Licence

Licence number	L4201/1991/11
Licence holder	Water Corporation
ACN	634 169 841
Registered business address	John Tonkin Water Centre 629 Newcastle Street LEEDERVILLE WA 6007
DWER file number	DEC6295/3
Duration	01/11/2010 to 31/10/2031
Date of amendment	25/07/2023
Premises details	Woodman Point Water Resource Recovery Facility Lot 9 Cockburn Road MUNSTER WA 6166 Legal description - Being part of Lot 9 on Diagram 31097 As defined by the coordinates in Schedule 2

Prescribed premises category description **(Schedule 1, *Environmental Protection Regulations 1987*)**	**Assessed production / design capacity**
Category 54: Sewage facility: premises – (a) on which sewage is treated (excluding septic); or (b) from which treated sewage is discharged onto land or into waters.	180,000 m^3 per day
Category 61: Liquid waste facility: premises on which liquid waste produced on other premises (other than sewerage waste) is stored, reprocessed, treated or irrigated.	50,000 tonnes per annual period

This Licence is granted to the Licence Holder, subject to the attached conditions, on 25 July 2023, by:

Sarah Cross

Digitally signed by Sarah Cross
Date: 2023.07.25 14:42:30 +08'00'

Sarah Cross
A/SENIOR ENVIRONMENTAL OFFICER
INDUSTRY REGULATION
an officer delegated under section 20 of the *Environmental Protection Act 1986* (WA)

Licence history

Date	Reference number	Summary of changes
01/10/2000	L4201/1991/11	Licence granted
01/07/2001	L4201/1991/11	Licence renewal
01/07/2002	L4201/1991/11	Licence renewal
14/01/2003	L4201/1991/11	Licence renewal
02/07/2003	L4201/1991/11	Licence renewal
02/07/2004	L4201/1991/11	Licence renewal
01/11/2005	L4201/1991/11	Licence renewal
28/10/2010	L4201/1991/11	Licence re-issue Licence re-issue and extension of expiry date to 31 October 2031
19/11/2015	L4201/1991/11	Licence amendment
14/04/2016	L4201/1991/11	Licence amendment for works upgrade for design capacity increase.
26/04/2016	L4201/1991/11	Notice of Amendment of Licence expiry dates to 31 October 2029. This amendment is considered invalid, as under section 59(1)(k) of the EP Act the CEO may amend a licence by extending the duration of the licence, not reducing the duration. The expiry date of 31 October 2031 remains valid.
12/07/2016	L4201/1991/11	Administrative amendment to Licence
29/05/2017	L4201/1991/11	Amendment Notice 1: Amendment to Licence condition 1.3.9
01/11/2019	L4201/1991/11	Licence amendment to consolidate amendments outlined in Amendment Notice 1 into the Licence document.
21/05/2020	L4201/1991/11	DWER initiated amendment to correct a number of administrative errors made during the last amendment process.
08/02/2022	L4201/1991/11	Licence amendment to install a third dissolved air flotation treatment tank and hoppers and pumps for existing rotary screw thickeners.
26/06/2023	L4201/1991/11	Amendment to alter the due date for the environmental report and annual audit compliance report, to be 1 October annually.
25/07/2023	L4201/1991/11	Amendment to incorporate additional administrative requests by the licence holder overlooked in the previous amendment.

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:

Infrastructure and equipment

1. The Licence Holder must operate and maintain the odour control facility, inflow meter, outflow meter and anerobic biosolid digester to the manufacturer's specification.

2. The Licence Holder must:

(a) construct and/or install the infrastructure and/or equipment;

(b) in accordance with the corresponding design, construction and installation requirements; and

(c) at the corresponding infrastructure location

as set out in Table 1.

Table 1: Design, construction and installation requirements

	Infrastructure	Design, construction and installation requirements	Infrastructure location
1.	Four dedicated thickened raw primary sludge hoppers and pumps	a) Each rotary screw thickener to have a dedicated thickened raw primary sludge hopper and pump installed. b) New pipework between rotary screw thickeners and digesters to be installed. c) All pipework, fittings and pumps must be hydraulically tested to the required pressure and visually inspected for any defects to ensure infrastructure is fit for purpose prior to use. d) All pipework, fittings and joins are to be constructed of impervious material and free from leaks and defects.	Attached to the existing rotary screw thickeners As shown in Schedule 1, Figure 10
2.	Third dissolved air flotation thickening tank	a) 13.4m internal diameter b) 3.4m high. c) Reinforced concrete tank constructed to AS 3600. d) Minimum 250mm thick walls and 250mm thick base slab. e) Base slab to slope to a central sump. f) Tank to include a perimeter concrete trough. g) Installation to include recirculation pumps, saturator and thickened excess activated sludge pump station. h) Tank to include an odour cover and be connected to the odour control facility.	Immediately to the south of the second dissolved air flotation thickening tank. As shown in Schedule 1, Figure 11

Construction Environmental Management Plan (CEMP)

3. The Licence Holder must submit a Construction Environmental Management Plan (CEMP) to the CEO a minimum 30 working days prior to construction activities specified in condition 2 commencing.

4. The CEMP specified in condition 3 should include as a minimum:

(a) details of the potential sources of:

(i) noise emissions;

(ii) dust emissions;

(iii) odour emissions; and

(iv) wastewater, hydrocarbon and chemical spills;

during the construction works; and

(b) provide mitigation and management measures to reduce and prevent the potential emissions listed under condition 4(a); and

(c) demonstrate how compliance with the *Environmental Protection (Noise) Regulations 1997* will be achieved.

Environmental compliance reporting

5. The Licence Holder must within 30 calendar days of any works specified in Table 1 being completed:

(a) undertake an audit of their compliance with the requirements of condition 2.

(b) prepare and submit to the CEO an Environmental Compliance Report on that compliance.

6. The Environmental Compliance Report required by condition 5, must include as a minimum the following:

(a) certification by a suitably qualified civil or structural engineer that the items of infrastructure or component(s) thereof, as specified in condition 2, have been constructed in accordance with the relevant requirements specified in condition 2.

(b) as constructed plans and a detailed site plan for each item of infrastructure or component of infrastructure specified in condition 2.

(c) labelled photographic evidence of the installation of the infrastructure.

(d) be signed by a person authorised to represent the Licence Holder and contains the printed name and position of that person.

Premises operation

7. The Licence Holder must only accept waste on to the premises if:

(a) it is of a type listed in Table 2;

(b) the quantity accepted is below any quantity limit listed in Table 2; and

(c) it meets any specification listed in Table 2.

Table 2: Waste acceptance

Waste	Waste Code	Quantity Limit	Specification[1]
Putrescible and Organic wastes			
Sewage waste	K130	180,000 m^3 per day	• Accepted through sewer inflows; and/or • Tankered into the premises and discharged via the WRRF pre-treatment works during emergency events or maintenance works.
Septage waste	K210	Combined total of 50,000 tonnes per annual period	• Tankered into the premises and discharged via the Tanker Receival Facility.
Vegetable oils and derivatives and other wastes	K200		
Wool scouring wastes	K190		
Tannery wastes not containing chromium	K140		
Animal effluent and residues	K100		
Grease waste	K110		
Industrial Strength Wastewater			
Industrial wash water	L150		
Car and truck wash waters	L100		
Inorganic Chemicals			
Non-toxic salts	D300		

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

8. The Licence Holder must ensure that where waste does not meet the waste acceptance criteria set out in condition 7 it is removed from the premises by the delivery vehicle or, where that is not possible, the Licence Holder shall contact the CEO to agree a course of action in relation to the waste.

9. The Licence Holder must ensure that wastes accepted onto the premises are only subjected to the processes set out in Table 3 and in accordance with any process limits described in that Table.

