

Northern Territory Product Approval On-site Wastewater Management System

Taylex Industries Pty Ltd

- **ABS 1500 concrete STS**
- **PABS 1500 polyethylene STS**

Advanced secondary treatment systems

1 Approval details

1.1 System

Name	Taylex ABS (concrete) & PABS (polyethylene) 1500 advanced secondary treatment systems
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1.2 Manufacturer

Company			
Name	Taylex Industries Pty Ltd		
Street address	56 Prairie Road, Ormeau QLD 4208		
ABN	35 113 453 091		
Contacts			
Name	Steve Tedmanson	Position	General Manager
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Website	https://www.taylex.com.au		

1.3 Approval number and expiry

Approval No.	2020/3459EH
HPRM File No.	EFILE2020/39630
Approval date	1 October 2020
Expiry date	1 October 2025

1.4 Issuing authority

Agency	Department of Health (DoH)
Address	PO Box 40596, Casuarina NT 0811
Phone	(08) 8922 7152
Email	publichealthdirector@doh.nt.gov.au
Website	www.nt.gov.au (wastewater management)

1.5 Issuing authority's approval*

Approved	
Peter Rogers	
Principal Policy Officer Public Health Directorate	
Public Health and Clinical Excellence Division	
Department of Health	

* This approval is issued under 'Division 4 – Product approval for on-site wastewater system' of the Public and Environmental Health Regulations.

1.6 Regulatory authority

- #1 The regulatory authority is the Northern Territory Government Agency that has responsibility for the legislation applicable to an individual onsite wastewater management system installation. The applicable legislation for wastewater installations in the Northern Territory is the *Building Act, Public and Environmental Health Act* and subordinate regulations.

2 System detail

2.1 ABS 1500

- #2 The Taylex ABS1500 (Concrete Advanced Blower System 1500) Secondary Treatment System (STS) is designed to treat the wastewater from a residential dwelling up to 1,500 Litres per day, with a daily flow of 150 Litres per person and an average daily BOD₅ 70g per person.
- #3 The Taylex ABS1500 STS is contained in one vertical axis type cylindrical precast Concrete collection well with a design capacity of 9,320 Litres and an operating capacity of 5,880 Litres.
- #4 Flow path of wastewater:
- A primary pre-treatment chamber, with a capacity of 1,684 Litres.
 - A secondary pre-treatment chamber, with a capacity of 842 Litres.
 - An aeration chamber, with a capacity of 2,071 Litres. This chamber is fitted with bio block media, 9" disk diffuser and air lift.
 - A sedimentation / clarifier chamber, with a capacity of 662 Litres, containing a Taylex Disk Filter fitted to the outlet, and a sludge return to the primary.
 - An irrigation chamber, with a capacity of 621 Litres, incorporating a capacity of 300 Litres for chlorine contact of effluent. A chlorine disinfection unit is installed on the inlet to the irrigation chamber. The system is fitted with either a Davey D25 or D42 Irrigation Pump.
 - The automatic irrigation pump transfers the treated effluent to the land application system.

2.2 PABS 1500

- #5 The Taylex PABS1500 (Polyethylene Advanced Blower System 1500) Secondary Treatment System (STS) is designed to treat the wastewater from a residential dwelling up to 1,500 Litres per day, with a daily flow of 150 Litres per person and an average daily BOD₅ 70g per person.
- #6 The Taylex PABS1500 STS is contained in one vertical axis type cylindrical moulded polyethylene collection well with a design capacity of 7,108 Litres and an operating capacity of 6,066 Litres.

#7 Flow path of wastewater:

- A primary pre-treatment chamber, with a capacity of 1,708 Litres.
- A secondary pre-treatment chamber, with a capacity of 911 Litres.
- An aeration chamber, with a capacity of 2067 Litres at high level. This chamber is fitted with bio block media, 9” disk diffuser and air lift.
- A sedimentation / clarifier chamber, with a capacity of 685 Litres, containing a Taylex Disk Filter fitted to the outlet, and a sludge return to the primary.
- An irrigation chamber, with a capacity of 685 Litres, incorporating a capacity of 300 Litres for chlorine contact of effluent. A chlorine disinfection unit is installed on the inlet to the irrigation chamber. The system is fitted with either a Davey D25 or D42 Irrigation Pump.
- The automatic irrigation pump transfers the treated effluent to the land application system.

2.3 Product approval documentation

The following documents are referenced as part of this product approval:

Document	Document date
Application for a product approval of an on-site wastewater system inclusive of supporting descriptive documentation	26/08/2020
Receiver of Territory Monies - Receipt No. 6812368850	01/10/2020
ABS 1500	
Specifications – Concrete advanced blower system 1500 (ABS1500)	Undated
Flow path engineering drawing – Taylex concrete ABS 1500	Undated
Installation manual – Concrete advanced blower system 1500 (ABS1500)	Undated
Safe Work Method Statement – Delivering and nesting a wastewater treatment plant into excavation	09/08/2017
Taylex ABS commissioning checklist	Undated
RCM compliance certificate	31/07/2020
Taylex ABS 1500 – Servicing procedure	June 2019
Taylex warranty statement ABS System and septic tanks – Warranty policy	Jan 2020
Taylex service life statement – Septic tanks & secondary treatment systems	Undated
Home owners manual – Taylex advanced blower system 1500 (ABS1500)	Sept 2020
Nitto Kohki’s MEDO Brand Air Blower brochure	Undated
Technical specifications for Nitto blower LA-80B-A1141-Q1-1411	Undated
Davey submersible drainage pumps datasheet – D15A, D25A, D40A, D40M	Undated

