# Licence

**Licence number** L5953/1991/14

Licence holder Water Corporation

**ACN** 634 169 841

Registered business address John Tonkin Water Centre

629 Newcastle Street

Leederville WA 6007

**DWER file number** 2011/007524

**Duration** 1/11/2014 to 31/10/2033

Date of amendment 19 June 2023

Premises details Augusta Wastewater Treatment Plant

869 Leeuwin Road AUGUSTA WA 6290

Legal description -

Lot 869 on Plan 190289 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	248 m³ per day

This licence is granted to the licence holder, subject to the attached conditions, on 19 June 2023, by:

Grace Campbell A/Senior Environmental Officer, Waste Industries Regulatory Services

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

# **Licence history**

Date	Reference number	Summary of change
04/10/2000	L5953/1991/5	Licence re-issue
04/10/2001	L5953/1991/6	Licence re-issue
10/10/2002	L5953/1991/7	Licence re-issue
01/10/2003	L5953/1991/8	Licence re-issue
01/10/2004	L5953/1991/9	Licence re-issue
01/11/2005	L5953/1991/10	Licence re-issue
01/11/2006	L5953/1991/11	Licence re-issue
01/11/2008	L5953/1991/12	Licence re-issue
03/12/2009	L5953/1991/12	Amendment to monitor for <i>E.coli</i> in place of thermo-tolerant coliforms
27/10/2011	L5953/1991/13	Licence re-issue
17/10/2013	L5953/1991/13	Licence amendment to include <i>E.coli</i> monitoring at MB1
30/10/2014	L5953/1991/14	Licence re-issue
27/11/2014	L5953/1991/14	Licence amendment to remove the requirement to monitor for faecal strepts and replace the monitoring of NH <sub>3</sub> -N with Ammonium-Nitrogen
19/02/2015	L5953/1991/14	Licence amendment to REFIRE format
26/04/2016	L5953/1991/14	Notice of Amendment of Licence expiry dates.
19/06/2023	L5953/1991/14	Licence amendment to the submission date for the Annual Environmental Report (AER) and Annual Audit Compliance Report (AACR).

# Interpretation

In this licence:

- (b) the words 'including', 'includes' and 'include' in conditions mean "including but not limited to", and similar, as appropriate;
- (c) 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;
- (d) where tables are used in a condition, each row in a table constitutes a separate condition:
- (e) 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:
- (f) unless specified otherwise, any reference to a section of an Act refers to that section of the EP Act; and
- (g) 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:
  - (a) it is of a type listed in Table 1;.
  - (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 <sup>1</sup>
Sewage	N/A	None specified	Accepted through sewer inflow(s) 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.* 

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, biological and chemical treatment	Treatment of sewage waste must be targeted at or below the treatment capacity of 248 m³/day.		
Sewage sludge	Storage	None specified		

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			
Pond 1 (Primary Pond)					
Pond 2 (Secondary Pond)	Wastewater	Clay lined			
Pond 3 (Tertiary Pond)					
Temporary sewage sludge storage area	Sewage	(a) adequately bunded to prevent surface runoff of leachate or sludge from crossing the boundary of the premises; and			
Siduge Storage area	sludge	(b) returns sludge leachate from the storage area back to the treatment ponds.			

- **4.** The Licence holder must manage all wastewater treatment ponds such that:
  - (a) overtopping of the ponds does not occur except as a result of an extreme rainfall event (greater than 1 in 10 year event of 72 hours duration;
  - (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.
- **5.** The Licence holder must manage the infiltration of treated wastewater such that:
  - (a) treated wastewater is evenly distributed over the infiltration area to minimise soil erosion; and
  - (b) the infiltration area must be clear of excessive sludge build up.

#### **Emissions**

6. The Licence holder must ensure that where waste is emitted to surface water 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: Emission points to surface water

Emission point reference	Emission point reference on Map of emission points	Description	Source including abatement
W1	S8000397	Discharge from infiltration area to Redman Brook	Treated wastewater from wastewater treatment plant infiltration area

7. The Licence holder must ensure that where waste is emitted to land from the emission points in Table 5 and identified on the map of emission points in Schedule 1 it is done so in accordance with the conditions of this Licence.

Table 5: Emissions to land

Emission point reference	Emission point reference on Map of emission points	Description	Source including abatement
L1	Discharge to infiltration	Discharge from Tertiary Pond (Pond 3) to onsite land disposal area (infiltration).	Final effluent pipeline from wastewater treatment plant

**8.** The Licence holder must target emissions to land at or below the levels specified in Table 6.

Table 6: Emission targets to land

Emission point reference	Parameter	Target (including units)	Averaging period
L1	BOD	30 mg/L	Spot sample

#### **Monitoring**

- **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 surface water sampling is conducted in accordance with AS/NZS 5667.4, AS/NZS 5667.6 or AS/NZS 5667.9 as relevant:
  - (d) all groundwater sampling is conducted in accordance with AS/NZS 5667.11; 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:
  - (a) monthly monitoring is undertaken at least 15 days apart;
  - (b) quarterly monitoring is undertaken at least 45 days apart; and
  - (c) annual monitoring is undertaken at least 9 months apart.
- 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 7 according to the specifications in that table.