Table 3: Waste processing

	Waste type	Process	Process requirements
1.	Sewage	Physical, chemical and biological treatment	a) Treatment of sewage waste shall be at or below the treatment capacity of 180,000 m^3 per day. b) Sewage biosolids to be directed to the anaerobic biosolids digester. c) Dewatered screenings and grit to be removed via a controlled waste carrier to a licenced landfill. d) Discharged to ocean outfall via the Sepia Depression Ocean Outfall Landline.
2.	Liquid waste	Physical, chemical and biological treatment	a) Treatment of liquid waste received shall be at or below 50,000 tonnes per annual period; b) Tested for pH and electrical conductivity prior to being processed at the premises. c) Leachate from dewatering system to be returned back to the WRRF pre-treatment works.
3.	Biosolids	Physical and biological treatment	a) Dewatered biosolids to be removed for off-site disposal.

10. 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 4: Containment infrastructure

	Vessel or compound	Material	Requirements
1.	Inlet works (Step Screen)	Grit and Screenings	a) Screening wash which returns leachate to the start of the treatment process. b) Screenings stored within an enclosed bin which is removed to landfill weekly.
2.	Tanker receival facility	Wastewater	a) Covered except during routine maintenance or emergency situations. b) Chemical scrubbers. c) Odour emission stack.
3.	Vortex grit tanks	Wastewater and grit	a) 9.75m vortex grit tanks with a foul air extraction system and trafficable fibre-reinforced plastic covers. b) Grit tanks able to have pumped grit removed with a separate grit washer.

	Vessel or compound	Material	Requirements
4.	Primary sedimentation tanks	Wastewater	a) 8x covered primary sedimentation tanks constructed of concrete with splitter box.
5.	Secondary sedimentation tanks	Wastewater	a) 8 x secondary sedimentation tanks (temporarily designed as aeration tanks) consisting of: i. 4 x tanks with lift out diffusion aeration grids. ii. 4 x tanks operated as clarifiers incorporating a solids-liquids separation system. b) Each tank to include a pair of direct-piped return activated biosolids pumps. c) Tanks constructed of concrete with splitter chamber.
6.	Continuously aerated Modified Ludzack-Ettinger (MLE) Reactor	Treated wastewater	a) Constructed of concrete. b) Biosolids directed via Dissolved Air Flotation Tank to the anaerobic biosolids digester. c) Liquid fraction directed to flow balancing dam. d) Mixed liquor discharge structure integrated into channel. e) Includes 3x submersible mixers, 5x submersible mixed liquor return pumps and 1x submersible drain pump into each MLE basin.
7.	Flow balancing dam	Treated wastewater	a) 2 x 1.5 mm plastic lined (polyethylene) layers with leak detection layer. b) Discharge to ocean outfall via the Sepia Depression Ocean Outfall Landline.
8.	Recycled water pump and filtration station	Treated wastewater	a) Junction chamber installed on the twin outlets to the pump station to allow dam bypass functionality.
9.	Odour control facility	-	a) Enclosed. b) Odour scrubbing equipment. c) Odour emission stack.
10.	Dissolved air flotation thickening tanks	Sewage sludge	a) Constructed of concrete. b) Connected to the odour control facility.
11.	Rotary Screw Thickeners (RST)	Sewage sludge	a) Designed to thicken raw primary sludge from the primary treatment process and from tankered septage waste. b) Each RST connected to the odour control facility.
12.	Anaerobic biosolids digester	Sewage biosolids	a) Enclosed. b) Digested biosolids storage tank. c) Dewatering centrifuge. d) Biosolid hoppers.

11. The Licence Holder must take the specified management action in the case of an event in Table 5.

Table 5: Management actions

Emission point	Event/action reference	Event	Management action
Odour control facility Tanker receival facility	EA1	Hydrogen sulphide emission levels above 1,500 ppb from the chemical scrubber outlets	a) Implement corrective actions to reduce hydrogen sulphide emission levels. b) Assess operation to determine any failure, malfunction or abnormal operation period. c) Restore normal operation of any failed equipment or replace the failed equipment. d) Undertake any corrective actions as soon as practicable to reduce hydrogen sulphide emissions. e) Notify DWER CEO, as per condition 34.

12. Following the cessation of emissions/operation under condition 11, the Licence Holder shall not restart operation of the process until:

(a) the problem has been rectified; and

(b) the Licence Holder has complied with condition 11.

13. The Licence Holder must manage the wastewater treatment vessels such that:

(a) overtopping of the vessels does not occur; and

(b) stormwater runoff is prevented from entering the vessels; and

(c) the integrity of the containment infrastructure and facility operation is maintained; and

(d) vegetation and floating debris (emergent or otherwise) are prevented from growing or accumulating in the vessels.

14. The Licence Holder must:

(a) implement security measures at the site to prevent as far as is practical unauthorised access to the site; and

(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.

15. The Licence Holder must:

(a) undertake an odour verification of the monitoring and modelling programme (MAM) initially completed, within six months of full operation of the new works, to confirm it is compliant against the ‘odour control summary’; and

(b) develop contingencies/mitigation measures where any failures/exceedances have been found to occur against the MAM verification.

Emissions and discharges

Point source emissions to air

16. The Licence Holder must ensure that where waste is emitted to air from the emission points in Table 6 and identified on the map(s) of emission points in Schedule 1, it is done so in accordance with the conditions of this Licence.

Table 6: Emission points to air

Emission point reference and location on map(s) of emission points	Emission Point	Emission point height (m)	Source, including any abatement
Odour control facility	Chemical scrubber inlet	-	Hydrogen sulphide emitted. Chemical odour scrubbers in use.
	Chemical scrubber outlet (prior to entering discharge stack)	-	
	Discharge stack	50 m	
Tanker receival facility	Chemical scrubber	-	
	Discharge stack	12 m	

Point source emissions to surface water

17. The Licence Holder must ensure that where waste is emitted to surface water from the emission points in Table 7 and identified on the map(s) of emission points in Schedule 1, it is done so in accordance with the conditions of this Licence.

Table 7: Emission points to surface water

Emission point reference and location on map(s) of emission points	Description	Source including abatement
Sepia Depression Ocean Outfall Landline	Discharge pipeline to ocean outfall[1]	Treated effluent.
Woodman Point Ocean Outlet	Discharge pipe to ocean	Treated effluent only discharged during routine maintenance or emergency situations, in order of priory, to: • Woodman Point Ocean Outlet; and • Jervoise Bay Ocean Outlet.
Jervoise Bay Ocean Outlet		

Note 1: Combined discharge volumes are regulated under Ministerial Statement 665.

Odour

18. The Licence Holder must ensure odour emissions are managed in accordance with the documents, or parts of documents, specified in Table 8.

Table 8: Management Plans

Management Plan Reference	Parts	Date of Document
Odour Improvement Plan, Water Corporation.	All	December 2006
Woodman Point Wastewater Treatment Plant Upgrade – Odour Control Summary (Identified as Appendix 1 within Woodman Point Wastewater Treatment Plant Licence Amendment – Supporting Document, November 2015. Version: 2 February 2016. Doc Id. PM#13945397-V4.)	All	2 February 2016
Woodman Point Wastewater Treatment Plant, Odour Management Plan (Project Number: TE18090)	All	28 November 2018

Monitoring

19. The Licence Holder must ensure that:

(a) all water samples are collected and preserved in accordance with AS/NZS 5667.1;

(b) all surface water sampling is conducted in accordance with AS/NZS 5667.9

(c) all wastewater sampling is conducted in accordance with AS/NZS 5667.10;

(d) all groundwater sampling is conducted in accordance with AS/NZS 5667.11;

(e) all microbiological samples are collected and preserved in accordance with AS 2031; and

(f) 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.

20. 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.

21. 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.

