



Taylex

WASTEWATER

HOME OWNER'S MANUAL

Taylex Advanced Blower System (ABS) Eco Controller

An Advanced Secondary
Aerated Wastewater Treatment System





Taylex
WASTEWATER

TRUSTED 1969
SINCE 1969



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Trust Taylex

Welcome to Taylex, an Australian family-owned company founded in 1969. Headquartered in South East Queensland, we have 50 plus employees and over 70 trained distributors who market, install and service our range throughout Australia, from Hobart to Darwin, from Sydney to Perth.

We manufacture a range of products for Wastewater, Rainwater and Stormwater, we also offer Servicing for our wastewater systems. Taylex was the first company to manufacture Home Sewage Treatment Systems in Australia and we continue to be leaders in our field.

Expertise

Over 50 years of experience. 50 years of building our reputation as the most trusted brand. We lead the industry, whether it be leading industry bodies or working with governing bodies to help guide new legislation for more stringent waste-water regulations, Taylex is the trusted voice.

Integrity

We honour warranties, no exceptions. We stand behind our products, for their lifetime, no questions, no fine print. We are an Australian owned and made, family business. We are passionate about producing quality products that work. We take care of our staff. We value our environment.

Longevity

Our systems work, for a long time. They are designed and engineered to last as long as your home.

Functionality

Our systems work. Monolithic single piece moulds mean no deteriorating sealants or weak post-joined walls exposing your family to catastrophic failure of your system. There's no skimping on parts from the biggest pump down to the smallest seal, we only accept the best in class.

Innovation

Taylex is at the cutting edge of environmentally sound wastewater treatment that is healthy for your home. If you need water storage and wastewater solutions for your home, we can customise a system for you that will work. In difficult terrain, or soil, for the size of your house or the slope of your block.



What is a Wastewater Treatment System?

Taylex Wastewater Treatment Systems are safe, environmentally sound, reliable and cost efficient. Our advanced systems use natural processes to turn your household wastewater into clear, odourless water.

Secondary treatment systems are the most commonly used systems in Australia. They treat your household wastewater to a very high quality, allowing you to reuse your water in areas closer to your home and neighbouring properties, often above ground, with complete peace of mind. Secondary Treatment Systems are designed to treat all the waste water that is generated by your home. The waste water includes the sewage (black water) that is discharged from the toilets and bidets, and the sullage (grey water) that is discharged from sinks, washing machines, dish washers, showers and baths. Your Taylex ABS treats wastewater in an environmentally sustainable way by making use of the naturally occurring bacteria that is present in the waste water. The system is designed to hold the polluted or degraded water in a series of compartments where various types of bacteria can flourish and in doing so, “treat” the water, naturally, without dangerous chemicals or additives.

Secondary Wastewater Treatment Systems are sometimes known by different names in different areas.

Here are some of the names you might have heard;

- Home Sewage Treatment Plant (HSTP)
- Sewage Treatment System (STS)
- On-site Sewage Facilities (OSSF)
- Aerated Wastewater Treatment Systems (AWTS)
- Aerobic Treatment Units (ATU)
- Aerobic Septic Systems
- Wastewater Treatment Systems



How does my Taylex Wastewater Treatment System work?

All household wastewater from your bathrooms, toilets, kitchen, and laundry naturally flows into your Taylex Wastewater Treatment System using gravity.

Step 1.

The first stop for your household wastewater is in the 'Primary Chamber'. Here, we rely on gravity and time to work their magic, allowing solids to settle to the bottom. Fats and oils will float to the top. Water from the middle moves on to the next stage of treatment. Good bacteria that already exists in the wastewater starts to flourish.

Step 2.

The next stop on the way to irrigation, is in the 'Secondary Chamber'. Further settling happens here. Millions of Bacteria are now well established and munching away at organic matter in your wastewater. Again, water from the middle flows on to the next stage. If you had have chosen a Septic System, this is where the journey would end and effluent would now be pumped onto your property and into our environment, relying on sand or soil to do the rest. Not so with a Taylex Wastewater Treatment System, there are still four more steps to produce clean, clear, safe water for your yard.

