



Licence number	L7717/1993/10
Licence holder	Water Corporation
ACN	634 169 841
Registered business address	John Tonkin Water Centre 629 Newcastle Street LEEDERVILLE WA 6007
DWER file number	DER2014/001684-1
Duration	01/11/2023 to 31/10/2033
Date of issue	27/10/23
Date of amendment	03/04/2024
Premises details	Pemberton Water Resource Recovery Facility Lot 13459 on Plan 192273 Crown Reserve 44628 Vasse Highway PEMBERTON WA 6260 As depicted 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.	Not more than 300 m ³ per day

This licence is granted to the licence holder, subject to the attached conditions, on 03 April 2024, by:

GRACE HEYDON

A/MANAGER WASTE INDUSTRIES – REGULATORY SERVICES

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

[L7717/1993/10 \(Amended 03/04/2024\)](#)

Licence history

Date	Reference number	Summary of changes
17/12/2001	L7717/1993/1	Licence granted.
23/11/2002	L7717/1993/2	Licence reissued.
23/11/2003	L7717/1993/3	Licence reissued.
01/10/2004	L7717/1993/4	Licence reissued.
01/11/2005	L7717/1993/5	Licence reissued.
01/11/2006	L7717/1993/6	Licence reissued.
01/11/2008	L7717/1993/7	Licence reissued.
01/11/2011	L7717/1993/8	Licence reissued.
01/11/2014	L7717/1993/9	Licence reissued.
29/04/2016	L7717/1993/9	This notice was given in accordance with section 59B(9) of the <i>Environmental Protection Act 1986</i> to the new expiry date of the licence. Expiry date extended to 31 October 2023.
22/09/2017	L7717/1993/9	Amendment Notice 1 - Licence amendment to change treated sewage discharge limit for total nitrogen to <7 mg/L.
20/07/2023	L7717/1993/9	Licence amendment to amend the reporting date for the Annual Audit Compliance Report (AACR) and the Environmental Report to 1 October annually, and to alter the premises name.
27/10/2023	L7717/1993/10	Licence reissued.
03/04/2024	L7717/1993/10	DWER initiated licence amendment to correct typographical error

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 ensure that the site infrastructure and equipment listed in Table 1 and located at the corresponding infrastructure location is maintained and operated in accordance with the corresponding operational requirement set out in Table 1.

Table 1: Infrastructure and equipment requirements

Site infrastructure and equipment		Operational requirement	Infrastructure location
Water Resource Recovery Facility (WRRF)			
1	Wastewater treatment system incorporating oxidation ditch technology designed to treat a maximum volume of 300 m³ per day consisting of: • Inlet works • Bioselector • Chemical Dosing System • Oxidation Ditch • Clarifiers • RAS System • WAS System • Oxidation Filter System • Denitrification Filtration System • Service Water Tank • Treated Water Tank • Emergency Storage Pond 1 • Emergency Storage Pond 2 • WAS Thickening Tank • Polymer System • Screw Press • Sludge Hopper	WRRF must be capable to treat sewage to the following discharge limits: • TSS ≤ 30 mg/L • BOD ≤ 20 mg/L • TN ≤ 7 mg/L • TP ≤ 2 mg/L • E. coli <150 cfu/100mL; and Must meet Nitrogen and Phosphorous limits required in condition 7.	As labelled in Figure 1 and Figure 2 Schedule 1
Solids management			
2	Solid waste storage area including: • Hardstand area.	(a) Solid waste generated from the process must be stored within the sludge drying hardstand area.	As labelled in Figure 3 Schedule 1 as Sludge drying bed