Davey submersible drainage pumps datasheet – D42A/B, D53A/B	Undated
Service contract for your Taylex household sewage treatment plant (HSTP)	Undated
Service report - System	19/02/2020
Field service report	Undated
Global Certification – ISO9001 QMS Certificate of Registration No. 40	23/01/2020
Global Certification Audit Report – AS 1546.3:2017	05/08/2020
Global Certification – Product Certificate of Registration No. 40/22 AS 1546.3:2017 - Advanced Secondary 1500 L/day or 10 EP Level	19/08/2020
Global Certification – Certificate of Conformance AS 3735:2001 & AS/NZS 1546.1.2008 No. 040/1	19/08/2020
Tank base plan: Drg No. S001	31/05/2019
Tank base plan – Tall 300: Drg No. S011	31/05/2019
Tank base plan – Tall 400: Drg No. S021	31/05/2019
Tank base plan – Tall 600: Drg No. S031	31/05/2019
ABS1500 Concrete standard excavation instructions	Undated
ABS1500 Concrete tall 300 - Excavation instructions	Undated
ABS1500 Concrete tall 400 - Excavation instructions	Undated
ABS1500 Concrete tall 300 - Excavation instructions	Undated
PABS 1500	
Specifications – Poly advanced blower system 1500 (PABS1500)	Undated
Flow path engineering drawing – Taylex poly ABS 1500	Undated
Installation manual – Poly advanced blower system 1500 (PABS1500)	Undated
Safe Work Method Statement – Delivering and nesting a wastewater treatment plant into excavation	09/08/2017
Taylex PABS commissioning checklist	Undated
RCM compliance certificate	31/07/2020
Taylex ABS 1500 – Servicing procedure	June 2019
Taylex warranty statement ABS System and septic tanks – Warranty policy	Jan 2020
Taylex service life statement – Septic tanks & secondary treatment systems	Undated
Home owner's manual – Taylex advanced blower system 1500 (ABS1500)	Sept 2020
Nitto Kohki's MEDO Brand Air Blower brochure	Undated
Technical specifications for Nitto blower LA-80B-A1141-Q1-1411	Undated
Davey submersible drainage pumps datasheet – D15A, D25A, D40A, D40M	Undated
Davey submersible drainage pumps datasheet – D42A/B, D53A/B	Undated

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Global Certification Audit Report – AS 1546.3:2017	05/08/2020
Global Certification – Product Certificate of Registration No. 40/22	19/08/2020
David Beneke Consulting – Taylex underground septic tank – Revision#1	12/07/2010
Global Certification - Audit Report – AS 1546.3.2017	05/08/2020
Global Certification – Product Certificate of Registration No. 40/22 AS 1546.3:2017 - Advanced Secondary 1500 L/day or 10 EP Level	19/08/2020
Global Certification – Certificate of Conformance AS/NZS 4766:2006 & AS/NZS 1546.1.2008 No. 040/7	05/11/2020
PABS1500 Poly excavation instructions	Undated

3 Installation, Operation and Maintenance

- #8 The system must be installed by a licensed plumber in accordance with the *Building Act* and Regulations (inside Building Control Areas) and the *Public Health and Environmental Health Act* and Regulations (outside Building Control Areas).
- #9 The installation of each system shall comply with the manufacturer’s installation instructions and shall comply with the minimum setbacks as specified in the Code of Practice for On-site Wastewater Management (‘the Code’).
- #10 All electrical work must be carried out by a licensed electrician and in accordance with the relevant provisions of AS/NZS 3000.
- #11 Officers from NTG regulatory authorities reserve the right to inspect installations and also to assess installation and their performance.
- #12 Cross connection of the system with the water supply for the premises must be prevented at all times.
- #13 Any dischargers involved with the manufacture, processing, wholesaling, preparation and retail of food products will be required to install pretreatment equipment to the system. Any other types of dischargers will need written approval from the manufacturer. Only pretreatment devices approved by the manufacturer will be permitted.
- #14 The system can only be installed in an unsewered area. Once sewer is available to the premises, this system must cease to operate and all wastewater must then be discharged to the sewer.

- #15 NT Distributors of the system shall:
- Ensure that the purchaser is provided with a home owner's manual; and
 - Maintain a list of installed systems that includes details of system type, date sold, owners name, owners address, owners contact details, installers name, installers contact details, service dates and service agent.
- #16 The system once installed, must be maintained in a fully operational and sanitary state at all times by the user/owner in accordance with the product approval conditions, manufacturer's requirements.
- #17 The system should be serviced at the intervals in accordance with the details set out in the Owner's Manual. Records are to be kept of all maintenance of the system and are to be maintained on-site.
- #18 Desludging is to be carried out in accordance with the manufacturer's instructions.

4 General conditions

- #19 The approval holder is responsible for ensuring compliance with conditions of this approval.
- #20 This product approval is not transferable without the prior approval of DoH.
- #21 If any modifications are proposed for the system that alters its design, as outlined in the design documentation referenced in this product approval, the approval holder is required to advise DoH in writing and apply for an application to vary this product approval.
- #22 If at any time it is determined by DoH that it cannot be demonstrated that the conditions of this approval are being maintained the issuing authority may provide direction to the approval holder to undertake actions to comply.
- #23 Direction under the previous clause of this product approval may include modifying current conditions, additional conditions or suspending or cancelling this product approval.
- #24 DoH, by written notice, may cancel this product approval and require the repair, replacement, rectification, alteration of the system or part thereof:
- Should the system or component thereof no longer be manufactured or available for purchase; or
 - If the system is defective and not able to perform the function for which the approval is issued; or
 - If the distributor fails to comply with one of more approval conditions; or
 - If the distributor within 30 days, fails to remedy a breach for which written notice has been given by DoH.