22. 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 point source emissions to air

23. The Licence Holder must undertake the monitoring in Table 9 according to the specifications in that table.

Table 9: Monitoring of point source emissions to air

Emission point reference	Parameter	Units[1]	Limit	Averaging period	Frequency[2]	Method
Odour control facility	Hydrogen sulphide – chemical scrubber inlets	ppm	-	Monthly to achieve a 90% availability	Continuous	-
	Hydrogen sulphide - chemical scrubber outlet prior to entering discharge stack	ppm	1.5			
	Volumetric flow rate	m^3/hr	-		Continuous	USEPA Method 2
Odour control facility – discharge stack sampling	Hydrogen sulphide (concentration)	mg/m^3	5	Spot sample	Annual	Manual
	Hydrogen sulphide (rate)	mg/s	250			-
	Volumetric flow rate	m^3/s	-			USEPA Method 2
	Stack exit temperature	°celsius	-			-
	Odour units	OU	-			AS 4323.1 AS/NZS 4323.3
Tanker receival facility – stack sampling	Hydrogen sulphide	mg/m^3	5	Spot sample	Annual	Manual
	Volumetric flow rate	m^3/s	-			USEPA Method 2
	Stack exit temperature	°celsius	-			-
	Odour units	OU	-			AS 4323.1 AS/NZS 4323.3

Note 1: All units are referenced to STP dry.

Note 2: Monitoring shall be undertaken to reflect normal operating conditions and any limits or conditions on inputs or production.

Monitoring of point source emissions to surface water

24. The Licence Holder must undertake the monitoring in Table 10 according to the specifications in that table.

Table 10: Monitoring of point source emissions to surface water

Emission point reference	Parameter	Units	Frequency
Treated Water channel, at new Reclaimed Water pump station (S1002273)	pH[1]	-	Monthly
	Total suspended solids	mg/L	
	Total dissolved solids		
	Biological oxygen demand		
	Total nitrogen		
	Total phosphorus		
	Ammonium-nitrogen		
	Nitrate+nitrite-nitrogen		
	E. coli[3]	cfu/ 100 ml	
	Cadmium	mg/L	Quarterly
	Copper		
	Chromium		
	Lead		
	Mercury		
	Nickel		
	Zinc		
	Contaminant loading[2]	kg/day	Annual

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

Note 2: Each parameter identified within the table assessed using flow-weighted data, excluding pH

Note 3: 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

25. The Licence Holder must undertake the monitoring in Table 11 according to the specifications in that table.

Table 11: Monitoring of inputs and outputs

Input/ Output	Monitoring point reference	Parameter	Units	Averaging period	Frequency
Wastewater input	WRRF Inflow meter (S1001222/S1)	Volumetric flow rate (cumulative)	m^3/day; or ML/ day	Monthly	Continuous
	Tanker receival facility	Liquid waste			Each load received to the facility
Wastewater output	WRRF Outflow meter (S1004373/M10)	Volumetric flow rate (cumulative)			Continuous
Biosolids output	Anaerobic Biosolids Digester	Sewage biosolids	m^3/day; or tonnes	Monthly	Each load leaving the premises

Process monitoring

26. The Licence Holder must undertake the monitoring in Table 12 according to the specifications in that table.

Table 12: Process monitoring

Monitoring point reference	Process description	Parameter	Units	Frequency	Method
Tanker Receival Facility	Compliance assessment of all tankered controlled waste received against condition 7	Flow	-	Each load received to or rejected from the premises	Visual
	Tankered controlled waste received	pH	-		None specified
		electrical conductivity			

Records and reporting

27. 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) the works conducted in accordance with condition 2 of this Licence;

(c) any maintenance of infrastructure that is performed in the course of complying with conditions 1 and 10 of this Licence;

(d) monitoring programmes undertaken in accordance with conditions 11, 15, 23, 24, 25 and 26 of this Licence; and

(e) complaints received under condition 30 of this Licence.

28. The books specified under condition 27 must:

(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.

29. 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.

30. The Licence Holder must:

(a) implement a complaints management system that shall 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 the Licence Holder to address the 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 condition 30(a) to identify any common factors and root cause of complaints and proposals to address these.

31. The Licence Holder must:

(a) prepare an environmental report that provides information in accordance with Table 13 for the preceding annual period, and

(b) submit the environmental report to the CEO by 1 October each year.

Table 13: Environmental Reporting Requirements

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
Condition 11, Table 5	Summary of Management actions undertaken	None specified
Condition 23, Table 9	Summary of Monitoring of point source emissions to air	None specified
Condition 24, Table 10	Summary of Monitoring of point source emissions to surface water	None specified
Condition 25, Table 11	Summary of Monitoring of inputs/outputs	None specified
Condition 26, Table 12	Summary of Process monitoring	None specified
Condition 29	Compliance	Annual Audit Compliance Report (AACR)
Condition 30	Complaints summary	None specified

32. The Licence Holder must ensure that the Environmental Report also contains an assessment of the information contained within the report against previous monitoring results and Licence limits.

33. The Licence Holder must submit the information in Table 14 to the CEO according to the specifications in that table.

Table 14: 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
-	Record of tankered third party waste (date/time)	Not applicable		As recorded by Licence Holder

Notification

34. The Licence Holder must ensure that the parameters listed in Table 15 are notified to the CEO in accordance with the notification requirements of the table.

Table 15: Notification requirements

Condition or table (if relevant)	Parameter	Notification requirement[1]	Format or form[2]
-	Any maintenance works on the the Sepia Depression Ocean Outfall Landline that will require the use of the Woodman Point or Jervoise Bay Ocean Outlets	Two weeks prior to planned maintenance operations taking place; or As soon as practicable but no later than 5pm of the next usual working day after becoming aware of any emergency maintenance operations undertaken.	None specified
Condition 11	Limit exceedance where management action taken	As soon as practicable but no later than 5pm of the next usual working day after becoming aware of any confirmed measurement that was not rectified within four hours of detection.	None specified
		Submit to the CEO a written report within five working days of receiving the confirmed measurement and shall include, but not limited to: (i) Date and time of exceedance; (ii) Results of continuous monitoring required by conditions 16 and 23 at the time of the exceedance; (iii) Cause of the exceedance; (iv) Indication of potential or known environmental impacts of the exceedance; and (v) Any corrective actions undertaken to prevent recurrence.	Email
Conditions 7, 9 and 23	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 22	Calibration report	As soon as practicable.	None specified

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

Note 2: N1 Form is in Schedule 3

Definitions

In this Licence, the terms in Table 16 have the meanings defined.

Table 16: 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 2031	means the Australian Standard AS 2031 Water quality – Sampling for microbiological analysis.
AS 3600	means Australian Standard AS 3600 Concrete structures
AS 4323.1	means the Australian Standard AS 4323.1 - Stationary source emissions - Selection of sampling positions and measurement of velocity in stacks.
AS/NZS 4323.3	means the Australian Standard AS/NZS 4323.3 Stationary Source Emissions - Determination of odour concentration by dynamic olfactometry.
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 Water Quality – Sampling – Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples.
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 AS/NZS 5667.10 Water Quality – Sampling – Guidance on sampling of waste waters.
averaging period	means the time over which a limit is measured or a monitoring result is obtained.
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 *Environmental Protection Act 1986* Locked Bag 10 Joondalup DC WA 6919 or: info@dwer.wa.gov.au
chemical scrubber outlet	means after the chemical scrubber but prior to entering the odour control facility discharge stack.
condition	a condition to which the licence is subject under section 62 of the *Environmental Protection Act 1986*
controlled waste	has the definition in *Environmental Protection (Controlled Waste) Regulations 2004.*
Department	means the department established under section 35 of the *Public Sector Management Act 1994* (WA) and designated as responsible for the

Term	Definition
	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.
engineered containment system	means any vessel or tank containment infrastructure associated with the treatment of wastewater.
EP Act	*Environmental Protection Act 1986* (WA).
EP Regulations	*Environmental Protection Regulations 1987* (WA).
g/s	means grams per second.
hardstand	means a surface with a permeability of 10^{-9} metres/second or less.
HDPE	High Density Polyethylene
Jervoise Bay Ocean Outlet, Sepia Depression Ocean Outlet (SDOOL) and 'Woodman Point Ocean Outlet	mean the marine discharge points labelled and depicted in Schedule 1: Maps of the Licence;
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.
Ministerial Statement 665	means "*Ministerial Statement 665 - Use of the Cape Peron Outlet Pipeline to Dispose of Industrial Wastewater to the Sepia Depression, Kwinana*" as amended from time to time.
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.
Odour control facility and odour control facility discharge stack	means those structures labelled and depicted in Schedule 1.
odour control summary	means Woodman Point Wastewater Treatment Plant Upgrade – Odour Control Summary, identified as Appendix 1 within Woodman Point Wastewater Treatment Plant Licence Amendment – Supporting Document, November 2015. Version: 2 February 2016. Doc Id. PM#13945397-V4.).
OU	means odour units.
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 in Schedule 1 to this Licence.
prescribed premises	has the same meaning given to that term under the EP Act.

