

# Application: Certificate of Accreditation

## Sewage Management Facility

### Aerated Wastewater Treatment System Advanced Secondary Effluent

This Certificate of Accreditation is issued by the Secretary of the NSW Ministry of Health pursuant to Section 41(1) Local Government (General) Regulation 2021.

**System:** Taylex Poly ABS1500 AWTS

**Manufacturer:** Taylex Industries Pty Ltd

**Of:** 56 Prairie Rd, Ormeau, QLD, 4208

The Taylex Poly ABS 1500 AWTS as described in Schedule 1, has been accredited as a Sewage Management Facility for use in single domestic premises in NSW. This accreditation is subject to the conditions of accreditation and permitted uses specified in Schedule 2. The AWTS has been independently certified as being manufactured to Australian / New Zealand Standard "AS/NZS1546.3:2017 On-site domestic wastewater treatment units – Part 3: Aerated wastewater treatment systems".



**Director, Environmental Health**

For Secretary (Delegation PH335)

Issued: 24 / 11 / 25

Certificate Number: STS-AWTS050

Expires: 31 December 2030







## **Schedule 1: Specification / Description of the Taylex Poly ABS1500 Advanced STS-AWTS**

Name and Model of STS: Taylex Poly Advanced Blower System (ABS) 1500 Advanced STS-AWTS

The Taylex Poly ABS 1500 Advanced STS-AWTS is designed to treat sewage from a residential dwelling occupied by a maximum of 10 persons.

The Taylex Poly ABS 1500 Advanced STS-AWTS is contained in a collection well with operational capacity of 6066L. NSW Health Accreditation Number STCW032;

<b>Chamber</b>	<b>Design capacities</b>
Primary treatment	2619 L (1708L + 911L)
• Partition	yes
Secondary treatment	911 L
• Aeration chamber	2067 L
• Clarifier	685L
• Irrigation chamber	685L
Emergency storage	1000+ L
Operational water level (depth)	(mm)
• primary	1430
• secondary	1410

The emergency storage capacity is achieved by allowing primary, secondary and aeration chambers to rise without shortcuts.

The Taylex Poly ABS1500 Advanced STS-AWTS is contained in one polyethylene collection well having the attached specification sheet "Poly ABS150".

### **Schedule 2: Conditions of Accreditation**

#### **1. General**

- 1.1 Prior to installation the owner/occupier of the premises shall make an application, in accordance with Clause 26 of the Local Government (General) Regulation 2021, to the local council for approval to install and operate the Taylex Poly ABS 1500 Advanced STS-AWTS as a Sewage Management Facility in accordance with Section 68, Part C of the Local Government Act 1993.
- 1.2 The local council shall apply those Conditions of Accreditation, appropriate to the owner / occupier, to any approval to operate the Taylex Poly ABS 1500 Advanced STS-AWTS issued under Clause 45(4), Local Government (General) Regulation 2021.
- 1.3 In accordance with Clause 36 of the Local Government (General) Regulation 2021, the Taylex Poly ABS 1500 Advanced STS-AWTS shall have an expected service life of 5 years in the case of mechanical and electrical components and 15 years in the case of other components.
- 1.4 The owner / occupier shall ensure that the Taylex Poly ABS 1500 Advanced STS-AWTS is installed or constructed:
  - in accordance with the accredited specifications of the type tested unit and in accordance with good trade practice, and
  - so as to allow ease of access for maintenance, and
  - with regard to the health and safety of users, operators and persons maintaining the facility, and
  - must be installed or constructed so as to make appropriate provision for access to and removal of contents in a safe and sanitary manner, and
  - must, if it is intended to be a permanent fixture, be anchored to prevent movement.
- 1.5 The manufacturer / supplier shall ensure that the Taylex Poly ABS 1500 Advanced STS-AWTS is supplied, constructed and installed in accordance with the design (including the disinfection unit) as submitted and accredited by the NSW Ministry of Health. The Taylex Poly ABS 1500 Advanced



STS-AWTS shall not be modified or altered except that alternate individual mechanical and electrical components such as pumps, PLCs, etc, may be substituted provided that the component meets the Accredited design specification.