General conditions

2. The licence holder must manage the water resource recovery facility such that:
 - (a) uncontaminated stormwater runoff resulting from roof and site drainage shall be prevented from entering the wastewater treatment tanks and sludge drying beds;
 - (b) uncontrolled loss of wastewater from the wastewater treatment tanks, sludge drying beds or holding basins shall not occur except as a result of an extreme rainfall event (greater than a 1 in 10-year event of 72 hours duration);
 - (c) there is no discernible seepage loss from the water resource recovery facility, sludge drying beds or holding basins;
 - (d) vegetation (emergent or otherwise) and debris shall be routinely removed from sludge drying beds or holding basins; and
 - (e) treated wastewater is available for re-use.
3. The licence holder must only discharge treated wastewater to Lefroy Brook during periods when wastewater is surplus to third party re-use requirements.
4. The licence holder must maintain metering devices for measuring monthly cumulative volumes of wastewater treated by the water resource recovery facility, discharged to Lefroy Brook and re-used by third parties. The monthly flow results must be presented in the next annual monitoring report in a tabular format in m³/day.
5. The licence holder must ensure that perimeter valves on bunded areas are locked or otherwise secured in the closed position whilst the site is unattended.
6. The licence holder must target treated wastewater to meet the process parameter treatment levels specified in table 2.

Table 2: Treated wastewater limits – discharge to Lefroy Brook

Location reference	Process description	Parameter	Limit (including units)	Averaging period
W1 (as depicted in Schedule 1)	Discharge from 300 kL storage tank to Lefroy Brook.	<i>Escherichia coli</i>	<150 cfu/ 100mL	Spot sample
		Biochemical oxygen demand	≤20 mg/L	
		Total Nitrogen	≤7 mg/L	
		Total phosphorus	≤2 mg/L	
		Total suspended solids	≤30 mg/L	

7. The licence holder must manage third party re-use schemes such that the nutrient loading rate does not exceed:
 - (a) Nitrogen: 250 kilograms per hectare per year; and
 - (b) Phosphorus: 50 kilograms per hectare per year.

Monitoring conditions

8. The licence holder must undertake the monitoring in Table 3 according to the specifications in Table 3.

Table 3: Sampling locations, parameters, frequencies and methods

Sampling location	Sampling location description	Parameters to be analysed ¹	Units	Sampling frequency	Method
None applicable	Outlet Pipe from the treatment plant to the treated wastewater tank	pH ¹	pH units	Monthly (when flowing, reusing or discharging)	AS/NZS 2031; AS/NZS 5667.1; and AS/NZS 5667.10
		Ammonium (NH ₄)	mg/L		
		<i>Escherichia coli</i>	cfu/100mL		
		Nitrate + nitrite – nitrogen	mg/L		
		Biochemical oxygen demand	mg/L		
		Total dissolved solids	mg/L		
		Total nitrogen	mg/L		
		Total phosphorus	mg/L		
		Total suspended solids	mg/L		
W1 (as depicted in Schedule 1)	Outlet pipe from treated wastewater tank to Lefroy Brook	pH ¹	pH units		AS/NZS 2031; AS/NZS 5667.1; and AS/NZS 5667.10
		Ammonium (NH ₄)	mg/L		
		<i>Escherichia coli</i>	cfu/100mL		
		Nitrate + nitrite – nitrogen	mg/L		
		Total and filtered aluminium	mg/L		
		Biochemical oxygen demand	mg/L		
		Total dissolved solids	mg/L		
		Total nitrogen	mg/L		
		Total phosphorus	mg/L		
		Total suspended solids	mg/L		

Sampling location	Sampling location description	Parameters to be analysed ¹	Units	Sampling frequency	Method
SW1 and SW2 (as depicted in Schedule 1)	Lefroy Brook upstream and downstream	pH ¹	pH units		AS/NZS 2031; AS/NZS 5667.1; and AS/NZS 5667.6
		Ammonium (NH ₄)	mg/L		
		<i>Escherichia coli</i>	cfu/100mL		
		Nitrate + nitrite – nitrogen	mg/L		
		Total and filtered aluminium	mg/L		
		Biochemical oxygen demand	mg/L		
		Total dissolved solids	mg/L		
		Total nitrogen	mg/L		
		Total phosphorus	mg/L		
		Total suspended solids	mg/L		
L1 (as depicted in Schedule 1)	Reuse scheme take-off point	pH ¹	pH units		AS/NZS 2031; AS/NZS 5667.1; and AS/NZS 5667.10
		Ammonium (NH ₄)	mg/L		
		<i>Escherichia coli</i>	cfu/100mL		
		Nitrate + nitrite – nitrogen	mg/L		
		Biochemical oxygen demand	mg/L		
		Total dissolved solids	mg/L		
		Total nitrogen	mg/L		
		Total phosphorus	mg/L		
		Total suspended solids	mg/L		