Term	Definition
process equipment	means any wastewater or biosolids 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.
Schedule 3	means Schedule 3 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.
stack test	means a discrete set of samples taken over a representative period at normal operating conditions.
STP	means standard temperature and pressure (0oCelsius and 101.325 kilopascals respectively).
Tanker receival facility and tanker receival facility discharge stack	means those structures labelled and depicted in Schedule 1.
usual working day	means 0800 – 1700 hours, Monday to Friday excluding public holidays in Western Australia.
USEPA	means United States (of America) Environmental Protection Agency.
USEPA Method 2	means the USEPA Method 2 - Determination of Stack Gas Velocity and Volumetric Flow Rate (Type S Pitot Tube).
waste	has the same meaning given to that term under the EP Act.
waste code	means the waste code assigned to the type of controlled waste for purposes of tracking and reporting as specified in the Department of Water and Environmental Regulation's 'Controlled Waste Category List' (May 2018), as amended from time to time.
wastewater treatment vessels	means any vessel, pond or tank containment infrastructure associated with the storage and treatment of wastewater.

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

Map of site layout

The premises infrastructure is indicated in the map below (Figure 2).

(Orange line does not depict premises boundary)

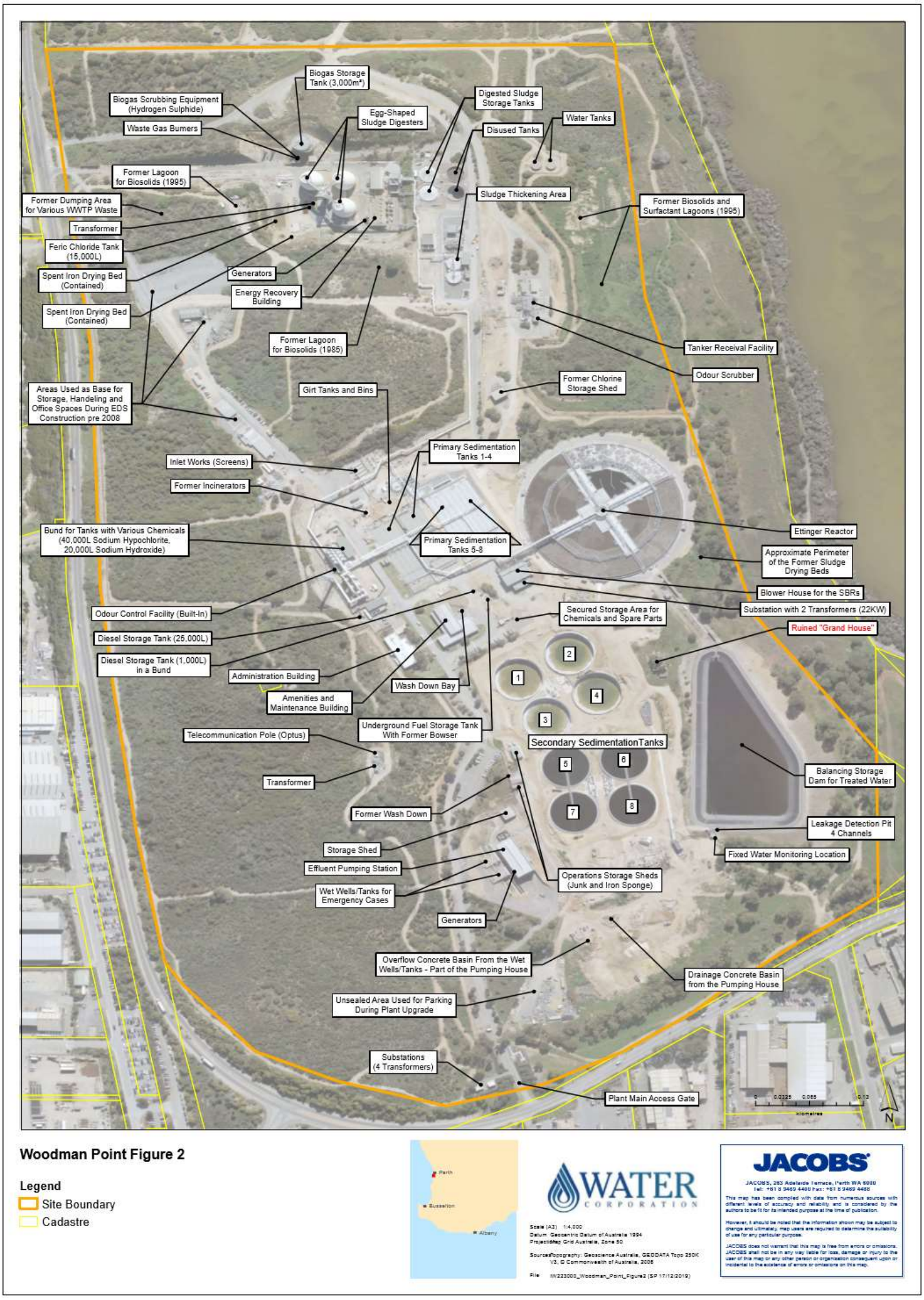

Figure 2: Premises infrastructure

Premises map of discharge pipeline

The premises discharge pipeline is indicated in the map below (Figure 3).

