



Licence number	L5976/1991/10
Licence holder	Water Corporation
ACN	28 003 434 917
Registered business address	629 Newcastle Street
DWER file number	DWERVT16600
Application number	APP-0030394
Internal number	INS-0011254
Duration	16/10/2014 to 31/10/2026
Date of issue	16/10/2014
Date of amendment	30/10/2025
Premises details	Carnavon Wastewater Treatment Plant Babbage Island Road MORGANTOWN WA 6701 Legal description - Lot 1321 on Plan 193061, portion Lot 1205 on Plan 240108 and portion of Lot 1146 on Plan 210835 As defined in Schedule 1

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.	1,800 cubic metres per day

This licence is granted to the licence holder, subject to the attached conditions, on 30 October, by:

GRACE HEYDON

MANAGER WASTE INDUSTRIES

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

Licence history

Date	Reference number	Summary of changes
L5976/1991/4	27/09/2000	Licence reissue
L5976/1991/5	03/10/2001	Licence reissue
L5976/1991/6	14/10/2002	Licence reissue
L5976/1991/7	08/09/2003	Licence reissue
L5976/1991/8	29/09/2004	Licence reissue
L5976/1991/9	17/09/2009	Licence reissue
L5976/1991/10	16/10/2014	Licence reissue and amendment to new template format
L5976/1991/10	10/09/2015	Licence amendment to include copper ioniser and administrative changes.
L5976/1991/10	29/04/2016	Amendment Notice – Department initiated amendment of licence expiry date to 31 October 2025.
L5976/1991/10	25/05/2017	Amendment Notice 1 – Upgrade of filtration and chlorination system and change to premises boundary.
L5976/1991/10	22/12/2017	Amendment Notice 2 – Amendment to undertake administrative changes to information errors submitted by Water Corporation.
L5976/1991/10	30/10/2025	Department initiated amendment to extend the licence expiry date, update the format and style of the licence and incorporate amendment notices 1 and 2.

Interpretation

In this licence:

- the words ‘including’, ‘includes’ and ‘include’ in conditions mean “including but not limited to”, and similar, as appropriate;
- 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;
- where tables are used in a condition, each row in a table constitutes a separate condition;
- any reference to an Australian or other standard, guideline, or code of practice in this licence:

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- (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 conditions

Waste acceptance

1. The licence holder must only accept onto the premises waste of a waste type that does not exceed the corresponding rate at which waste is received, and that meets the corresponding acceptance specification set out in Table 2.

Table 1: Waste acceptance

Waste type	Rate at which waste is received	Acceptance specification
Sewage (K130)	1800 cubic metres per day	Waste accepted through sewer inflow(s) and tankered waste only
Septage Wastes (K210)		

Waste processing

2. The licence holder must ensure that waste accepted onto the premises are only subjected to the process(es) set out in Table 3 and in accordance with any process requirements described in that table.

Table 2: Waste processing

Waste type	Process	Process requirements
Sewage	Physical and biological and chemical treatment	• Treatment of sewage waste shall be at or below the treatment capacity of 1 800 m³/day; • Treated wastewater shall be filtered and chlorinated prior to discharge beyond the premises boundary for reuse.
Sewage sludge	Storage – sludge drying bed	Returns sludge leachate to the start of the treatment process

Containment infrastructure

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 4.

Table 3: Containment infrastructure

Vessel or compound	Material	Requirements
Inlet works	Screening	Stored in a sealed bin which is surrounded by a bunded hardstand area which returns sludge leachate to the start of the treatment process.
Primary Pond Aerated	Wastewater	Clay lined to achieve a permeability of less than 10 ⁻⁹ m/s or equivalent.
Secondary Pond	Wastewater	

Tertiary Pond	Treated wastewater	
Emergency Overflow Infiltration Ponds 1 and 2	Treated wastewater	Unlined, in-situ soils. Used in emergency events only.
Filtration and chlorination system	Treated wastewater	Filtration and gaseous chlorination of treated wastewater prior to discharge to Shire of Carnarvon storage ponds for reuse.
Storage Tanks 1 and 2	Treated wastewater	Holding tanks for the containment of overflow to sump To achieve required chlorine contact time prior to irrigation off site.
Sludge drying bed	Sewage sludge	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.

4. The licence holder must manage all wastewater treatment, evaporation, and infiltration ponds such that:
 - (a) overtopping of the ponds does not occur;
 - (b) a freeboard equal to, or greater than, 300mm is maintained;
 - (c) the integrity of the containment infrastructure is maintained;
 - (d) trapped overflows are maintained on the outlet of ponds to prevent carry-over of surface floating matter; and
 - (e) 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;
 - (b) wastewater disposal is to be rotated between the infiltration areas on a regular basis to minimise soil erosion and surface ponding and allow the soils to dry between disposal; and
 - (c) sludges are removed from the base of the pond to maintain the infiltration performance;
6. 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.
7. The licence holder must manage the sewage sludge drying beds and geobag laydown area such that:
 - (a) stormwater runoff is prevented from entering the beds or area; and
 - (b) discharges/leachate from the beds or area are directed to the primary pond.
8. The licence holder must only discharge treated wastewater from pond 3 to the emergency overflow storage ponds, during an emergency event.