Step 3.

The 'Aeration Chamber' is next up. This is where the magic happens. Your quiet, reliable, energy efficient Nitto Blower sends oxygen into this chamber through a diffuser. The diffuser send the air in as tiny little bubbles, through a specially designed filter system called 'Bio Mass'. Bio Mass is purpose designed to trap the air bubbles and cultivate naturally occurring 'Aerobic Bacteria'. These microscopic Enviro-warriors are now steadily chomping through most of the remaining organic matter, polishing your water and eliminating odour.

Step 4.

Step four is the 'Clarification Chamber'. More settling occurs here. Once settled to the bottom, we return some of this magical mix of fine particle solids back to the Primary Chamber. It is chock-a-block full of good bacteria to help keep the Primary Chamber nice and healthy (read 'not smelly').



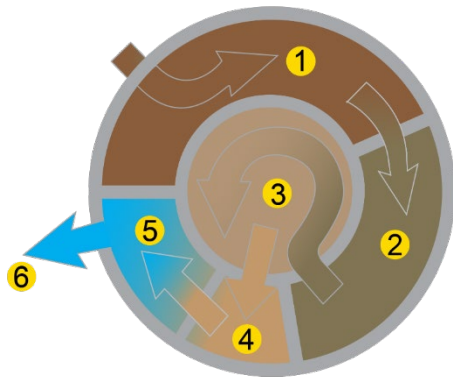
Step 5.

The final treatment stage is our own TFG Filter and a chlorinator. Removing any remaining floating solids and ensuring that your water is now free from any remaining harmful bacteria, viruses, or pathogens. Clean, clear, safe, healthy water now waits in the irrigation tank until there is enough to pump out.

Step 6.

When the irrigation tank fills up, your dependable Davey pump automatically switches on to send your water out to do its job in your yard. Crystal clear water irrigates your designated area and returns safely to nature.

- 1. Primary Chamber**
- 2. Secondary Chamber**
- 3. Aeration Chamber**
- 4. Clarification Chamber**
- 5. Irrigation Chamber**
- 6. To irrigation**





What keeps my system healthy?

- ✓ Food
- ✓ Air
- ✓ A good environment

FOOD

Food is supplied in the waste water we that comes from your home. It comes from the toilets, hand basins, sink, showers, washing machine, in fact anything that we put down the sink or flush down the toilet.

AIR

The Taylex tank is fitted with an air blower that takes fresh air and introduces it to the water through an aerator disc. The oxygen in the air dissolves into the water as it bubbles up to the top. This gives the water a higher than normal dissolved oxygen content allowing the good bacteria breathe, live and multiply.

A GOOD ENVIRONMENT

This is where you have a major influence.

- Too much FOOD will kill the bacteria.
- Too little AIR will kill the bacteria.
- Heavy Pollutants will degrade A GOOD ENVIRONMENT and kill the bacteria.



What upsets the balance in my system?

The greatest cause of problems for Wastewater Treatment Systems are harmful cleaning products and the washing machine. Remember, when using household cleaning products:

- ✓ Adhere to the manufacturer's recommended measured dosage. Do not free pour.
- ✓ Use cleaning products that are bio-degradable, low phosphorus and labeled 'Septic Safe' or 'Safe for onsite treatment systems'

ANTIBIOTICS

Never pour antibiotics down the sink or flush down the toilet. This can cause problems throughout the system.

CLEANING PRODUCTS

Unfortunately, what we call cleaning products, the good bacteria in your treatment system may class as poisons if high levels are used. Like humans, some poisons kill us while others will just make us sick and the same can happen to the good bacteria in your system. Please always use environmentally friendly products.