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

9. The licence holder must ensure that all laboratory samples are submitted to and tested by a laboratory with current NATA accreditation for the parameters being measured unless indicated otherwise in Table 3.

Records and reporting

- 10.** The licence holder must:
- (a) inform the CEO prior to taking a treatment tank offline for maintenance works;
 - (b) where sewage sludge is temporarily stored on-site, direct sewage sludge to a hard-stand area, holding basin or approved drying bed which;
 - (i) is adequately bunded to prevent surface runoff of leachate or sludge from crossing the boundary of the premises; and
 - (ii) where possible, returns sludge leachate from the hard-stand area, or approved drying bed back to the treatment plant.
- 11.** The licence holder must determine the monthly load of each contaminant in the treated wastewater discharged from the outlet pipe from the treated wastewater tank to Lefroy Brook (except pH and *Escherichia coli*) using flow-weighted data. The loads shall be based on the treated wastewater discharge rates and the concentrations as measured in accordance with condition 4 and 8. Monthly and annual average loads of the contaminants shall be reported in the Annual Environmental Report in kilograms per day.
- 12.** The licence holder must:
- (a) prepare an environmental report that provides information in accordance with Table 4 for the preceding annual period, and
 - (b) submit the environmental report to the CEO by 1 October each year.

Table 4: Environmental reporting requirements

Condition	Requirement
-	monitoring data or other collected data required by any condition of this licence;
-	an assessment of the data against any limits set or other environmental guidelines, targets or policies referred to in this licence and data from previous years' monitoring;
-	a summary of any data exceeding those limits, guidelines, targets or policies including information on why the exceedance occurred (if known) and action taken by the licence holder to prevent recurrence of such exceedances;
-	a summary of the number and type of complaints received;
-	any changes to site boundaries, location of groundwater monitoring bores, surface drainage channels and on-site or off-site impacts or pollution; and
-	a list of any monitoring methods used to collect and analyse data required by any condition of this licence to demonstrate they comply with the methods specified in this licence.

- 13.** 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.

Definitions

In this licence, the terms in Table 5 have the meanings defined.

Table 5: Definitions

Term	Definition
ACN	Australian Company Number
Annual Audit Compliance Report (AACR)	means a report submitted in a format approved by the CEO (relevant guidelines and templates may be available on the Department's website).
annual period	a 12 month period commencing from 1 July until 30 June of the immediately following year.
approved form	means the Annual Audit Compliance Report (AACR) form template approved by the CEO for use and available via DWER's external website.
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 5667.6	means the Australian Standard AS/NZS 5667.6 <i>Water Quality – Sampling – Guidance on sampling of rivers and streams</i> .
AS/NZS5667.10	means the Australian Standard AS/NZS 5667.10 <i>Water Quality – Sampling – Guidance on sampling of waste waters</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
condition	a condition to which the licence is subject under section 62 of the <i>Environmental Protection Act 1986</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	<i>Environmental Protection Act 1986</i> (WA)
licence	refers to this document, which evidences the grant of a licence by the CEO

Term	Definition
	under section 57 of the EP Act, subject to the specified conditions contained within.
licence holder	refers to the occupier of the premises, being the person specified on the front of the licence as the person to whom this licence has been granted.
premises	refers to the premises to which this licence applies, as specified at the front of this licence and as shown on the premises maps (Figure 1 and Figure 2) in Schedule 1 to this licence.
prescribed premises	has the same meaning given to that term under the EP Act.
Schedule 1	means Schedule 1 of this Licence unless otherwise stated.
Schedule 2	means Schedule 2 of this Licence unless otherwise stated.
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).