- 1.6 Any permanent modification or variations to the Accredited design of the Taylex Poly ABS 1500 Advanced STS-AWTS shall be submitted for separate consideration and variation of the Certificate of Accreditation by the NSW Ministry of Health. Modifications will be considered in accordance with section 2.3.13 of AS1546.3:2017.
- 1.7 Each Taylex Poly ABS 1500 Advanced STS-AWTS shall be permanently and legibly marked by the manufacturer in accordance with section 3 of AS1546.3:2017.
- 1.8 The manufacturer shall supply with each Taylex Poly ABS 1500 Advanced STS-AWTS an owner's manual, which sets out the care, operation, maintenance and on-going management requirements of the system. The owner's manual prepared by the manufacturer shall specifically contain a plan for the on-going management of the Taylex Poly ABS 1500 Advanced STS-AWTS. The plan shall include details of:
  - the treatment process,
  - procedures to be followed in the event of a system failure,
  - emergency contact numbers,
  - maintenance requirements,
  - inspection and sampling procedures to be followed as part of any on-going monitoring program developed by the local authority.
- 1.9 The manufacturer shall provide the following information to each local council where it is intended to install an AWTS in their area once Ministry Accreditation has been obtained:

<ul style="list-style-type: none"><li>• Statement of warranty</li><li>• Statement of service life</li><li>• Quality Assurance Certification</li><li>• Installation Manual</li><li>• Service Manual</li><li>• Owner's Manual</li></ul>	<ul style="list-style-type: none"><li>• Manufacturer's Service Report Form</li><li>• Engineering Drawings</li><li>• Specifications</li><li>• A4 Plans</li><li>• Certificate of Accreditation documentation from NSW Health.</li></ul>
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The manufacturer need not provide the above information to the local council where the information or document is contained on the manufacturer's web site.

## **2. Installation and Commissioning**

- 2.1 The owner / occupier shall have the Taylex Poly ABS 1500 Advanced STS-AWTS inspected and checked by the manufacturer or the manufacturer's agent. The manufacturer or the agent is to certify that the system has been installed and commissioned in accordance with its design, conditions of Accreditation and any additional requirements of the local council.
- 2.2 The owner / occupier shall ensure that all electrical work is carried out on the Taylex Poly ABS 1500 Advanced STS-AWTS by a licensed electrician and in accordance with the relevant provisions of AS/NZS 3000.
- 2.3 The owner / occupier shall not commission the Taylex Poly ABS 1500 Advanced STS-AWTS unless the land application system has been completed.

## **3. Maintenance**

- 3.1 The owner / occupier of the premises shall enter into a minimum 12-month contract or agreement with a service agent and ensure that the Taylex Poly ABS 1500 Advanced STS-AWTS is serviced:
  - in accordance with the manufacturer's / supplier's service manual and using the manufacturer's / supplier's service sheet; and
  - by a service agent who
    - has completed a course on the servicing and maintenance of STS; and has some supervised servicing experience or extensive un-supervised experience;
    - is employed or authorised by the manufacturer / supplier of the Taylex Poly ABS 1500 Advanced STS-AWTS;



- uses replacement parts which meet the minimum specification of the Taylex Poly ABS 1500 Advanced STS-AWTS;
- has advised of their name, contact details and credentials to the local council;
- submits a completed NSW Health "Local Council Service Report" (attached) to the local council immediately after each and every service;
- shall report to the local council any instances where the owner / occupier refuses to authorise repairs, replacement of parts or maintenance; and
- does not perform electrical work or enter confined spaces unless trained and is suitably qualified to do so.

