



Licence number	L7994/2003/4
Licence holder	Shire of Brookton
Registered business address	14 White Street BROOKTON WA 6306
DWER file number	App-0028559
Duration	13/02/2014 to 12/02/2026
Date of issue	07/02/2014
Date of amendment	08/05/2025
Premises details	Brookton Wastewater Treatment Plant Lot 448 Robinson Road (Crown Reserve 35832) BROOKTON WA 6306 Legal description - Being Lot 448 on Plan 192654 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.	120 cubic metres per day

This licence is granted to the licence holder, subject to the attached conditions, on 8 May 2025, by:

Grace Heydon

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

[L7994/2003/4 Amendment Date: 8 May 2025](#)

Licence history

Date	Reference number	Summary of changes
11/02/2005	L7994/2003/1	New application
06/02/2006	L7994/2003/2	Licence re-issue
12/02/2009	L7994/2003/3	Licence re-issue
07/02/2014	L7994/2003/4	Licence re-issue
29/04/2016	L7994/2003/4	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.
11/02/2019	L7994/2003/4	Amendment Notice 1 - Removal of treated water re-use monitoring and associated conditions
16/05/2022	L7994/2003/4	Notice of amendment of licence reporting requirements section 59(2), section 59(1)(a) and 59(1)(b) <i>Environmental Protection Act 1986</i> Licensed Prescribed Premise
2/10/2023	L7994/2003/4	<p>Amendment to licence for removal of the clarifier and polishing tank from the infrastructure and the removal of E.coli limitation in the conditions.</p> <p>This amendment also includes CEO initiated amendment to the type and style of licence and incorporated amendment notices. During the consolidation of amendment notices, DWER has not undertaken any additional risk assessment of the premises.</p> <p>In consolidating the licence, the CEO has,</p> <ul style="list-style-type: none"> (a) Updated the format and appearance of the licence; (b) Deleted the redundant AACR form set out in Schedule 2 of the previous licence and advised the licence holder to obtain the form from the Department's website; (c) Revised the licence condition numbers, removed any redundant conditions and realigned condition numbers for numerical consistency; and <p>Corrected clerical mistakes and unintentional errors.</p>
08/05/2025	L7994/2003/4	Licence amendment to facilitate desludging of the Pond.

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:

Operation

1. The licence holder must operate and maintain all pollution control and monitoring equipment to the manufacturer's specification or any relevant and effective internal management system
2. The licence holder must record and investigate the exceedance of any descriptive or numerical limit, and/or target in this licence.
3. 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	Quantity limit	Specification ¹
Sewage – waste from the reticulated septic tank effluent disposal system	120 m ³ /day	Accepted through sewer inflows only

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

4. 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	Biological treatment	<p>Secondary treatment (Oxidation Pond):</p> <ul style="list-style-type: none"> Water depth to sludge shall be greater than 0.4 m or equivalent and sludge depth on ponds to be less than 1 m or equivalent; and pH of wastewater to be maintained at 6.5 to 8.5. <p>Treatment of sewage waste shall be targeted at or below the treatment capacity of 120 m³/day.</p>

5. 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	Requirement
Pond 1 (Oxidation Pond)	Wastewater	Clay lined to achieve a permeability of less than <10 ⁻⁹ m/s or equivalent.

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- 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.

Emissions and discharges

Water

- 7.** The licence holder must manage all wastewater treatment ponds such that:
- (a) overtopping of ponds does not occur;
 - (b) a minimum freeboard of 300 mm 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.
- 8.** The licence holder must manage the wastewater treatment vessels such that:
- (a) overtopping of the wastewater treatment vessels does not occur;
 - (b) stormwater runoff is prevented from entering the wastewater treatment vessels; and
 - (c) there is no discernible seepage loss from the wastewater treatment vessels.
- 9.** The licence holder must:
- (a) implement all practical measures to prevent stormwater run-off becoming contaminated by the activities on the premises; and
 - (b) treat contaminated or potentially contaminated stormwater as necessary prior to being discharged from the premises.

Odour

- 10.** The licence holder must ensure that odour emitted from the premises does not unreasonably interfere with the health, welfare, convenience, comfort or amenity of any person who is not on the premises.