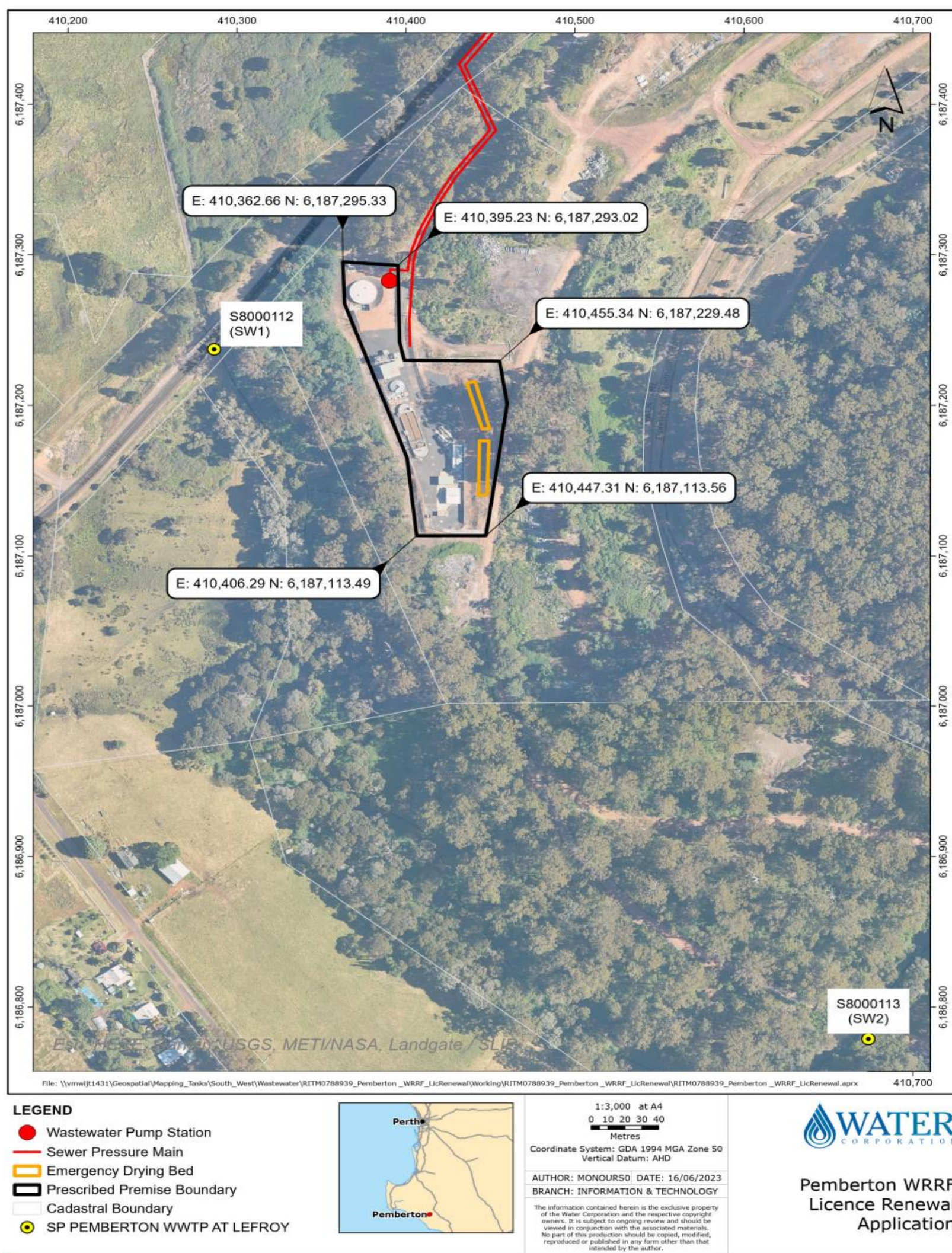


Figure 1: Map of the boundary of the prescribed premises.