Your treatment system relies on bacteria for it to work effectively therefore any product labeled as anti-bacteria can be harmful to your system if used frequently and in large doses. Any bleaches or harsh chemicals should only be used once a week and in small doses. The use of harsh chemicals in high levels can affect the function of your system and are not good for the environment.

WASHING MACHINES

Try to evenly spread your washing over the course of the week. Avoid, where possible, washing everything in one day. It puts a lot of water into your treatment system and it may struggle to cope. Liquid soaps breakdown more easily than granulate styles do. Try not to be heavy handed with the amount of soaps you use.

When working properly, your treatment system will work efficiently with no odours or problems.

YOUR SYSTEM NEEDS A HAPPY BALANCE

Suitable Products

ALL PRODUCTS SHOULD BE USED IN MODERATION

The products listed below are suitable for use based on the dosage amount recommended by the product manufacturer.

DISWASHING LIQUIDS

Adds	Greenapple	Kit	Rix
Bushlands	Morning Fresh	Palmolive	Sunlight
Finish for Dishwashers (limit quantity)		Rinse Aid	

SURFACE CLEANERS

Jiff Cream Cleaner	Shower Power	Swipe
Nifty	Spray & Wipe (limit quantity)	Windex

TOILET CLEANERS

Jiff Cream Cleaner or any cream cleaner – Toilet fresheners are not recommended.

FLOOR CLEANERS

Use hot water and detergent.

LAUNDRY POWDERS AND LIQUIDS AND BATH SALTS

Please look at the Independent Laundry Product Research which is available on the internet at www.lanfaxlabs.com.au. Washing soda can occasionally be added (less than ½ cup) to help reduce foaming if necessary.

When using Epsom salts in your bath, use small amounts, less than 2 cups of Epsom salt per bath, no more than once per week.

PET / ANIMAL WASHING IN BASINS

Pets are treated with products to maintain their health (especially flees). If washed in laundry, bath or shower, this treatment used could flow through to the system and cause operational problems.



PLEASE NOTE

The above list is not intended to promote or discredit the product of any Company. It is provided to assist in ensuring the satisfactory on-going operation of your system.

If your technician notices there is a problem, they may request you to limit the use of any product (even if suitable).

Products to Avoid

ALL WIPES

Do not dispose of wipes in the toilet. Wipes do not breakdown and can cause costly problems with Irrigation Pumps, Filters and Sprinklers. 'Flushable Wipes' are not flushable, please avoid them altogether.

ANTIBACTERIAL SOLUTIONS

Antibiotics	Milton Tablets	Napisan	Toilet Cleaners
Bio-Ad	Nappy Fresh	Nursil	Toilet Duck
Bio Jo	Nappy Plus	Pineoclean	Tri-zyme
Blue Loo	Nappy Soft	Preen Soaker	Teatree & Eucalyptus Oil / Extracts

BLEACHES

Budget Lemon	Fiesta	Marvolinn	Zixo
Domestos	Lemon Bleach	White King	

OTHER CLEANERS

Ajax	Down to Earth	Flea, Tick Wash	Metho or Kero
Aussa	Draino	Floor Cleaners	Spirits/Alcohol
Borax	ESP Herbal	Green Choice	Swipol
Bubble Baths	Exit Mould	Handy Andy	
Caustic Oven Cleaners			

PLEASE NOTE

The above list is not intended to promote or discredit the product of any Company. It is provided to assist in ensuring the satisfactory on-going operation of your system.

If your technician notices there is a problem, they may request you to cease the use of any product.



Looking after your Wastewater Treatment System

NEVER TURN THE ELECTRICITY SUPPLY TO THE PLANT OFF

Turning the supply OFF will:

1. Stop the air supply and kill the bacteria.
2. Flood the system
3. Disable the alarm system
4. Cause back-up in your sewer line from the house

The plant will smell, the equipment may be damaged and you will be in contravention of your "Permit to Use" and "Occupancy Certificate".