Emissions and discharges

Emissions to land

9. 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 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
L1	Emergency Overflow from Pond 3 to infiltration area	Discharge to the infiltration area is only authorised when the WWTPs storage capacity is exhausted and when there is no capacity to send the water off-site for subsequent storage and third-party reuse.	Treated wastewater pumped from Pond 3 during emergency events only

Monitoring

10. 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.
11. 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;
12. 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.
13. 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

14. The licence holder must undertake the monitoring in **Error! Reference source not found.**6 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
M2 & M3	Magflow meter or by 'mass balance' from pond 3	Volumetric flow rate (cumulative) ¹	m ³ /day	Monthly	Continuous
	Post ioniser sample point	pH ¹	pH	Spot Sample	Quarterly
		Biochemical Oxygen Demand	mg/L		
		Total Dissolved Solids			
		Total Suspended Solids			
		Nitrate + Nitrite-nitrogen			
		Ammonium-nitrogen			
		Total Nitrogen			
		Total Phosphorus			
		Copper			
		<i>Escherichia coli</i>			

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

Note 2: The actual level is 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

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

Table 6: Monitoring of inputs and outputs

Input/Output	Monitoring point reference	Parameter ¹	Units	Averaging period	Frequency
Wastewater Treatment Plant -	Inflow meter (M1 –	Volumetric flow	m ³ /day	Monthly	Continuous

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Inlet Flow	S2042103)	rate (cumulative)			
Treated wastewater discharged to Shire of Carnarvon ponds	Outflow meter (M2 - S0037360)	Volumetric flow rate (cumulative)	m ³ /day	Monthly	Continuous
Treated wastewater discharged to on-site infiltration ponds	Outflow meter or mass balance calculation (M3)	Volumetric flow rate (cumulative)	m ³ /day	Monthly	Emergency/ abnormal events only
Treated wastewater discharged from pond 3 (post chlorination)	Final treated water discharge monitoring point	Chlorine	mg/L	Monthly	Spot sample

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

Ambient environment quality monitoring

- 16.** The licence holder must undertake the monitoring in Table 8 according to the specifications in that table.

Table 7: Monitoring of ambient groundwater quality

Monitoring point reference and location	Parameter	Units	Averaging period	Frequency
Monitoring Bores: 1/94 and 2/94 (Schedule 1)	Standing water level ¹	m(AHD) mBGL	Spot sample	Six monthly
	pH ¹	pH		
	Copper	mg/L		
	Total Dissolved Solids			
	Total Nitrogen			
	Total Phosphorus			

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

Records and reporting

Records

- 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) monitoring programmes undertaken in accordance with conditions 14, 15 and 16 of this licence; and
 - (c) complaints received under condition 20 of this licence.
- 18.** The books specified under condition 17 must:

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- (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:
- (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 no later than 30 September 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 9 for the preceding two annual periods, and
 - (b) submit that Environmental Report to the CEO by 30 September 2026 and biennially thereafter.

Table 8: Environmental Reporting requirements

Condition or table (if relevant)	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
Table 2	Summary of any treatment capacity target exceedances and any action taken	None specified
4	Summary of any freeboard target exceedances and any action taken	None specified
Table 6	Monitoring of emissions to land	None Specified
Table 7	Monitoring of inputs and outputs	None specified
	Methodology and calculations used to estimate the daily volumetric flow rate of treated wastewater pumped to infiltration channel and results of those calculations	None specified
Table 8	Monitoring of ambient groundwater quality	None Specified

19	Compliance	Annual Audit Compliance Report (AACR) <i>Forms accessed at www.dwer.wa.gov.au</i>
20	Complaints summary	None specified

22. The licence holder must ensure that the Biennial Environmental Report also contains 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 10 to the CEO according to the specifications in that table.

Table 9: Biennial Environmental Report

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 Licensee by third parties	Not Applicable	Within 14 days of the CEOs request	As received by the Licensee from third parties

Notification

24. The licence holder must ensure that the parameters listed in Table 11 are notified to the CEO at the Contact Address and in accordance with the notification requirements of the table.

Table 11: Notification requirements

Condition or table (if relevant)	Parameter	Notification requirement ¹	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 vessel, sewage sludge storage pond or Geobag	No less than 14 days in advance of works ³	
-	Groundwater bores being de-commissioned or rendered useless	Within 14 days	
12	Calibration report	As soon as practicable	None specified

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

Note 3: 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 102 have the meanings defined.