The prescribed premises boundary, monitoring locations and infrastructure is shown in the map below (Figure 2).

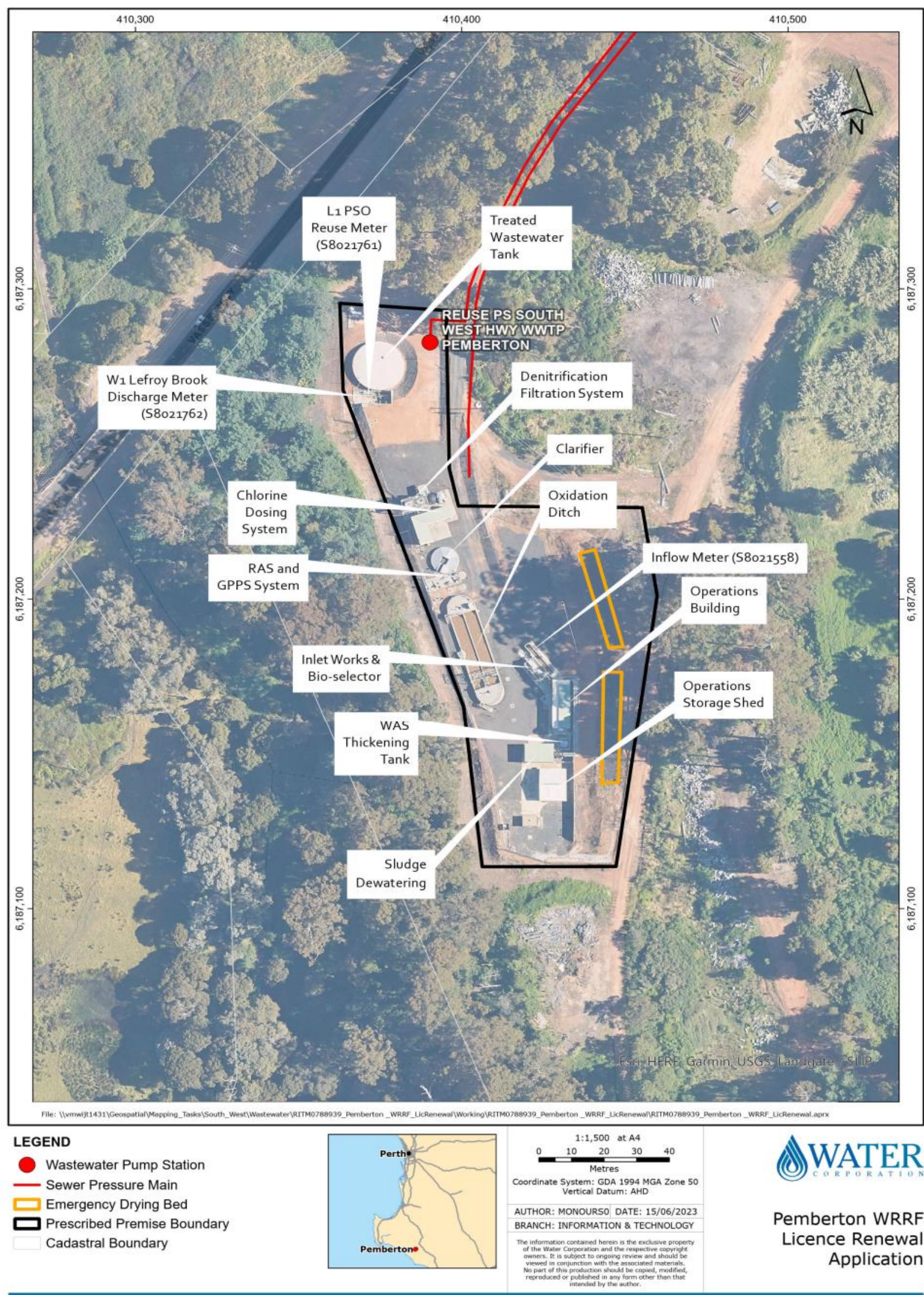


Figure 2: Pemberton Water Resource Recovery Facility premises details

[illegible]

