause of complaints and proposals to address these.

19. 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	Parameter	Format or form ¹
-	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
-	Summary of any significant alterations undertaken at the premises and approvals obtained prior to commencement.	
Table 2	Summary of any treatment capacity limit exceedances and any action taken.	
Condition 4	Summary of any freeboard limit exceedances and any action taken.	
Table 5	Monitoring of emissions to land	
	Methodology and calculations used to estimate the daily volumetric flow rate of treated wastewater discharged to emission points L1 and L2 and results of those calculations.	
	Contaminant loading (kg/day and kg/ha/day – monthly average and total annual loading kg/yr and kg/ha/yr) to land at emission points L1 and L2 of parameters monitored in Table 5 (all except pH and <i>E.coli</i>)	

Table 6	Summary of inputs and outputs	
Table 7	Monitoring of ambient groundwater quality	
Condition 17	Compliance	Annual Audit Compliance Report (AACR)
Condition 18	Complaints summary	None specified

- 20.** The Licence Holder must ensure that the Environmental Report also contains:
- (a) any relevant process, production or operational data recorded under condition 10; and
 - (b) an assessment of the information contained within the report against previous monitoring results and Licence limits.
- 21.** 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

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

Table 10: Notification requirements

Condition or table	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	
-	Notifications of non-standard operations/ activities.	24 hours prior to commencement.	
-	Groundwater bores being de-commissioned or rendered useless for monitoring purposes.	Within 14 days.	

-	Breach of any limit specified in the Licence	Part A: As soon as practicable but no later than 5pm of the next usual working day. Part B: As soon as practicable.	N1
Condition 12	Calibration report	As soon as practicable.	None specified

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

Note 2: Forms are in Schedule 2

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

Definitions

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

Table 11: Definitions

Term	Definition
ABN	Australian Business Number.
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	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 <i>Selection of containers and preservation of water samples for microbiological analysis</i> .
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.
category	means category as described in Schedule 1 of the <i>Environmental Protection Regulations 1987</i> .
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.
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</i> (WA).

Term	Definition
EP Regulations	<i>Environmental Protection Regulations 1987 (WA).</i>
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.
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	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.
prescribed premises	has the same meaning given to that term under the EP Act.
process equipment	means any wastewater or sludge containment infrastructure or wastewater treatment vessel.
Schedule 1	means Schedule 1 of this Licence unless otherwise stated.
Schedule 2	means Schedule 2 of this Licence unless otherwise stated.
spot sample	means a discrete sample representative at the time and place at which the sample is taken.
usual working day	means 0800 – 1700 hours, Monday to Friday excluding public holidays in Western Australia.
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 (Figure 1). The pink line depicts the Premises boundary.



Figure 1: Map of the boundary of the prescribed premises

Map of emission points and monitoring locations

The locations of the emission points and monitoring locations defined in Tables 4, 5, 6 and 7 are shown below (Figure 2).

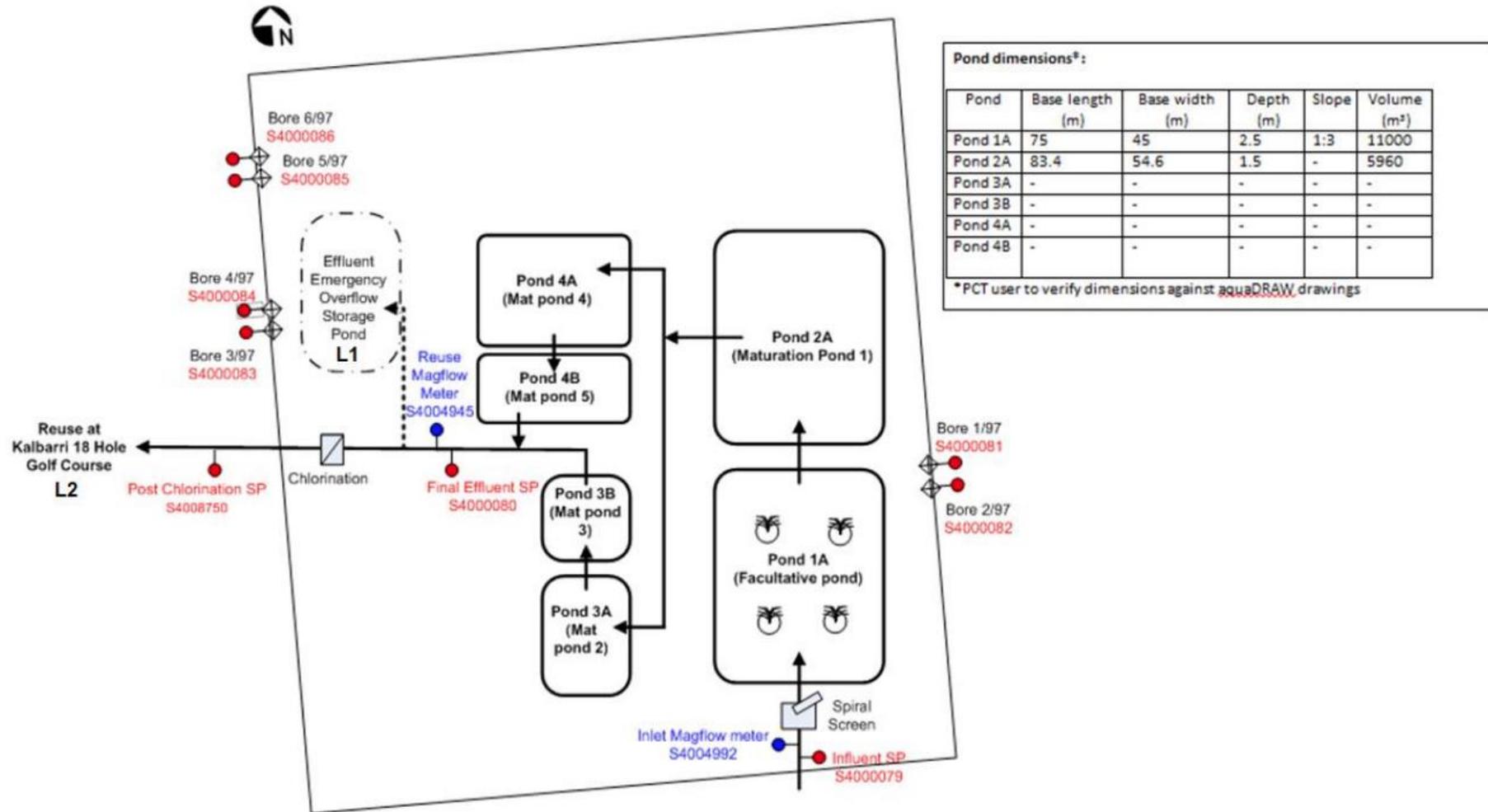


Figure 2: Map of emission points and monitoring locations

L5954/1991/12 (Amended 24 August 2023)

Schedule 2: Reporting & notification forms

Licence: L5954/1991/12 Licence Holder: Water Corporation
 Form: N1 Date of breach:

Notification of a breach of any limit specified in the Licence.

These pages outline the information that the operator must provide.

Units of measurement used in information supplied under Part A and B requirements must 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	