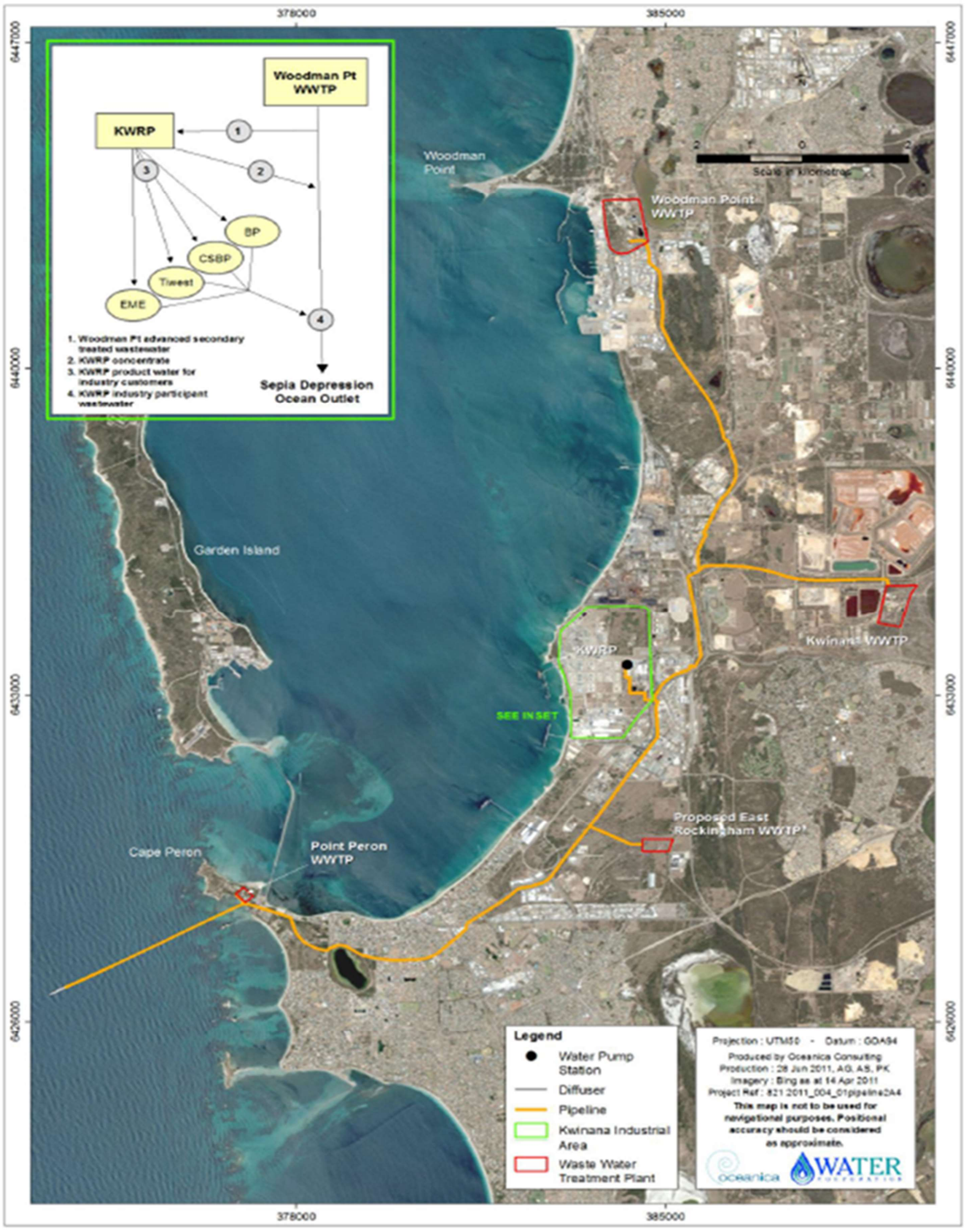

Figure 3: Premises discharge pipeline

Map of WRRF emission and monitoring points – primary treatment

The premises WRRF emission and monitoring points for primary treatment is shown in the map below (Figure 4).

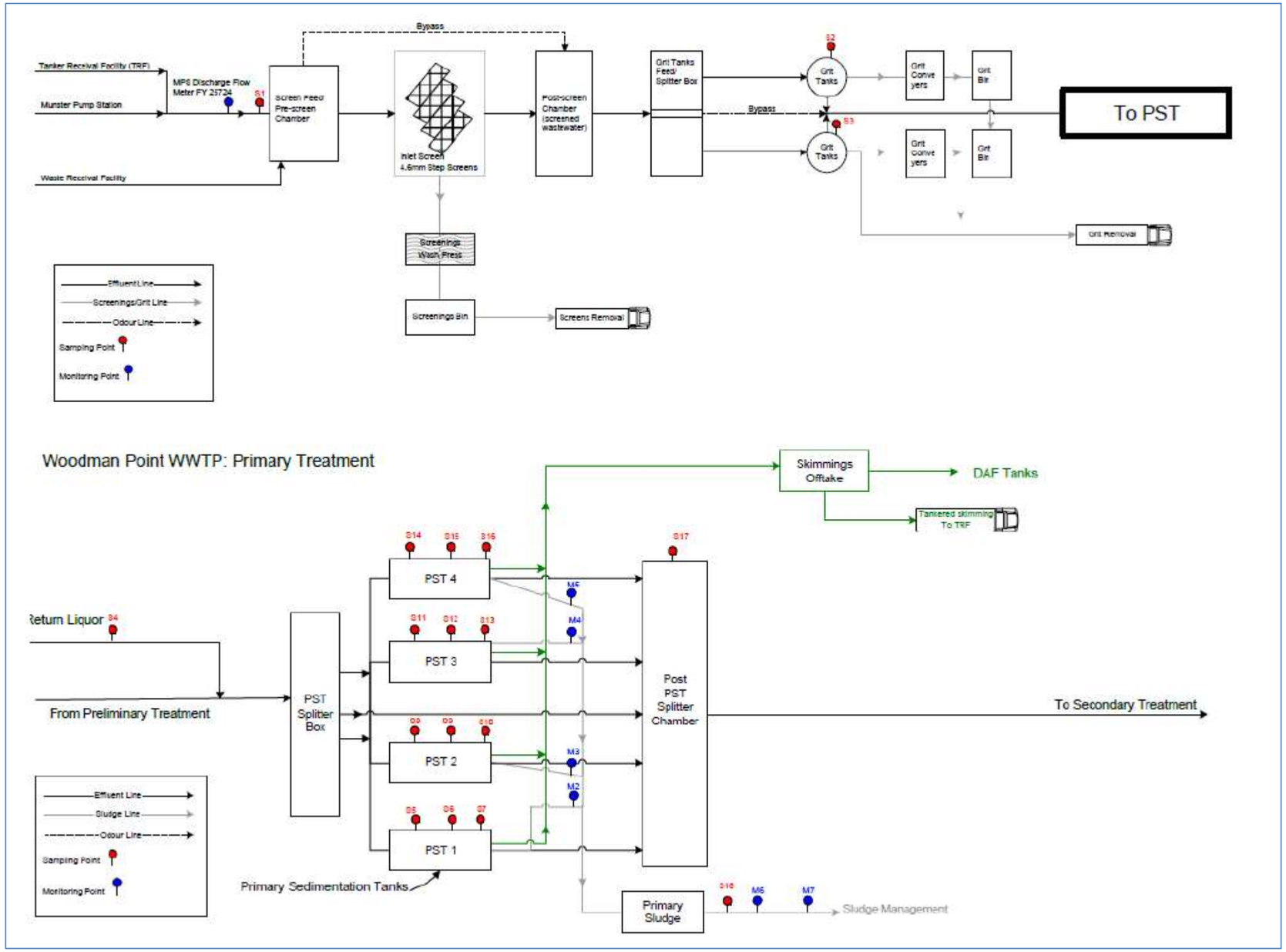

Figure 4: Premises emission and monitoring points for primary treatment

Map of WRRF emission and monitoring points – Secondary treatment

The premises WWRF emission and monitoring points for secondary treatment is shown in the map below (Figure 5).