Table 10: Definitions

Term	Definition
ACN	Australian Company Number
ACT	<i>means the Environmental Protection Act 1986;</i>
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates are available on the Department's website).
annual period	a 12 month period commencing from 1 July until 30 September of the immediately following year.
biennially	means every two years.
books	has the same meaning given to that term under the EP Act.
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	has the definition in <i>Environmental Protection (Controlled Waste) Regulations 2004</i> .
department; DWER	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.
emergency event	means rainfall equivalent to, or in excess of, a 72 hour, 1-in-10 year event.
emission	has the same meaning given to that term under the EP Act.
EP Act	<i>Environmental Protection Act 1986</i> (WA).
EP Regulations	<i>Environmental Protection Regulations 1987</i> (WA).
hardstand	means a surface with a permeability of 10^{-9} metres/second or less.
licence	refers to this document, which evidences the grant of a licence by the

Term	Definition
	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 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.
mass balance	means the calculation resource flows and losses based on the mass and/or volume of inputs to a process which balances the mass and/or volume of outputs as products, emissions and wastes, plus any change in stocks.
monthly period	means a one-month period commencing from day 2 of a month until day 1 of the immediately following month.
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
six monthly	means the 2 inclusive periods from 1 July to 31 December and 1 January to 30 June in the following year.
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.
wastewater treatment vessels	means any vessel or tank containment infrastructure associated with the treatment of wastewater and includes, but not limited to, oxidation ditches and infiltration ponds.