NEVER POUR DOWN THE SINK OR FLUSH DOWN THE TOILET:

1. Anything from your home brew kit
2. Sour milk or yogurt
3. Cooking oils
4. Excess food scraps (particularly from a garbage grinder)

All of these will provide too much food material for the bacteria to use. They must be disposed of in proper containers in your garbage collection.

NEVER DISPOSE OF ANY OF THE FOLLOWING IN TO THE SYSTEM:

1. Automotive oil
2. Bleaches, disinfectants, whiteners
3. Nappy liners, condoms, sanitary napkins, wipes, flushable wipes
4. Antibiotics
5. Liquid from portable toilets, holding tanks, cassette's or canisters, RU's or similar

Automotive oil is not treatable by the bacteria; the disinfectants will take away all the bacteria's oxygen; the sanitary items are impregnated with anti-bacterial matter, so they will never break down. The results will be - the bacteria will die. The tank will almost certainly need to be pumped out to remove the gross pollutants and the tank refilled and re-started.



Servicing your Wastewater Treatment System

All Wastewater Treatment Systems are required by State laws to be serviced on a regular basis. Your local municipality enforces these laws. **Systems may only be serviced by appropriately trained and licensed Wastewater Service personnel.**

There are better reasons to service your Taylex Wastewater Treatment System than just complying with the law. Your service person is trained to monitor your system; they can detect problems often before they become a hazard. More importantly, a properly operated and maintained system is your contribution to the environment, right in your own back yard. Correctly operating systems do not smell, they guarantee a healthy physical environment. **They save water and protect the health of your family, friends and neighbours.**

HOW CAN YOU ASSIST IN SERVICING YOUR TAYLEX WASTEWATER TREATMENT SYSTEM?

1. Do not cover the top of the tank with earth, gravel, tanbark, concrete, pavers, pot plants, barbecue, swing set, seat etc.
2. Provide clear access to the plant and the inspection openings.
3. If you have a locked yard, provide your service person with a key.
4. Make sure surface water does not pool and can never enter the plant, even during torrential rain events.

WARRANTY

Every Taylex ABS Wastewater Treatment System is covered by a full manufacturer's warranty. There is a 15 year warranty* on the pre-cast concrete or polymer tank. There is also a 3 year* warranty on all electrical and mechanical components, including the irrigation pump (a 12 month standard warranty and a further 24 months extended warranty is available when you purchase your 2nd and 3rd year of service calls with a Taylex Approved Service Agent). Warranties apply from the date of commissioning or 90 days from the date of purchase (whichever is sooner).

This guarantee does not cover damage caused by misuse, neglect, failure to keep the unit clean and functional, accident, use of incorrect power supply, or repair or attempts to repair by unauthorised personnel. The benefits conferred by this warranty are in addition to all other rights and remedies in respect of the product which the consumer has under the Trade Practices Act and other legislations.

TO ENSURE YOUR WARRANTY IS VALID, THE FOLLOWING SHOULD BE OBSERVED:

- ✓ DO NOT use system or allow wastewater to enter tanks before power services
- ✓ are available to the System and a Taylex Authorised Distributor has been notified of pending occupancy of the property and has subsequently commissioned (activated) the system.
- ✓ DO NOT cover lids with soil
- ✓ DO NOT position concrete paths or driveways over System
- ✓ DO NOT allow surface water to enter the System by incorrect falls and landscaping around the system.
- ✓ NEVER turn the power off unless instructed to do so by your Service Agent

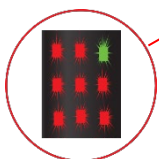
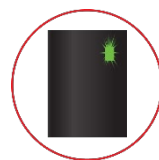
*Terms and Conditions apply

Operating Instructions for your ABS Eco Controller

INTRODUCTION

The basic purpose of the Eco Control Panel is to monitor and control the functioning of the Treatment Plant's air blower, pump and to register an alarm when it detects a fault in the system.