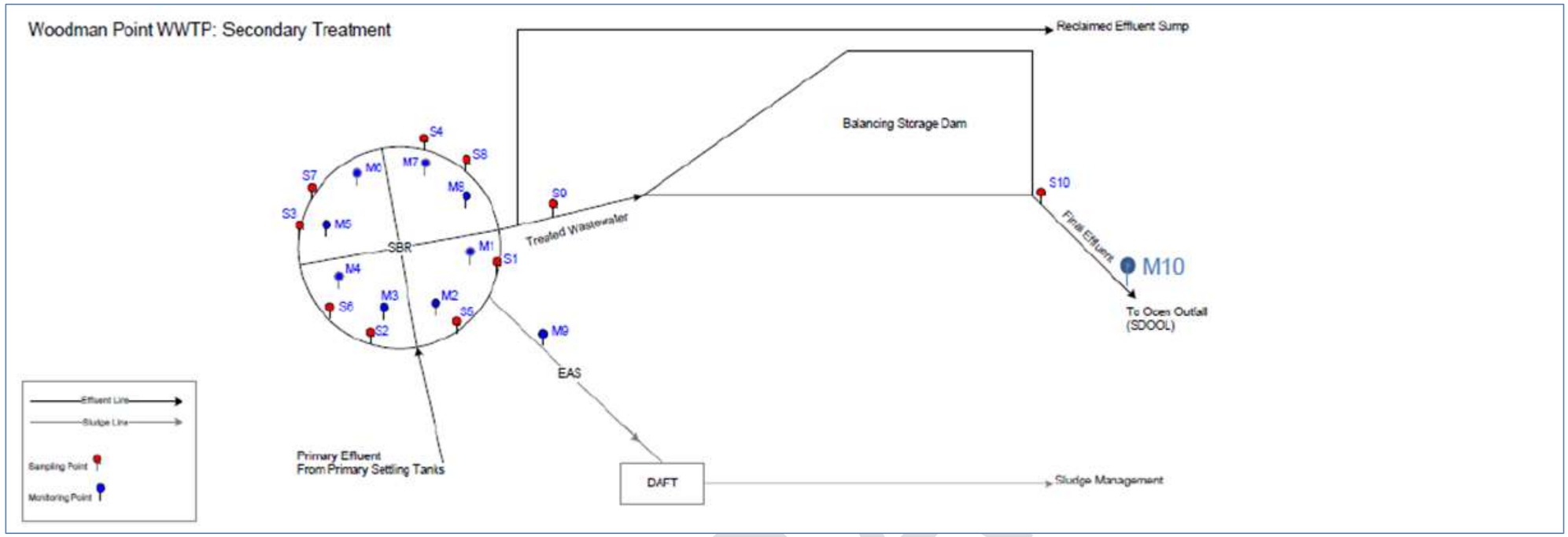

Figure 5: Premises emission and monitoring points for secondary treatment

Process flow of WRRF emission and monitoring points – solids treatment

The WRRF emission and monitoring points for solids treatment is shown in the process flow diagram below (Figure 6).

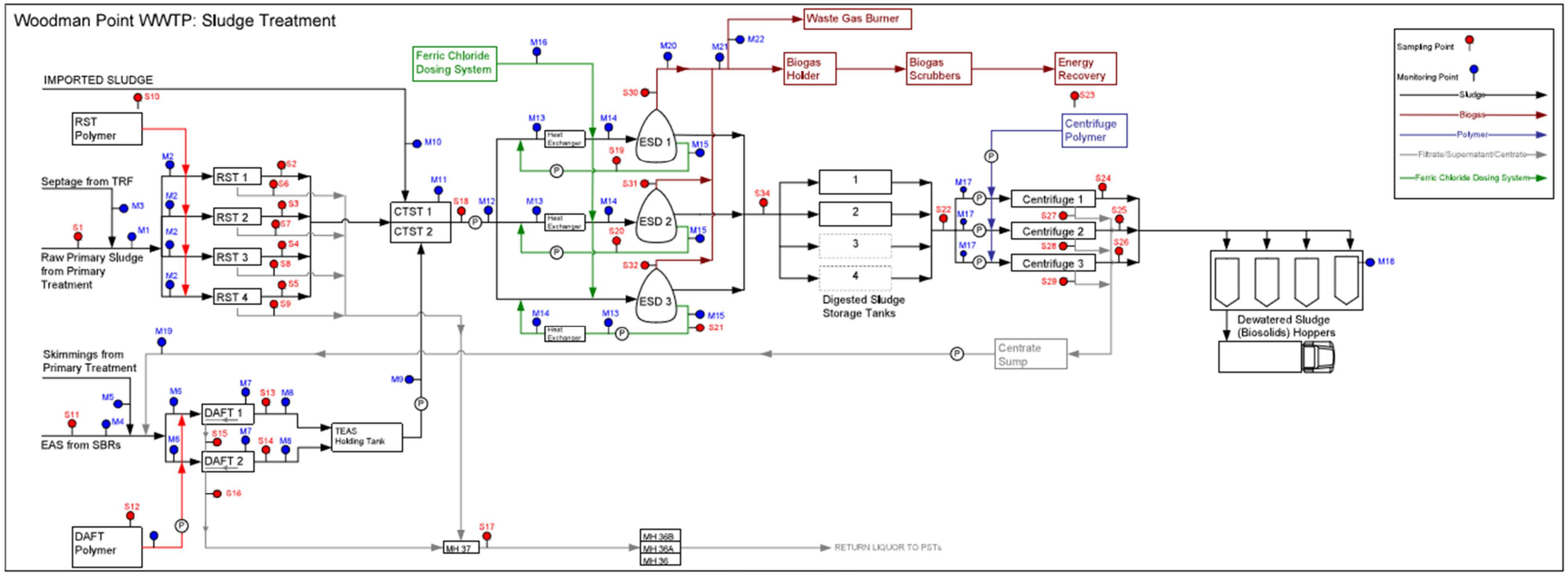

Figure 6: Premises emission and monitoring points for solids treatment

Proposed interim process flow for solids treatment.

The WRRF solids treatment is shown in the process flow diagram below (Figure 7).

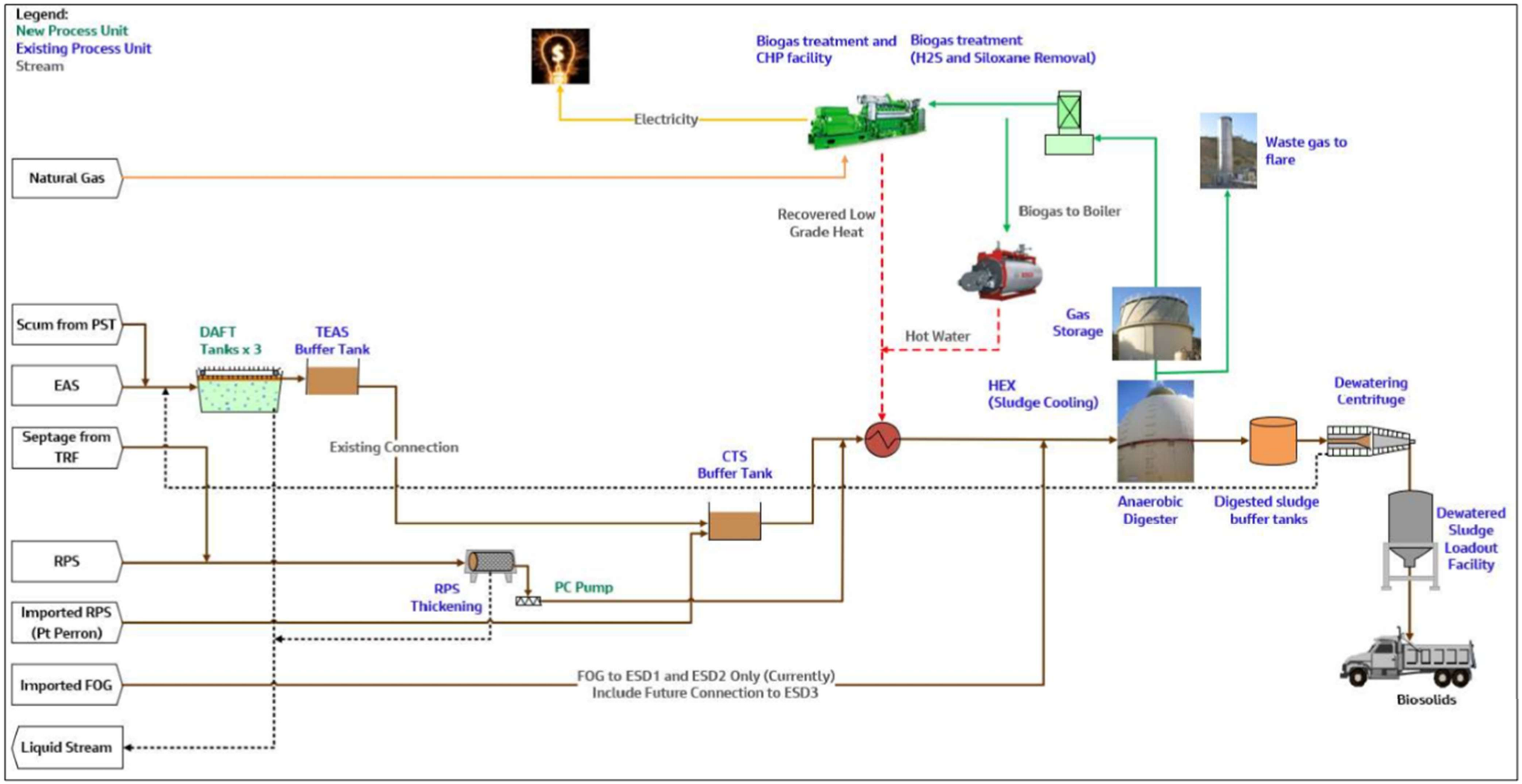

Figure 7: Premises solids treatment flow diagram

Map of odour control facility emission and monitoring points

The premises odour control facility emission and monitoring points are shown in the map below (Figure 8).