Table 7: Monitoring of point source emissions to surface water

Emission point reference	Monitoring point reference	Parameter	Units	Averaging Period	Frequency
	S8000397	pH <sup>1</sup>		Spot sample	Quarterly
W1 (discharge from WWTP infiltration area to Redman	Biochemical oxygen demand (BOD)	mg/L	Spot sample	Quarterly	
	Total Suspended	mg/L	Spot sample	Quarterly	

	Brook)	Solids			
		Total Kjeldahl Nitrogen	mg/L	Spot sample	Quarterly
		Ammonium- Nitrogen (NH <sub>4</sub> -N)	mg/L	Spot sample	Quarterly
		Nitrite + Nitrate- nitrogen (NO <sub>2</sub> / NO <sub>3</sub> -N)	mg/L	Spot sample	Quarterly
		Total Phosphorus	mg/L	Spot sample	Quarterly
		Conductivity	Ms/m	Spot sample	Quarterly
		Chlorophyll-a	μg/L	Spot sample	Quarterly
		Phaeophytins	μg/L	Spot sample	Quarterly
		Escherichia coli	cfu/100 mL	Spot sample	Quarterly
		Arsenic (As)	mg/L	Spot sample	Annually
		Cadmium (Cd)	mg/L	Spot sample	Annually
	S8000397 (discharge	Chromium (Cr)	mg/L	Spot sample	Annually
W1	from WWTP infiltration	Lead (Pb)	mg/L	Spot sample	Annually
	area to Redman	Mercury (Hg)	mg/L	Spot sample	Annually
	Brook)	Nickel (Ni)	mg/L	Spot sample	Annually
		Selenium (Se)	mg/L	Spot sample	Annually
		Zinc (Zn)	mg/L	Spot sample	Annually

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

**14.** The Licence holder must undertake the monitoring in Table 8 according to the specifications in that table.

**Table 8: Monitoring of emissions to land** 

Emission point reference	Monitoring point reference	Parameter	Units	Averaging Period	Frequency
L1 outflow meter  Discharg	wastewater outflow	Volumetric flow rate (cumulative)	m <sup>3</sup> /day	Monthly	Continuous
	Discharge	pH <sup>1</sup>		Spot sample	Quarterly
	to infiltration	Biochemical Oxygen Demand	mg/L		Quarterly

		Total Suspended Solids	mg/L		Quarterly
		Total Kjeldahl Nitrogen	mg/L		Quarterly
		Nitrite + Nitrate- nitrogen (NO <sub>2</sub> / NO <sub>3</sub> -N)	mg/L		Quarterly
		Ammonium-nitrogen (NH <sub>4</sub> -N)	mg/L		Quarterly
		Total Phosphorus	mg/L		Quarterly
		Conductivity	Ms/m		Quarterly
		Escherichia coli	cfu/100 mL		Quarterly
		Load of Total Suspended Solids	kg/day	Monthly and Annual	Annually
		Load of Total Kjeldahl Nitrogen	kg/day		Annually
		Load of BOD	kg/day		Annually
L1	Discharge to infiltration	Load of Nitrite + Nitrate-nitrogen (NO <sub>2</sub> / NO <sub>3</sub> -N)	kg/day		Annually
		Load of Ammonium nitrogen (NH <sub>4</sub> -N)	kg/day		Annually
		Load of Total Phosphorus	kg/day		Annually
		Load of conductivity	kg/day		Annually

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

**15.** The Licence holder must undertake the monitoring in Table 9 according to the specifications in that table.

Table 9: Monitoring of inputs and outputs

Input/Output	Monitoring point reference	Parameter	Units	Averaging period	Frequency
Sewage - Inlet Flow	Albany Tce and Blackwood Ave PS Flow Meter	Volumetric flow rate (cumulative)	m³/day	Monthly	Continuous
Treated wastewater discharged from the final treatment pond.	Outflow (flume)	Volumetric flow rate (cumulative)	m³/day	Monthly	Continuous

16. The Licence holder must undertake the ambient surface water monitoring in Table 10 according to the specifications in that tables and record and investigate results that do not meet any target specified.