3.2 The owner/occupier shall not service the Taylex Poly ABS 1500 Advanced STS-AWTS unless they are an authorised agent.

3.3 The Taylex Poly ABS 1500 Advanced STS-AWTS once installed and commissioned shall be serviced at 3 monthly intervals.

3.4 The manufacturer / supplier of the Taylex Poly ABS 1500 Advanced STS-AWTS shall place on its web site a copy of the service manual, service sheet or form and specifications for the Taylex Poly ABS 1500 Advanced STS-AWTS to facilitate servicing, maintenance and repairs. Commercial-in-confidence documents may be provided directly to the service agent without uploading to the web site.

3.5 Each three monthly service shall, as a minimum where provided, include a check on all mechanical, electrical and functioning parts of the system including:

- The chlorinator and replenishment of the disinfectant,
- Any alternative disinfection unit,
- Replace a UV light globe at recommended intervals and keep a record,
- Pump and air blower,
- The alarm system,
- Slime growth on the filter media,
- Operation of the sludge return system,
- The effluent irrigation area,
- On-site testing for free residual chlorine, pH and dissolved oxygen at the appropriate check points.

#### **4. Verification**

4.1 Effluent from the Taylex Poly ABS 1500 Advanced STS-AWTS taken in any random grab sample shall comply with the following standard:

- BOD<sup>5</sup> less than 30 mg/L
- TSS less than 45 mg/L
- E. coli less than 100 cfu/100 ml
- Free residual chlorine greater than 0.5 and less than 2.0 mg/L

#### **5. Permitted uses**

5.1 The effluent is suitable for re-use for garden purposes by way of any of the forms of irrigation as described in AS/NZS 1547:2012:

- above ground spray irrigation; and/or
- surface drip irrigation covered by mulch; and/or
- sub-surface drip irrigation installed at around 100 mm depth; and or
- any form of sub-soil application.

Each of the forms of irrigation or application is subject to the approval of the local authority.



## 6. Advanced Secondary Treatment System

The Taylex Poly ABS 1500 Advanced STS-AWTS when tested by a Product Certification Body in accordance with AS1546.3:2017 was found to comply with the Advanced Secondary Effluent Criteria as follows:

**TABLE 2.1 (Abrev) AS1546.3:2017  
ADVANCED SECONDARY EFFLUENT COMPLIANCE CRITERIA FOR A STS**

Parameter	Advanced secondary effluent	
	90% of Samples	Maximum
BOD5	≤ 10mg/L	20 mg/L
TSS	≤ 10 mg/L	20 mg/L
<i>E. coli</i> *	≤ 10 cfu/100mL	30 cfu/100mL
FAC p	Minimum 0.5 mg/L†	N/A
Turbidity ¶	N/A	10 NTU

\* Where disinfection is required.

p Where chlorine disinfection is used.

† Minimum level, not 90% of samples.

¶ Where UV light is used for disinfection .