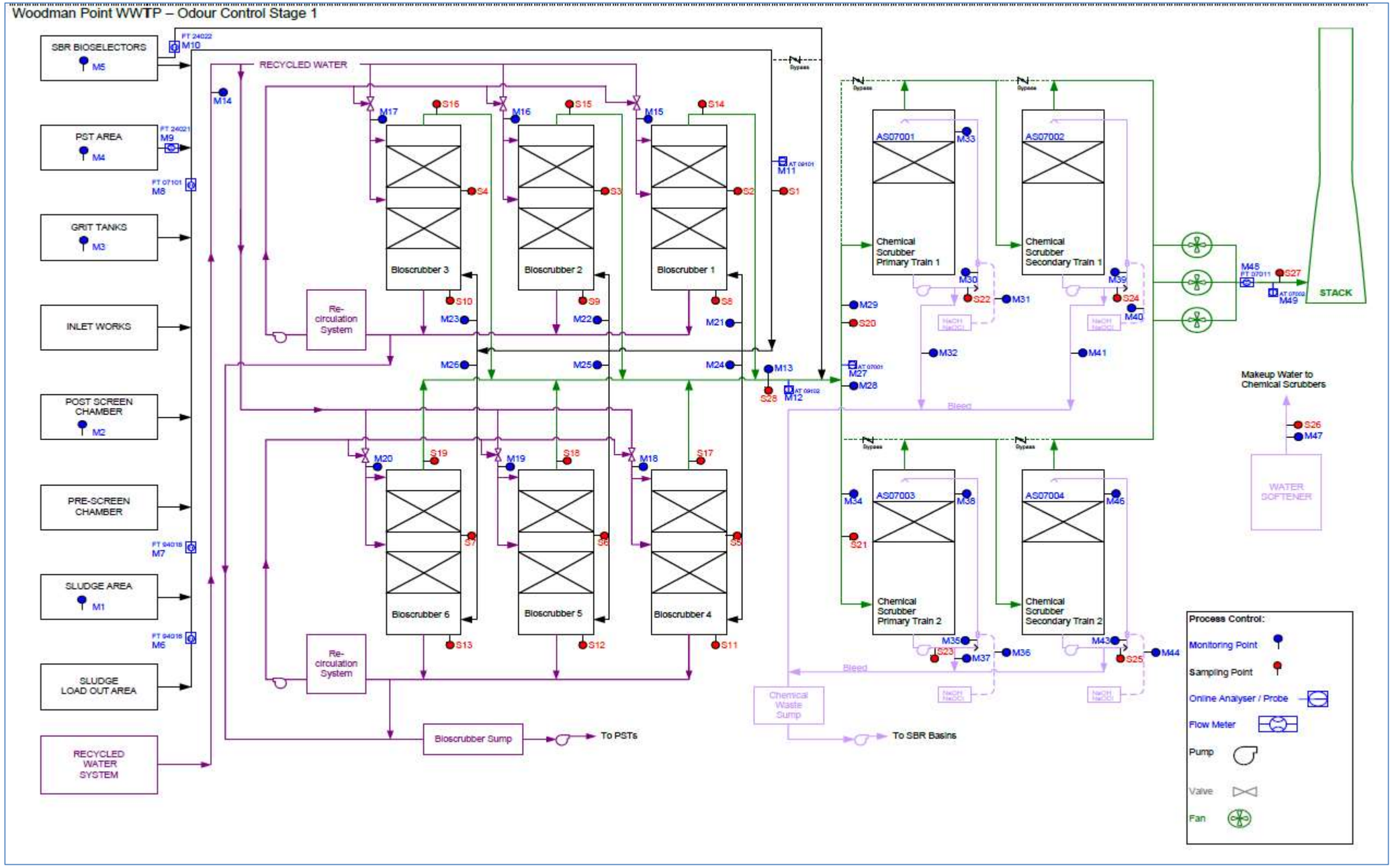

Figure 8: Premises emission and monitoring points for odour control facility

Map of tanker receival facility emission point

The premises tanker receival facility emission point is shown in the map below (Figure 9).

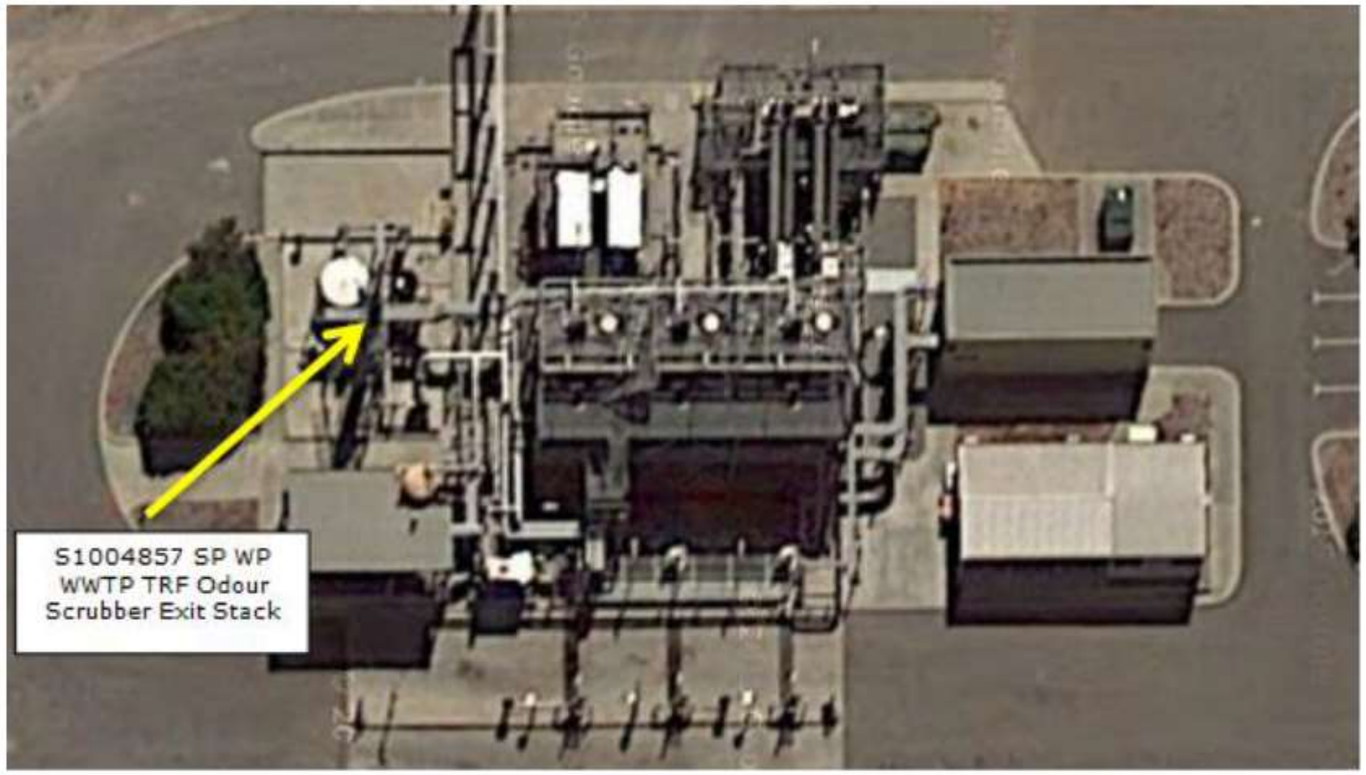

Figure 9: Premises tanker receival facility emission point

Installation model of thickened raw primary sludge hopper and pump under each rotary screw thickener

3D model showing installation of the thickened raw primary sludge hopper and pump under each rotary screw thickener (Figure 10).