Monitoring

- 11.** The licence holder must ensure that:
- (a) all water samples are collected and preserved in accordance with AS/NZS5667.1;
 - (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, or AS/NZS 5667.6 as relevant;
 - (d) all microbiological samples are collected and preserved in accordance with AS/NZS 2031; and

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- (e) all laboratory samples are submitted to a laboratory with current NATA accreditation for the parameters to be measured unless indicated otherwise in relevant table.
- 12.** 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;
 - (c) six monthly monitoring is undertaken at least 5 months apart; and
 - (d) annual monitoring is undertaken at least 9 months apart.
- 13.** 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 and the requirements of the licence.
- 14.** 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.
- 15.** The licence holder must undertake the monitoring in Table 4 according to the specifications in that table.

Table 4: Monitoring of inputs and outputs

Input/output	Monitoring point reference and location	Parameter	Units	Averaging period	Frequency
Sewage – inlet flow	Inflow meter (M1)	Volumetric flow rate (cumulative)	m ³ /day	Monthly	Continuous
Treated wastewater discharged to offsite storage pond.	Outflow meter (L1)				

- 16.** The licence holder must undertake the monitoring in Table 5 according to the specifications in that table.

Table 5: Process monitoring

Emission point reference and location	Process description	Parameter	Target	Units	Averaging Period	Frequency
L1	Discharge from wastewater treatment plant to offsite storage pond	pH ¹	6.5-8.5	mg/L	Spot sample	Six monthly
		Biochemical Oxygen Demand	<20			
		Total Dissolved Solids				
		Total Suspended	<30			

		Solids				
		Nitrate + Nitrite-nitrogen				
		Ammonium-nitrogen				
		Total Nitrogen	<30			
		Total Phosphorus	<10			
		<i>Escherichia coli</i>		cfu/100mL		
		Aluminium		mg/L		Annually
		Cobalt, total				
		Copper				
		Flouride				
		Iron, total				
		Lead, total				
		Manganese, total				
		Total Organic Carbon				
		Total residual chlorine				
		surfactants				
		Zinc, total				

Note 1: In situ non-Nata accredited analysis is permitted

Records and reporting

Records

- 17.** 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:
- the name and contact details of the complainant, (if provided);
 - the time and date of the complaint;
 - the complete details of the complaint and any other concerns or other issues raised; and
 - the complete details and dates of any action taken by the licence holder to investigate or respond to any complaint.

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- 18.** The licence holder must ensure that:
- (a) any person left in charge of the Premises is aware of the conditions of the Licence and has access at all times to the Licence or copies thereof; and
 - (b) any person who performs tasks on the Premises is informed of all of the conditions of the Licence that relate to the tasks which that person is performing.
- 19.** 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 26 of this licence;
 - (c) any maintenance of infrastructure that is performed in the course of complying with condition 3, 4 and 5 of this licence;
 - (d) monitoring programmes undertaken in accordance with conditions 11 and 16 of this licence; and
 - (e) complaints received under condition 17 of this licence.
- 20.** The books specified under condition 19 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.

Reporting

- 21.** 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 30 January each year.
- 22.** The licence holder must submit to the CEO an Environmental Report by 30 January 2024 and biannually thereafter. The report shall contain the information listed in Table 6 in the format or form specified in that table for the preceding two annual periods.

Table 6: Environmental Report

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
Table 2	Summary of any treatment capacity target exceedances and any action taken	
Condition 7	Summary of any freeboard target exceedances and any action taken	

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Table 4	Monitoring of inputs and outputs	
Table 5	Process monitoring	
Condition 17	Complaints summary	None specified

- 23.** The licence holder must ensure that the Environmental Report also contains:
- (a) any relevant process, production or operational data recorded under condition 15;
 - (b) an assessment of the information contained within the report against previous monitoring results and licence limits and/or targets; and
 - (c) copies (electronic), or any original monitoring reports submitted to the licence holder from third parties for the annual period.
- 24.** The licence holder must submit the information in Table 7 to the CEO according to the specifications in that table.

Table 7: Additional reporting requirements

Condition or table (if relevant)	Parameter	Reporting period	Reporting date (after end of the reporting period)	Format or form
Table 5	Target exceedances	Six monthly	28 calendar days	None specified

- 25.** The licence holder must ensure that the parameters listed in Table 8 are notified to the CEO in accordance with the notification requirements of that table.