Local Council STS (DGTS) Service Report: February 2018		
Owner's Name:		Local Council:
Installation Address:		
System Brand & Model:	<input type="checkbox"/> Domestic	<input type="checkbox"/> Commercial
Date of this service: / /	Date of last Service: / /	Next service due: / /
Has the STS/DGTS been <b>serviced</b> in accordance with the manufacturer's / supplier's requirements and using the service sheet? <input type="checkbox"/> Yes <input type="checkbox"/> No If "No" why not?		
STS/DGTS <b>functioning</b> correctly? <input type="checkbox"/> Yes <input type="checkbox"/> No If "No" why not?		
<b>According to sludge-judge or other methodology is de-sludging needed?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No If "Yes" what action is recommended?		
<b>Offensive odours?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No      If "Yes" what action is recommended?		
<b>Alarms</b> tested and functional? <input type="checkbox"/> Yes <input type="checkbox"/> No      If not "functional" what action is recommended?		
<b>Final Effluent Quality</b> Tested? <input type="checkbox"/> Yes <input type="checkbox"/> No Disinfected? <input type="checkbox"/> Yes <input type="checkbox"/> No Chlorine tablets remaining? <input type="checkbox"/> Yes <input type="checkbox"/> No Quality? <input type="checkbox"/> Satisfactory <input type="checkbox"/> Unsatisfactory On what evidence is this judgement made?      If "Unsatisfactory" what action was recommended?		
<b>Land Application Area</b> Surface ponding? <input type="checkbox"/> Yes <input type="checkbox"/> No Run off? <input type="checkbox"/> Yes <input type="checkbox"/> No Excess plant growth? <input type="checkbox"/> Yes <input type="checkbox"/> No Effluent leaving premises? <input type="checkbox"/> Yes <input type="checkbox"/> No High risk areas contaminated? * <input type="checkbox"/> Yes <input type="checkbox"/> No      * Patio, play areas, BBQ, etc Operating satisfactorily? <input type="checkbox"/> Yes <input type="checkbox"/> No      If "Not operating satisfactorily" what action was recommended?		
<b>Overall Condition of STS?</b> <input type="checkbox"/> Excellent <input type="checkbox"/> Good <input type="checkbox"/> Fair <input type="checkbox"/> Poor Comments / Action Recommended / Repairs Needed / Repairs Performed:		
Has the owner / occupier taken recommended actions? <input type="checkbox"/> Yes <input type="checkbox"/> No		
Service Agent:		Contact Details:
Signature:		Date:

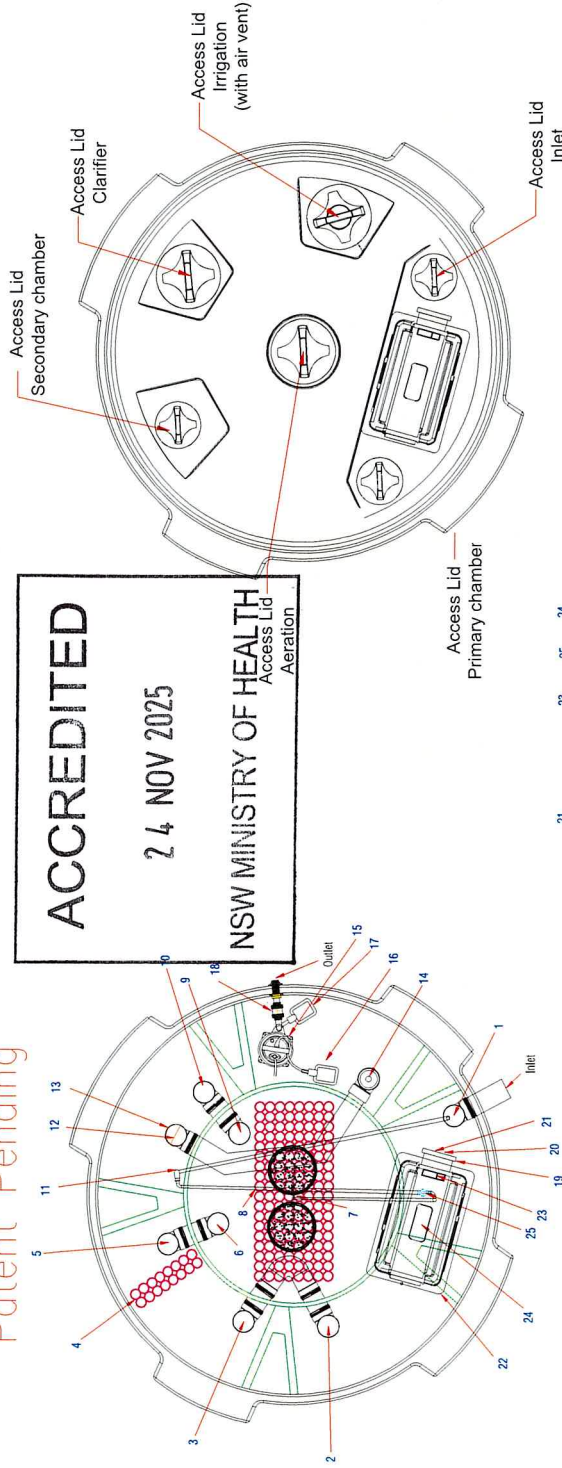
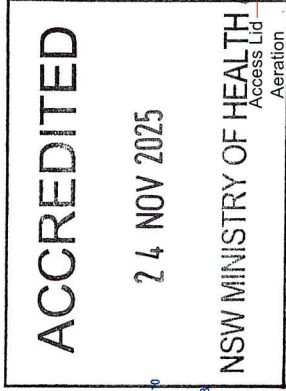
Source: Adapted from "Checklist 4.2: Operational AWTS inspection report for use by service providers and Council inspectors" in *Designing and Installing On-Site Wastewater Systems*, Sydney Catchment Authority, May 2012