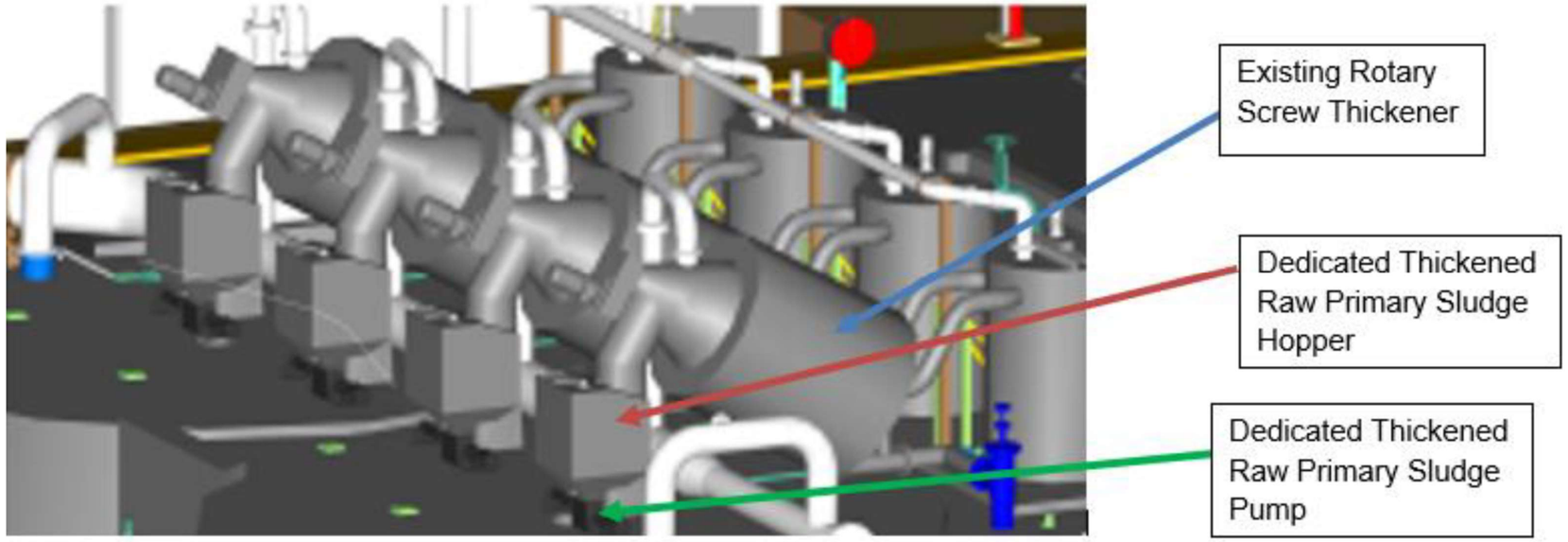

Figure 10: Installation model of thickened raw primary sludge hopper and pump under each rotary screw thickener

Installation model of third dissolved air flotation thickening tank and ancillary equipment

3D model showing installation of the third dissolved air flotation thickening tank and ancillary equipment (Figure 11).

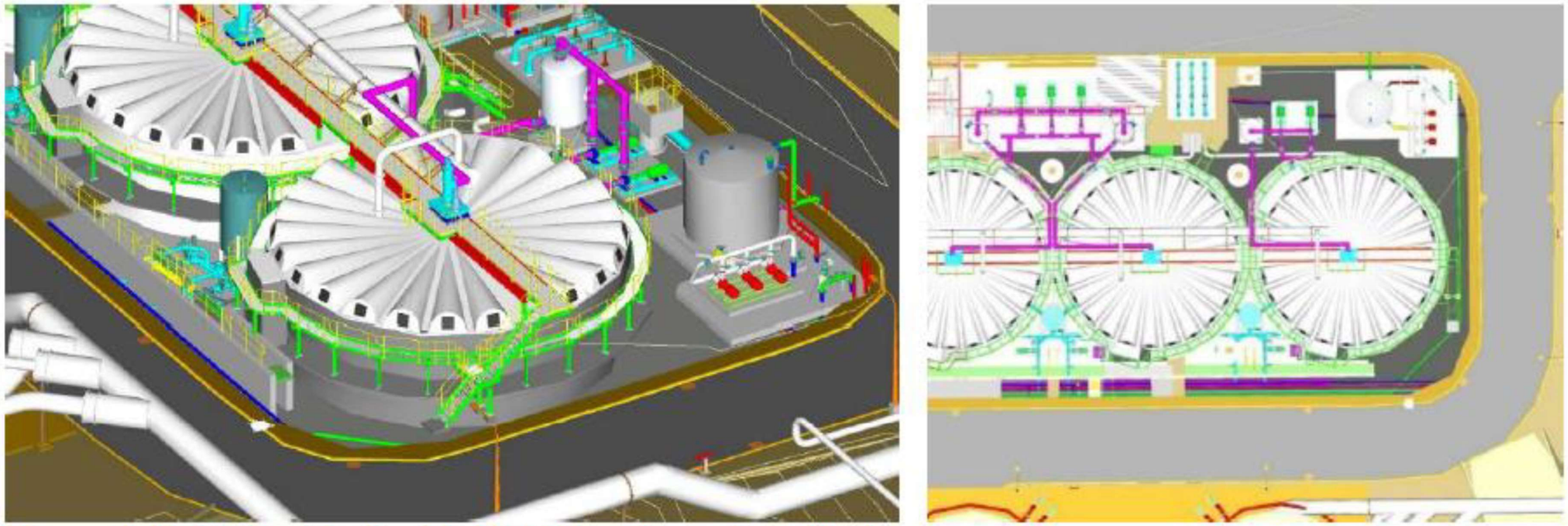

Figure 11: Installation model of the third dissolved air flotation thickening tank and ancillary equipment

Schedule 2: Premises boundary

The premises boundary is defined by the coordinates in Table 17.

Table 17: Premises boundary coordinates (GDA2020)

No.	Easting	Northing	Zone
For exclusion from Woodman Point WRRF prescribed premises boundary — Hazer CDP			
1	383904.97886	6443648.78307	50
2	383970.87869	6443660.62313	50
3	383989.61680	6443671.92422	50
4	384008.22836	6443694.31087	50
5	383998.16296	6443749.63117	50
6	383884.97362	6443748.33788	50
Woodman Point WRRF prescribed premises boundary perimeter			
7	383800.08160	6443747.36708	50
8	384384.76686	6443765.12598	50
9	384416.59648	6443455.05132	50
10	384534.06773	6443079.42840	50
11	384658.56993	6442914.53779	50
12	384660.58465	6442737.16813	50
13	384473.46848	6442601.99639	50
14	384323.57700	6442511.59338	50
15	384220.21210	6442477.15402	50
16	384116.08869	6442509.22730	50
17	384030.82722	6442541.51500	50
18	383935.24680	6442651.29354	50
19	383864.15547	6443093.96338	50
20	383851.30052	6443393.16705	50
Existing exclusion from Woodman Point WRRF prescribed premises — Channel Marker Obelisk – State Heritage Register P10163			
21	384044.49962	6442996.24070	50
22	384063.23655	6443007.54169	50
23	384072.92141	6442985.47814	50
24	384054.18452	6442974.17717	50

Schedule 3: N1 Notification Form

Licence: L4201/1991/11 Licence Holder: Water Corporation

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 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 of behalf of	
Date	