Table 8: 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
26	Construction of a Pad and Tubes for Desludging campaign, Removal of sewage sludge from a treatment pond, wastewater treatment vessel, sewage sludge storage pond or Tubes	No less than 14 days in advance of works ²	
26	Desludging – removal of Pad, Liner, Tubes and associated pipes	No less than 14 days at the conclusion of desludging works ³	None specified
Condition 4	Breach of any limit specified in the licence	As soon as practicable but no	None specified

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-	Any failure or malfunction of any pollution control equipment or any incident, which has caused, is causing or may cause pollution	later than 5pm of the next working day	
Condition 16	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 2: the following information shall be included: (i) when desludging is proposed to occur, (ii) the desludging method including Tubes (or equivalent) to be used, (iii) the proposed Liner to be constructed at the Pad (iv) action to mitigate potential odour impacts, and (v) the method by which the community will be advised of the desludging activities.

Note 3: the following information shall be included: (i) when desludging concluded; and (ii) at what licensed waste facility the desludging material was disposed.

Specified works

26. When Desludging is required, the licence holder must:

- (a) construct and/or install the critical containment infrastructure and/or equipment;
 - (b) in accordance with the corresponding design and construction / installation requirements; and
 - (c) at the corresponding infrastructure location;
- as set out in Table 9.

Table 9: Design and construction / installation requirements

	Infrastructure	Design and construction / installation requirements	Infrastructure location
1.	Pad	<ul style="list-style-type: none"> (a) Maximum dimensions of 36 m in length, 30 m in width; (b) Compacted base of in-situ clayey soil; (c) The perimeter of the Pad must be bunded to divert stormwater away from the Pad. 	As shown in Schedule 1 Desludging Map - referenced as lined and bunded Geotube laydown area
2.	Liner	<p>The Liner must:</p> <ul style="list-style-type: none"> (a) Be PVC (or equivalent) with a permeability greater than 1×10^{-9} m/s; (b) must meet design and installation specifications as listed in Schedule 3: (c) be installed as one consecutive piece, overlapped if necessary to manufacturer's specification; (d) extend to the bunding of the Pad around all sides; (e) be free from leaks and defects where it adjoins the bunding; (f) Separation distance of at least 2 m must be maintained between the base of the Liner and the highest wet season water table. 	As shown in Schedule 1 Desludging Map - referenced as lined and bunded Geotube laydown area
3.	Tubes	Tubes to consist of:	As shown in Schedule 1 Desludging Map -

	Infrastructure	Design and construction / installation requirements	Infrastructure location
		<ul style="list-style-type: none"> (a) Sufficient number of Tubes with the capacity to contain all the desludging material; (b) Not exceed combined 1000 m³ sludge volume at any time; and (c) must meet design and installation specifications as listed in Schedule 2. 	referenced as lined and bunded Geotube laydown area
4.	Slurry and return water pipes	<p>The desludging slurry and return water pipes must:</p> <ul style="list-style-type: none"> (a) Be connected to the micro-dredge at all times while desludging is occurring; (b) Return sludge filtrate from the Tubes back into the Pond; and (c) Be free of leaks and defects. 	As shown in Schedule 1 Desludging Map

Definitions

In this licence, the terms in Table 10 have the meanings defined.

Table 10: Definitions

Term	Definition
ACN	Australian Company Number.
The Act	means the <i>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 January until 31 December in the same year.
AS/NZS 2031	means the Australian Standard AS/NZS 2031 <i>Selection of containers and preservation of water samples for microbiological analysis</i> .
AS/NZS 5667.1	means the Australian Standard AS/NZS 5667.1 <i>Water Quality-Sampling - Guidance of the Design of sampling programs, sampling techniques and the preservation and handling of samples</i> .
AS/NZS 5667.4	means the Australian Standard AS/NZS 5667.4 <i>Water Quality-Sampling Guidance on sampling from lakes, natural and man-made</i> .
AS/NZS 5667.10	means the Australian Standard AS/NZS 5667.10 <i>Water Quality-Sampling - Guidance on sampling of waste waters</i> .
averaging period	means the time over which a limit or target 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 <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> .
Dangerous goods	has the meaning defined in the <i>Dangerous Goods Safety (Storage and Handling of Non-explosives) Regulations 2007</i> .