Table 10: Monitoring of ambient surface water quality

Monitoring point reference and location	Parameter	Units	Averaging period	Frequency
	Volumetric flow rate (cumulative)	L/s or m³/day	Monthly	Continuous
	pH¹			Quarterly
Redman Brook Gauging Station	Conductivity	Ms/m		Quarterly
sample point S8000076 (not	Total Kjeldahl Nitrogen	mg/L	Spot	Quarterly
specified on map)	Ammonium-Nitrogen (NH <sub>4</sub> -N)	mg/L	sample	Quarterly
	Nitrite + Nitrate-Nitrogen (NO <sub>2</sub> / NO <sub>3</sub> -N)	mg/L		Quarterly
	Total Phosphorus	mg/L		Quarterly
Dada a Dada	pH <sup>1</sup>			Quarterly
	Total Kjeldahl Nitrogen	mg/L		Quarterly
	Ammonium-Nitrogen (NH <sub>4</sub> -N)	mg/L		Quarterly
Redman Brook downstream of WWTP sample	Nitrite + Nitrate-Nitrogen (NO <sub>2</sub> / NO <sub>3</sub> -N)	mg/L		Quarterly
point S8000075	Total Phosphorus	mg/L	Spot sample	Quarterly
(as specified in Schedule 1: Maps Figure 1)	Conductivity	Ms/m		Quarterly
	Chlorophyll-a	μg/L		Quarterly
	Phaeophytins	μg/L		Quarterly
	Escherichia coli	cfu/100 mL		Quarterly

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

17. The Licence holder must undertake the ambient groundwater monitoring in Table 11 according to the specifications in that table and record and investigate results that do not meet any target specified.

Table 11: Monitoring of ambient groundwater quality

Monitoring point reference and location	Parameter	Units	Averaging period	Frequency
Groundwater Monitoring Bores	Standing water level	m(AHD) mBGL		Quarterly
MB1;	pH <sup>1</sup>			Quarterly
MB2;	Conductivity	μS/cm		Quarterly
MB3; MB4;	Total Kjeldahl Nitrogen	mg/L	Spot sample	Quarterly
MB5, and	Ammonium-Nitrogen (NH₄-N)	mg/L		Quarterly
MB6 (as specified in Schedule 1:	Nitrite + Nitrate-Nitrogen (NO <sub>2</sub> / NO <sub>3</sub> -N)	mg/L		Quarterly
Maps Figure 1)	Total Phosphorus	mg/L		Quarterly
Groundwater Monitoring Bore MB1	Escherichia coli	cfu/100 mL	Spot sample	Quarterly

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

## **Records and reporting**

- **18.** All information and records required by the Licence shall:
  - (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 condition 19(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.
- **19.** 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.

- **20.** 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.
- **21.** The Licence holder must:
  - (a) prepare an environmental report that provides information in accordance with Table 12 for the preceding annual period, and
  - (b) submit the environmental report to the CEO by 1 October each year.

**Table 12: Environmental reporting requirements** 

Condition or table (if relevant)	Parameter	Format or form <sup>1</sup>
-	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 2	Summary of any treatment capacity target exceedances and any action taken.	None specified
Table 6	Target Exceedances	None specified
Table 7	Monitoring of point source emissions to surface waters	None specified
Table 8	Monitoring of emissions to land	None specified
	Contaminant loading (kg/day – monthly average and total annual loading kg/yr) to land of parameters monitored in Table 8 (except pH and <i>E. coli</i> )	None specified
Table 9	Monitoring of inputs and outputs	None specified
Table 10	Monitoring of ambient surface water quality	None specified
Table 11	Monitoring of ambient groundwater quality	None specified
19	Compliance	Annual Audit Compliance Report (AACR)
20	Complaints summary	None specified

Note 1: Forms are on the Department's website

- **22.** The Licence holder must ensure that the Environmental Report also contains:
  - (a) any relevant process, production or operational data recorded under condition 11Error! Reference source not found.; and
  - (b) an assessment of the information contained within the report against previous monitoring results and Licence limits and/or targets.
- 23. The Licence holder must submit the information in Table 13 to the CEO at the Contact Address according to the specifications in that table.

**Table 13: 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

24. The Licence holder must ensure that the parameters listed in Table 14 are notified to the CEO at the Contact Address and in accordance with the notification requirements of the table.

**Table 14: Notification requirements** 

Condition or table (if relevant)	Parameter	Notification requirement <sup>1</sup>	Format or form <sup>2</sup>	
-	Taking a treatment pond offline for maintenance works	Prior to the treatment pond being taken offline	None	
-	Removal of sewage sludge from a treatment pond	No less than 14 days in advance of works	specified	
-	Any failure or malfunction of any pollution control equipment or any incident, which has caused, is causing or may cause pollution	Part A: As soon as practicable but no later than 5pm of the next working day  Part B: As soon as practicable	N1	

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

Note 2: 'Forms are available on the Department's website. N1 form is in Schedule 2

# **Definitions**

In this licence, the terms in Table 15 have the meanings defined.