Monitoring Points	Monitoring Points cont.	Sampling Points
M1 S8021558 Pemberton WWTP Inflow Meter FE22105	M15 S8021679 Pemberton WWTP Oxidation Filter Ammonium Analyser Outlet	S1 S8000107 SP Pemberton Raw Influent
M2 S8021595 Pemberton WWTP Grit Tank pH Meter	M16 S8021674 Pemberton WWTP Oxidation Filter Outlet Flowmeter	S2 S8106857 SP Pemberton WWTP Oxidation Ditch
M3 S8021603 Pemberton WWTP Alum Tank Level Transmitter	M17 S8021675 Pemberton WWTP Oxidation Filter Backwash Flowmeter	S3 S8106859 SP Pemberton WWTP Return Activated Sludge
M4 S8021616 Pemberton WWTP Sucrose Tank Level Transmitter	M18 S8021678 Pemberton WWTP Denitrification Nitrate Analyser Inlet	S4 S8106860 SP Pemberton WWTP Waste Activated Sludge
M5 S8021647 Pemberton WWTP Oxidation Ditch Flow Meter	M19 S8021680 Pemberton WWTP Denitrification Nitrate Analyser Outlet	S5 S8106866 SP Pemberton WWTP Oxidation Filter Feed
M6 S8021642 Pemberton WWTP Oxidation Ditch DO Probe 1	M20 S8021681 Pemberton WWTP Denitrification Filter Backwash Flowmeter	S6 S8106868 SP Pemberton WWTP Denitrification Filter Feed
M7 S8021643 Pemberton WWTP Oxidation Ditch DO Probe 2	M21 S8021761 Pemberton WWTP PSO Inlet Flow FE68102	S7 S8106869 SP Pemberton WWTP Denitrification Filter Filtrate
M8 S8021644 Pemberton WWTP Oxidation Ditch DO Probe 3	M22 S8021762 Pemberton WWTP Outflow to Lefroy FE68103	S8 S8106870 SP Pemberton WWTP Oxi/Deni Filter Combined Backwash
M9 S8021655 Pemberton WWTP RAS Flow Meter FE52103	M23 S8021766 Pemberton WWTP Thickened Sludge Tank Level	S9 S8106957 SP Pemberton WWTP Oxi Filter Backwash
M10 S8021661 Pemberton WWTP WAS Flow Meter FE53102	M24 S8021772 Pemberton WWTP Screw Press Feed Flowmeter	S10 S8106958 SP Pemberton WWTP Deni Filter Backwash
M11 S8021666 Pemberton WWTP Intermediate Tank Level Trans	M25 S8021771 Pemberton WWTP Screw Press Inlet Pressure	S11 S8106858 SP Pemberton WWTP Final Effluent
M12 S8021720 Pemberton WWTP Filter Feed Flowmeter	M26 S8021776 Pemberton WWTP Screw Press Cone End Pressure	S12 S8009988 SP Pemberton WWTP Reuse Post Chlorination
M13 S8021672 Pemberton WWTP Oxidation Filter Ammonium Analyser Inlet	M27 S8021838 Pemberton WWTP Site Service Water Flow Meter	S13 S8106865 SP Pemberton WWTP TWAS Supernatant
M14 S8021673 Pemberton WWTP Oxidation Filter DO Probe	M28 S8021824 Pemberton WWTP Site Service Water Free Chlorine	S14 S8106861 SP Pemberton WWTP Screw Press Feed
		S15 S8106872 SP Pemberton WWTP Screw Press Polymer
		S16 S8106862 SP Pemberton WWTP Screw Press Cake
		S17 S8106863 SP Pemberton WWTP Screw Press Filtrate
		S18 S8000111 SP Pemberton WWTP Discharge to Lefroy Brook

L7717/1993/9 (Amended 03/04/2024)