Normal Operation –
Single Green LED



Fault Detected –
Flashes



GENERAL

The Taylex ECO Controller Assembly (complete with Controller, Control Panel Box, 3 x GPO Assembly and Blower Box) is classed as electrical equipment and has been certified to comply with AS/NZS3820 and AS/NZS 3100:2017, meeting the Electrical Safety requirements in Australia and New Zealand.

Your Taylex ABS is designed to operate automatically and its operation will usually be event free. The Eco Control Panel provides visual and audible indicators of both normal operating conditions and fault conditions. The illustration on the previous page provides description markers that correspond with the following description of their operation.

- A. VISUAL ALARM / DISPLAY. This is a LED display that describes normal and abnormal conditions by using a number of flashes. See later in this document to understand their meaning. This is also your visual alarm.
- B. MUTE ALARM. This is a “soft touch” key that when pressed, silences the audible alarm for a period of 24 hours.

Note:

THE POWER SUPPLY

The power outlets for the ECO Controller for your system are located inside the Blower Box.



Normal Operation



Circuit Breaker Activated

Each switch must be in the ON position at all times. If any or all switches are OFF, the treatment process and alarms may not function.



The single GPO is for the 240V – 12V power supply for your controller and the double GPO is for your Pump and Blower. The double GPO contains a 5amp breaker underneath the GPO, which will activate in the case of a fault with the pump and/or blower. If the breaker is activated it will trigger the associated alarm on the Controller. You can reset the Breaker by pushing in the reset button. If the breaker is activated again, please contact your Service Agent to rectify the issue.

NORMAL OPERATION AT START-UP

Every time the power is switched on to your Taylex® ABS Eco Control Panel, the display (A) will flash twice. The audible alarm will sound in unison with the 2 flashes, this is a TEST MODE. At the completion of the Test Mode, the display will show a single LED light in the top right corner to indicate that the system has tested out correctly. Unless a visual or audible alarm occurs, the single LED light in the top right corner is the normal operating display.

ALARM RECOGNITION AND RECTIFICATION

Visual Alarm and Display (A)

All faults are indicted by the number of flashes on the display (A). If two faults occur simultaneously, then two sets of flashes will be displayed in sequence, after a short interval, the display and alarm will repeat the sequence (Please refer to Page 18).

Audible Alarm and how to silence it

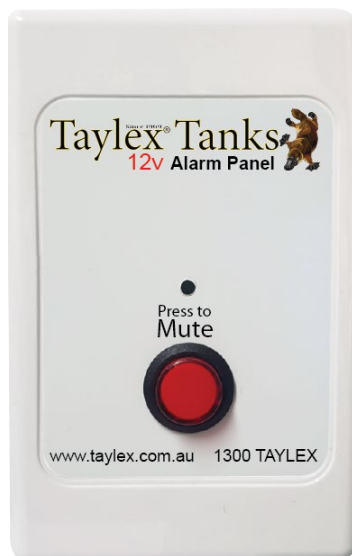
The audible alarm mimics the number of flashes of the LED visual display. To silence the audible alarm, press the Soft Touch Mute Alarm key (B) briefly once. This will silence the alarm for 24 hours, the Display (A) will now flash a number of times matching the faults codes and indicating that the alarm has been muted. Should another fault occur while the alarm is muted, a new alarm will sound. If the faults are not rectified, the alarm will sound again at the expiration of 24 hours as a reminder that the plant is not operating correctly. The visual alarm cannot be turned off until all faults are rectified.

OPTIONAL IN-HOUSE ALARM PANEL

A 12volt In-house Alarm Panel is available as an optional extra to the system. If required, the panel can be fitted during the installation of the system.

The In-house Alarm Panel is connected to the same circuit as the alarm, situated on the system, and works in tandem with the same functions listed above. To mute the In-house Alarm, press the red button, this will silence the alarm.

The alarm at the system will still function, and needs to be muted separately. The LED light on the In-house Alarm Panel will continue to flash until the fault is rectified.