**Table 15: Definitions** 

Term	Definition
ACN	Australian Company Number
AHD	means the 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).
approved form	means the Annual Audit Compliance Report (AACR) form template approved by the CEO for use and available via DWER's external 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 ASINZS 5667.1 Wafer Quality — Sampling — Guidance of theDesign of sampling programs, sampling techniques and the preservation and handling of samples;
AS/NZS 5667.4	means the Australian Standard AS/NZS 5667.4 Water Quality – Sampling – Guidance on sampling from lakes, natural and man-made;
AS/NZS 5667.6	means the Australian Standard AS/NZS 5667.6 Water Quality – Sampling – Guidance on sampling of rivers and streams;
AS/NZS 5667.9	means the Australian Standard AS/NZS 5667.9 Water Quality – Sampling – Guidance on sampling from marine waters;
AS/NZS 5667.10	means the Australian Standard ASINZS 5667.10 Water Quality — Sampling — Guidance on sampling of waste waters;
AS/NZS5667.11	means the Australian Standard AS/NZS 5667.11 Water Quality – Sampling – Guidance on sampling of groundwaters;
averaging period	means the time over which a limit or target is measured or a monitoring result is obtained

Term	Definition
CEO	means Chief Executive Officer of the Department.  "submit to / notify the CEO" (or similar), means either:  Director General Department administering the Environmental Protection Act 1986 Locked Bag 10 Joondalup DC WA 6919  or:  info@dwer.wa.gov.au
code of practice for the storage and handling of dangerous goods	means document titled "Storage and handling of dangerous goods: Code of Practice" published by the Department of Mines and Petroleum, as amended from time to time;
controlled waste	has the definition in Environmental Protection (Controlled Waste) Regulations 2004;
dangerous goods	has the meaning defined in the <i>Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007</i> ;
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	Environmental Protection Act 1986 (WA)
EP Regulations	Environmental Protection Regulations 1987 (WA)
environmentally hazardous material	means material (either solid or liquid raw materials, materials in the process of manufacture, manufactured products, products used in the manufacturing process, by-products and waste) which if discharged into the environment from or within the premises may cause pollution or environmental harm. Note: Environmentally hazardous materials include dangerous goods where they are stored in quantities below placard quantities. The storage of dangerous goods above placard quantities is regulated by the Department of Mines and Petroleum;
hardstand	means a surface with a permeability of 10 <sup>-9</sup> 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.

Term	Definition
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 (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;
quarterly	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;
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;
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 Environment Regulation "Controlled Waste Category List" (July 2014), as amended from time to time.

### **END OF CONDITIONS**

# Schedule 1: Maps

### Premises map and map of emission and monitoring points

The Premises is shown in the map below. The pink line depicts the Premises boundary. The locations of the emissions points defined in Tables 4 and 5 and monitoring points defined in conditions 15, 16 and 18 are shown below.

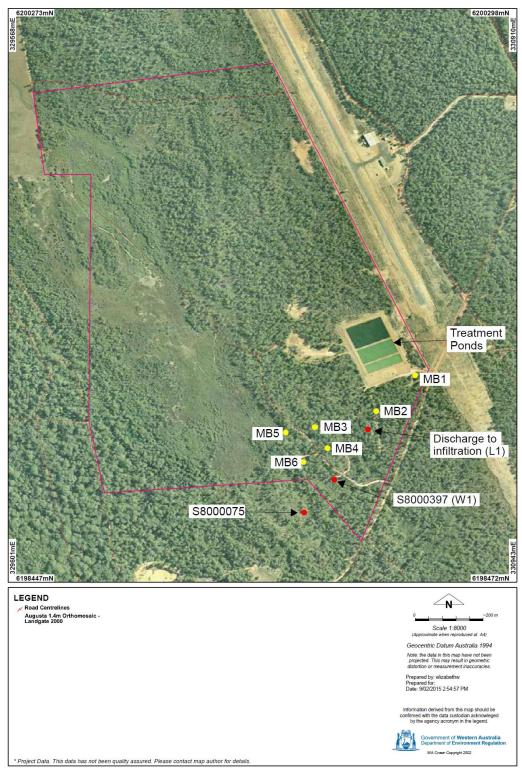


Figure 1: Premises boundary, emission and monitoring points

### **Schedule 2: Forms**

Licence: L5953/1991/14 Licence holder: Water Coporation

Form: N1 Date of breach:

Notification of detection of the 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 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

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 of behalf of Water Corporation	
Date	