Term	Definition
Desludging	means the process of removing sludge that has built up underneath the effluent pond.
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.
DWER	means Department of Water and Environmental Regulation
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).
EP Regulations	<i>Environmental Protection Regulations 1987</i> (WA).
freeboard	means the distance between the maximum water surface elevations and the top of retaining banks or structures at their lowest point.
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.
Liner	means PVC liner (or equivalent).
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
Pad	means compacted hardstand bunded pad referenced as lined and bunded Geotube laydown area in Schedule 1 Desludging Map.
Pond	means the single Oxidation/Settling Pond at the Premises.
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 January to 31 March 1 April to 30 June, 1 July to 30 September, and 1 October to 31 December of the same year.

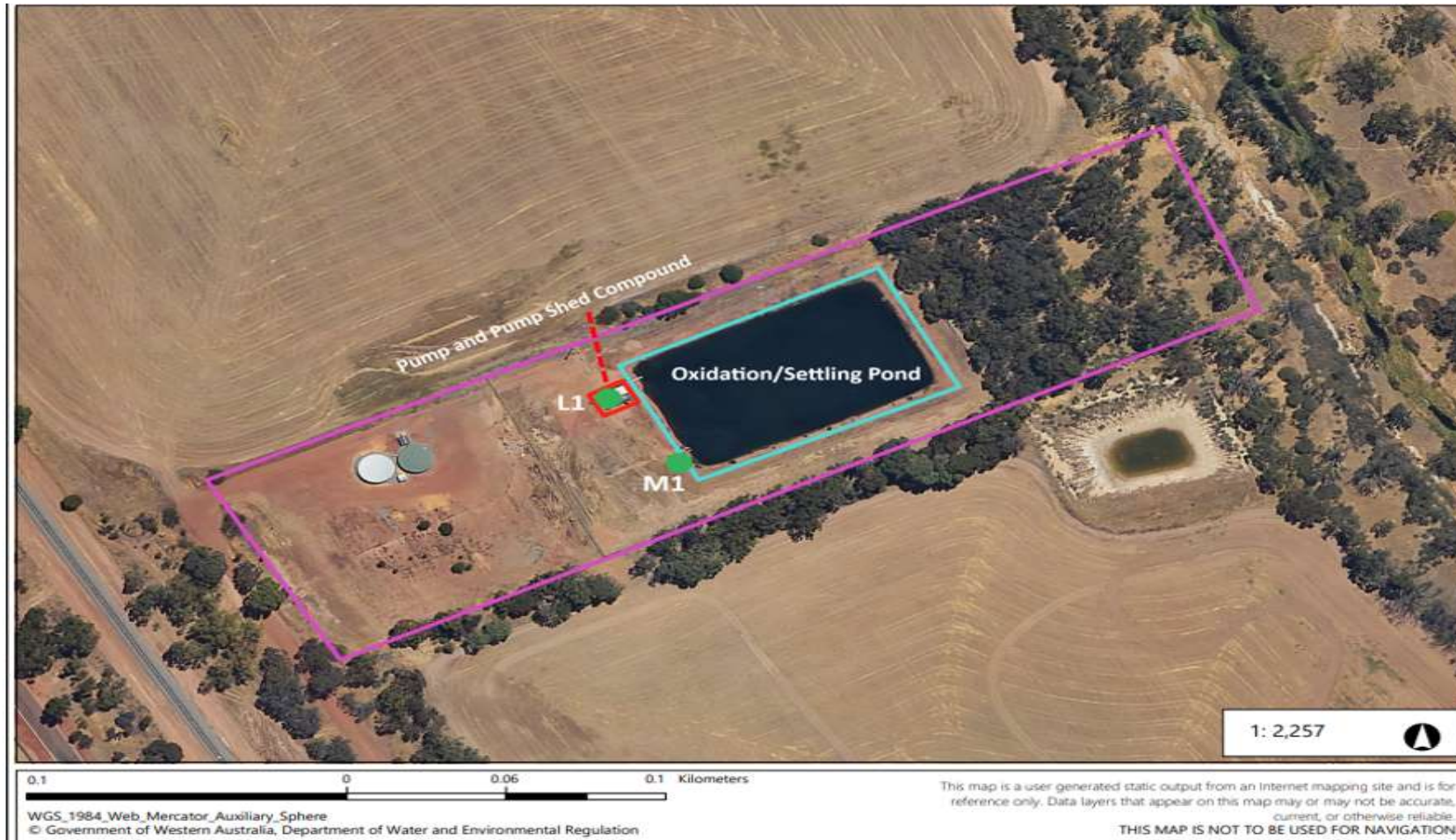
Term	Definition
six monthly	means the 2 inclusive periods from 1 April to 30 September and 1 October to 31 March in the following year.
spot sample	means a discrete sample representative at the time and place at which the sample is taken.
Tubes	means GeoPro Tube 105WT Fabric geotextile tubes as outlined in Schedule 2 (or equivalent).
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, clarifiers and polishing tanks.