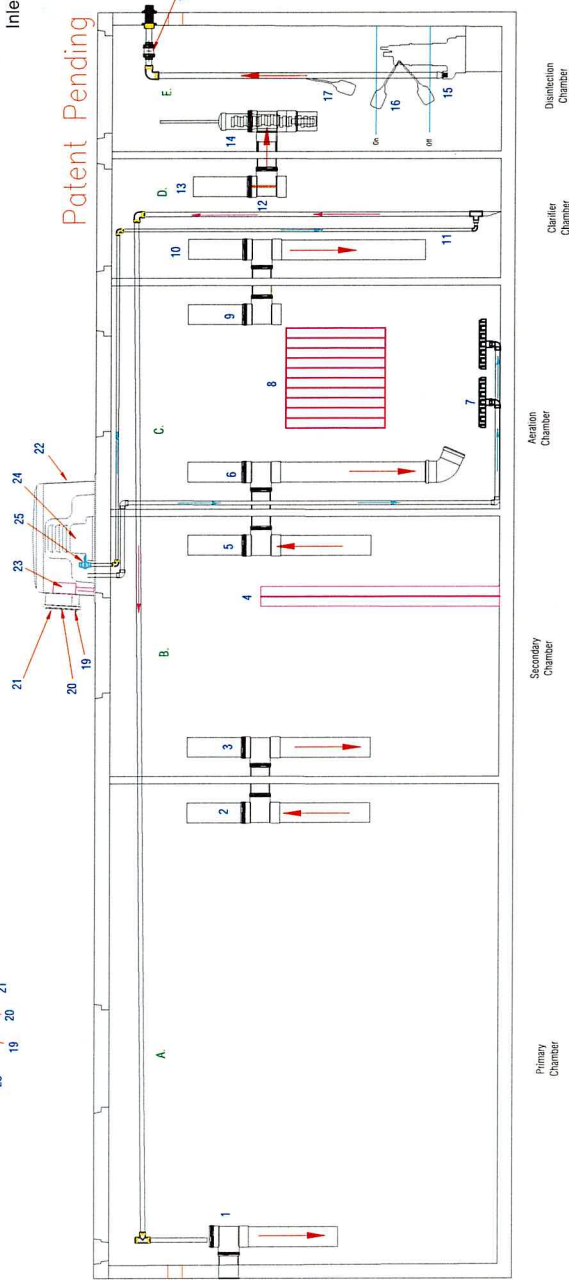




Patent Pending



Patent Pending



TANK DETAILS

TAYLEX WASTEWATER  
PABS2000NR – Poly

Poly Tank	
CHAMBER	CAPACITY 'L'
A PRIMARY	1646
B SECONDARY	881
C AERATION	2053
D CLARIFIER	663
E IRRIGATION	665
EMERGENCY STORAGE	
1541	

WORKING VOLUME 5908 Litres  
TOTAL VOLUME 7449 Litres

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