END OF CONDITIONS

Schedule 1: Maps

Premises map

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





Figure 1: Map of the boundary of the prescribed premises

Schematics

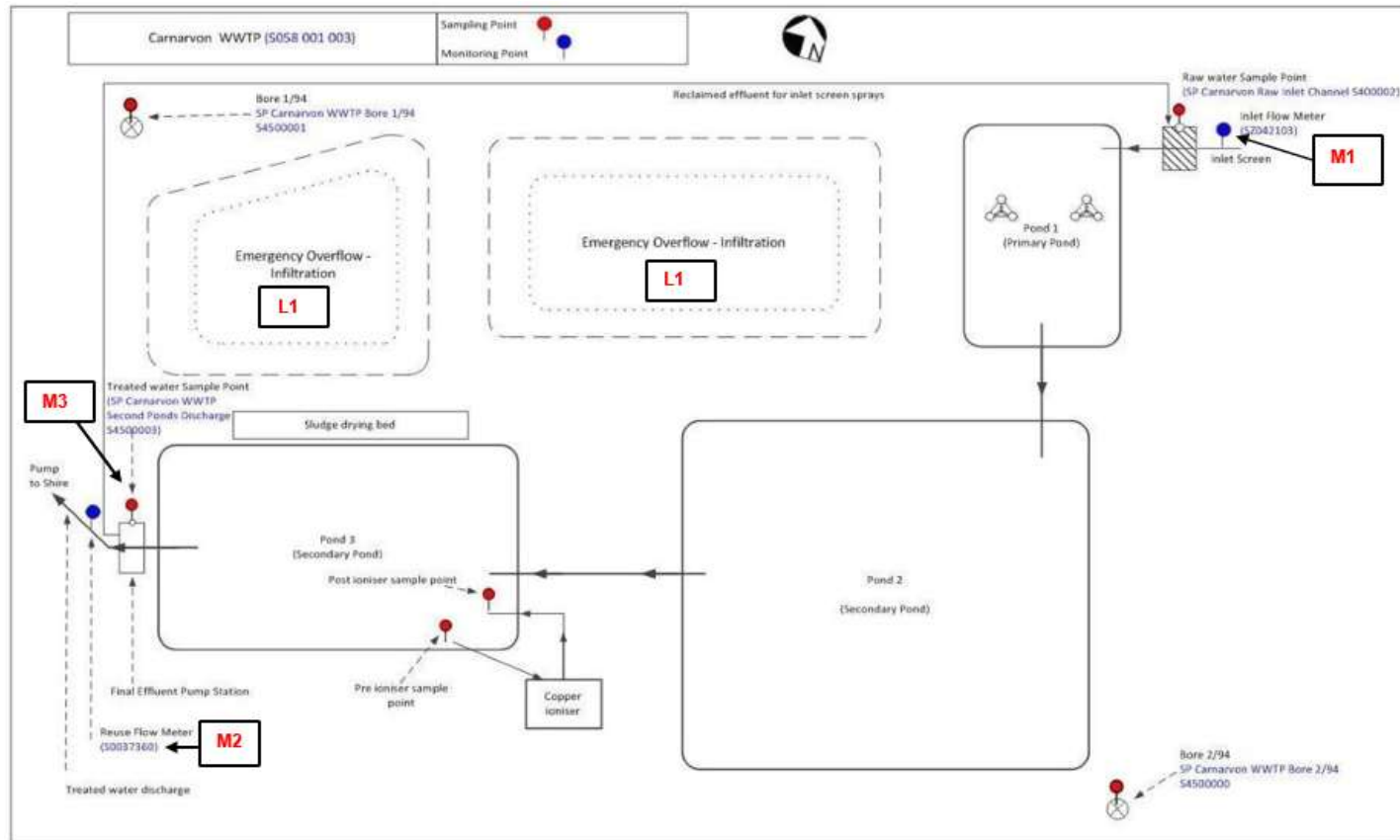


Figure 2: Premises process schematics, emission and monitoring points

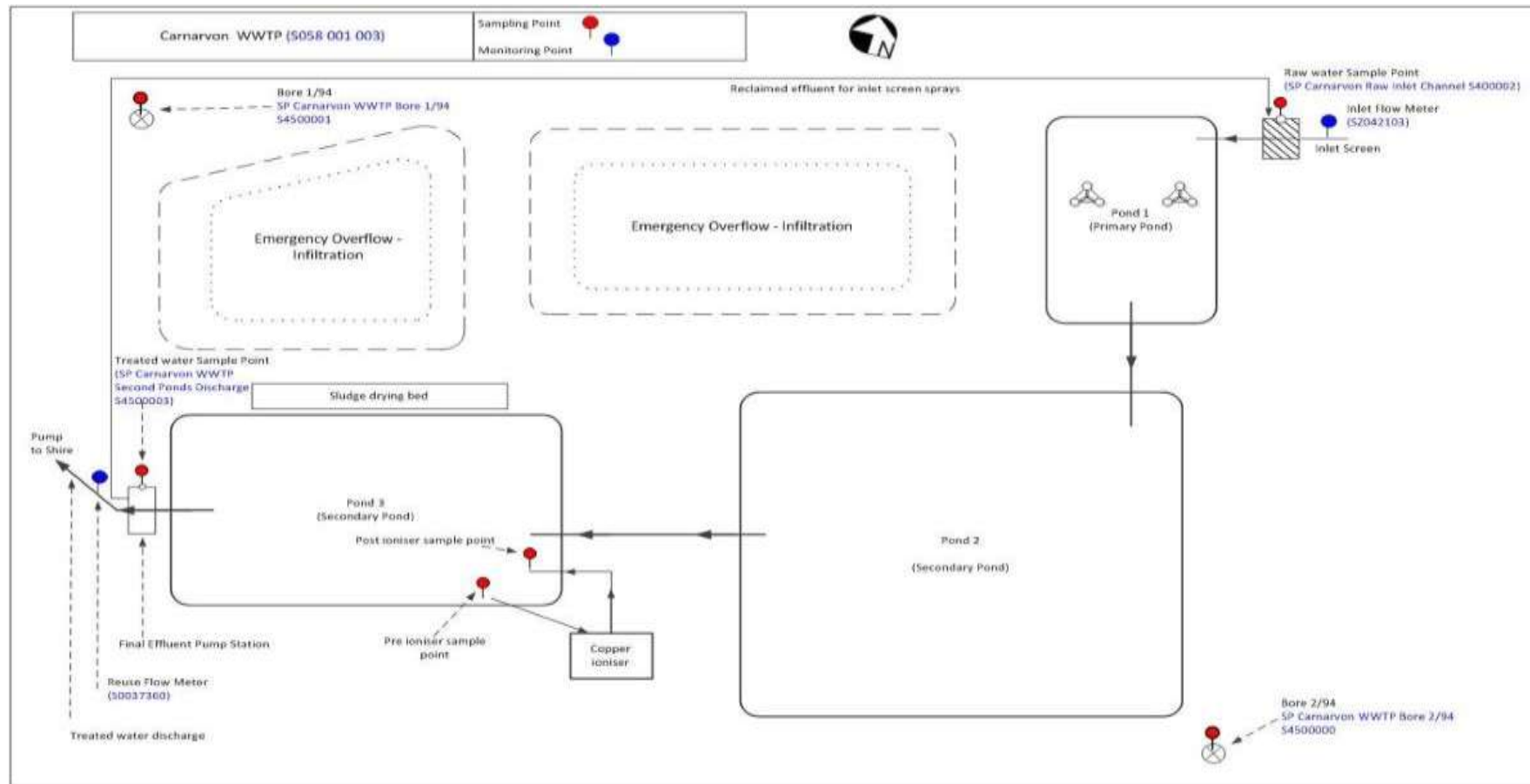


Figure 3: Premises process schematics, emission and monitoring points (2)