END OF CONDITIONS

Schedule 1: Maps

Premises map

The boundary of the prescribed premises is shown in the map below in pink.



L7994/2003/4 Amendment Date: 8 May 2025

IR-T06 Licence template (v10.0) (May 2024)

Desludging map

The location of the desludging Pad and Liner is shown in the map below.



L7994/2003/4 Amendment Date: 8 May 2025

IR-T06 Licence template (v10.0) (May 2024)

Schedule 2: Minimum specification for Tubes

GeoPro Tubes

The Construction Quality Assurance Requirements for the installation of the Tubes are outlined in Table 11 below.

Table 11: Tubes Material specifications

GeoPro™ Tube 105WT Fabric

GeoPro™ 105WT is a high strength polypropylene geotextile used commonly for dewatering tubes and bags. It has a good chemical resistance and is UV stabilised.

Properties	Units	Values Metric	Test Method
Physical Properties			
Material		High Tenacity Polypropylene Yarn	
Length	M	50	
Width	M	4.5	
Area	m ²	225	
Mechanical Index Properties			
Tensile Strength T _{ult} -MD/CD min	kN/m	70/50	ASTM D4595
Nominal Elongation – MD/CD	%	16/15	ASTM D4595
Trapezoid Tearing Strength – MD/CD	N	900/1700	ASTM D4533
Static Puncture Resistance	N	9000	ASTM D6241
Mechanical Performance Properties			
UV Resistance – Retained Strength	%	95	ISO 12224
Chemical Resistance – Retained Strength	%	95	EN 14030
Microbiological Resistance – Retained Strength	%	90	EN 12225
Oxidation Resistance – Retained Strength	%	95	ISO 13438
Hydraulic Properties			
Permittivity (50mm head)	l/sec	0.8	ASTM D4491
Flow Rate (50mm head)	l/m ² /min	2400	ASTM D4491
Apparent Opening Size (0.95)	Mm	0.425	ASTM D4751

The information presented herein, while not guaranteed, is to the best of our knowledge true and accurate. Except when agreed to in writing or specific conditions of use, no warranty or guarantee expressed or implied is made regarding the performance of any product, since the manner of use and handling are beyond our control. Nothing contained herein is to be constructed as permission or as a recommendation to infringe any patent.

Schedule 3: Construction specifications for Liner

PVC Liner

The Construction Quality Assurance Requirements for the installation of the PVC Liner are outlined in Table 12 below.

Table 12: PVC Material specifications

610GSM Reinforced PVC Bunding Material Properties	
Physical Properties	Test Results
Total Weight	610 GSM (DIN EN ISO 2286-2)
Yarn	1000 x 1300 Denier – 1100 x 1430 Dtex (DIN EN ISO 1049-2)
Coating	PVC
Finish	Slip Resistant Matt Finish
Threads	7 x 7 Per CM / 18 x 17 Per Inch (DIN EN ISO 1049-2)
Tensile Strength	289 x 287 KG/5cm – 2832.2 x 2831 N/5cm – 323 x 321 LBS/Inch (DIN 53354)
Tear Resistance	43 x 32 KG – 421.4 x 317N – 95 x 71 LBS (DIN 53363)
Welding Adhesion	11.0KG/5cm – 107.8N/5cm – 12.3LBS/Inch (DIN 53357)
Temperature Resistance	-30° + 70°C (DIN 53361)
UV Resistant	Yes