RCM Compliance Certificate

Certificate No.: 20/RCM /13 Date of Issue: 31 Ju ly 2020

Certificate Holder: Taylex Industries Pty Ltd

Address: 56 Prairie Road , Ormeau , QLD 4 208

Equipment : Control ler for waste water treatment tank

Brand s: "Taylex"

Model No 's: ABS Controller; and ABS ECO Controller

QEC Global certifies that the above article meets the requirements for use of the RCM as follows:

Electrical Safety Standard s: AS/NZS3820:2020 & AS/NZS 3100:2017 +A1 & A2

Evidenced by: CPC Test Report No. 90644-19-70-20-PP001 (for ABS Controller) to AS/NZS 3100:2017 +A1 & A2 (demonstrating compliance with essential safety requirements of AS/NZS3820)

'ABS ECO Controller' same as 'ABS Controller' except ELV supplied electronic circuitry via safety isolating PSU covered under approval certificate SAA132096EA

EMC Standard: AS/NZS61000.6.3:2012

Evidenced by: EMC Services Pty Ltd Test Report No. 80606 (for ABS Controller)

EMC Services Pty Ltd Test Report No. 191204 (for ABS ECO Controller)

EESS National Equipment Database Supplier Registration Number : E4296

RCM required to be marked on all stock sold:



On behalf of QEC Global

P// +61 7 5429 6999

A// PO Box 552, Maleny QLD 4552

Alarm Codes

ALARM	MEANING	ACTION
1 Flash	This is normal operation	No action required
3 Flashes	The water level is high	Please refer below
5 Flashes	There is no air flow	Call your Service Agent
3 & 5 Flashes	Tripped Circuit Breaker	Reset or Call your Service Agent

3 FLASHES – HIGH WATER

A high water level may be self-correcting. It can be caused by the washing machine discharging at the same time as the bath is being emptied and the dishwasher is pumping out. If you think this may have occurred, then wait for 15 minutes until the surge flow has stopped and see if the alarm stops. If sprinklers are still operating, recheck the alarm when they stop to see if the alarm has stopped.

If it does not then check the following:

1. Is there a filter on the irrigation line before effluent disposal area?
Is it blocked?
2. Is the irrigation line kinked or broken?
3. Has the irrigation pump failed?
4. Surface irrigation – Are all the turf valves connected?

If you can rectify any of these problems yourself, then you will save the call out cost of your Service Provider. However, they are experts in this field and will assist you whenever you need their help. Call them whenever you need their assistance or you are in doubt about what you need to do. They will happily assist you over the phone.



Who to contact for help and troubleshooting

Before you call for help and to avoid unnecessary call out fees, check these items before you call for assistance:

1. Is the power turned ON at the plant?
2. Are there lights ON in the panel face?
3. Has a Safety Switch, not related to the plant, tripped in your switchboard?
4. Has the irrigation hose become kinked, preventing the plant pumping out?
5. If you have removable "Turf Keys" on your sprinklers, make sure they are engaged properly, PUSH DOWN HARD (Surface irrigation only).
6. Is the outlet filter blocked? (If fitted)

If you have an issue, you can try to reset your system with the following sequence:

1. Turn the system OFF, remove the 4 screws on the blower box cover and turn the single power point ONLY off. This will reset the program.
2. Turn the system "ON" using the ON/OFF switch.
3. If the system starts and operates correctly, observe the system over the next few days for another ALARM event and discuss it with your Service Agent.
4. If the system goes back into the ALARM mode, call your Service Agent. Limit your water usage until the fault is rectified.

You can find your closest Accredited Service Agent on our website

taylex.com.au

Or call one of the numbers on the back cover of this manual.

FOR ASSISTANCE PLEASE CALL
YOUR AUTHORISED DISTRIBUTOR:



TAYLEX.COM.AU

1300 TAYLEX

If the office is closed, a recorded message will give you a
24 Hour Assistance Hotline for your area.
If there is no answer, please leave your name and number on the message bank.

Home Owner's Manual for Taylex Advanced Blower System

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