

Home Owners Manual

Integra Wastewater Treatment Systems

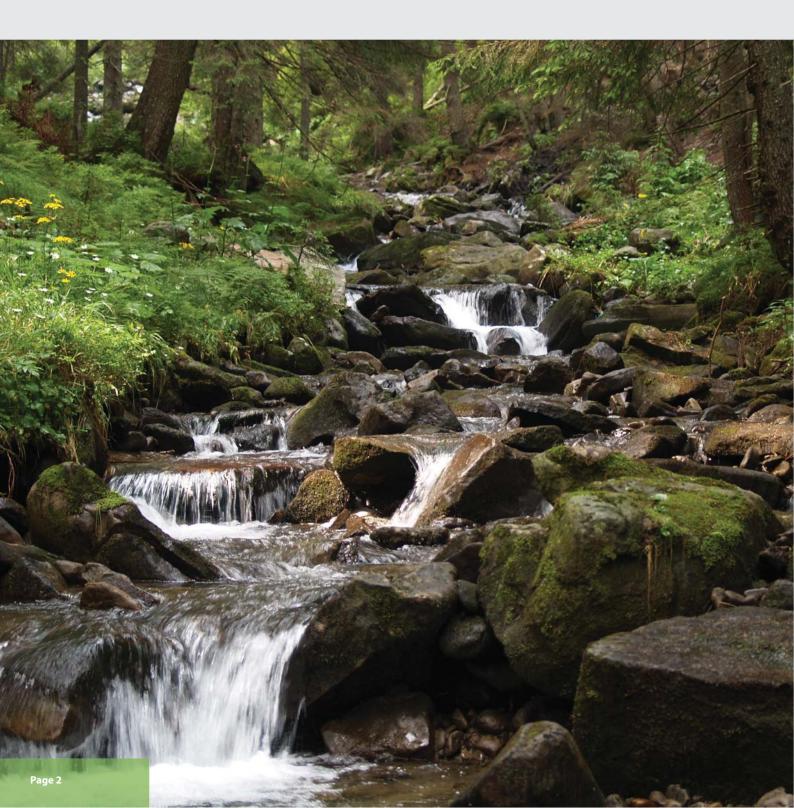
WELL DONE!

With the preservation of our precious environment becoming increasingly important, many people are now choosing to manage their wastewater in an environmentally sensible manner.

Well done on making the decision to partner with Devan to manage and treat the wastewater you dispose of from your property. Through a partnership with another company Devan embarked on the world of wastewater management about a decade ago. Since then, Devan has formed its own wastewater management division and invested hundreds of thousands of dollars into research and development over a number of years which has resulted in the product you have installed to treat and dispose of the wastewater from your property.

With a strong support network and a comprehensive product warranty your Devan wastewater product will provide years of trouble free service providing you take the time to read all the information in this manual and adhere to the warnings and recommendations made.

Thank you and well done!



CONTENTS

Troubleshooting

System components Vessels Ecotube Blower Pump Control panel Arkal filter Irrigation field	Page 4
How does your system work? Primary chamber Aeration chamber Clarification chamber Pump-out chamber	Page 6
Irrigation field	
General guidelines Keeping bacteria alive Power supply Electrical control panel	Page 7
Integra Specifications	Page 8
Servicing requirements	Page 9
Component servicing	Page 9
Servicing frequency	Page 9
Suitable and avoidable products	Page 10
Suitable planting within irrigation field	Page 11
Warranty policy	Page 14
Your obligations Local authority requirements Typical service costs System faults Health warning	Page 15

Page 15

SYSTEM COMPONENTS

Your Devan wastewater treatment system is made up of several key components which we will cover off here.

Vessels



The vessels which comprise a Devan wastewater treatment system are made of a robust underground grade of polyethylene.

Outlet Filter



The outlet filter improves the efficiency of your primary chamber in two ways. It prevents the occurrence of solids carrying over into the aeration chamber by filtering out solid matter.

Primary effluent typically separates into three layers. The outlet filter extracts and filters the effluent from the relatively clean middle layer for discharge to the aeration vessel.

The outlet filter utilises highly durable polypropylene filter tube and provides a large filter area.

The outlet filter comes with a handle to allow for easy and complete removal however frequent cleaning is not required as solids captured on the filter fall back into the underlying sludge layers. The outlet filter comes complete with an outlet junction and insert filter.

Blower and air diffuser



The Gardner Denver diaphram air

compressor utilised in the system for circulating airflow into the second stage of the process provides between 60 and 100 litres per minute of air flow depending on blower size used. The air is diffused from the bottom of the vessel to aerate the contents, catalysing the digestion of remaining solids.

Submersible pump



The systems utilises the Grundfos SB 3-35A submersible pump. The pump is essentially silent from above the ground and has built in thermal overload protection. Made of a composite of stainless steel and other materials the Grundfos SB is rugged and built for purpose meaning an extra long life when compared to



other submersibles which do not last in this harsh environment.

Control panel



The PLC controller used with the Devan wastewater treatment system is built specifically for the purpose and is housed in a water proof controller box. The blower mode and alarming functionality is controlled from the box. It is recommended that the control panel is located on the wall of the dwelling closest to the system. The audible alarm housed within the controller box sounds when a problem is detected with the system. Such problems could be an issue with the blower or the pump.

Arkal filter

The arkal filter removes any final traces

of solid matter to ensure it does not



enter the disposal field which could then cause blockages in the dripper line. This manual provides a guide to cleaning the filter as required.

Irrigation field

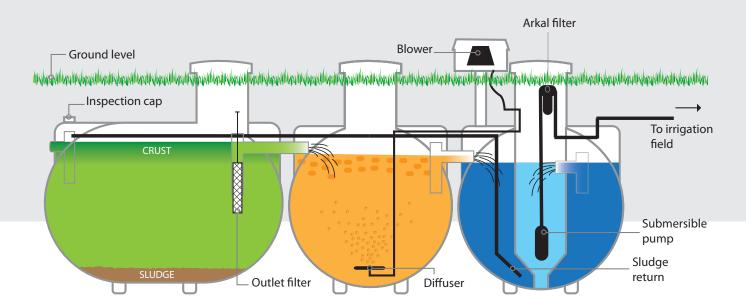


A key element of the Devan wastewater treatment system is that the final product is treated to a standard that is safe to discharge under a lawn or into a planted area. The irrigation field is constructed using dripper line. This dripper line has antisiphon and self flushing technology within to avoid wet patches at

lower points in the irrigation field and blockages in the dripper holes. Generally the minimum size of an irrigation field will be 300 m² of dripper line and the line is coloured purple to indicate non-potable.



HOW DOES THE SYSTEM WORK?



PRIMARY CHAMBER

As you will be aware by now, an aerated wastewater treatment system treats wastewater from your home to a much higher level than an ordinary septic tank. The graphic above illustrates what is taking place in each of the three chambers.

Primary Chamber

Initially the wastewater is handled much the same as with a standard septic tank in what is described as the primary stage of the process. In the primary chamber the raw wastewater from the home is given time to settle out. This means that any scum that floats will form a crust on the top of the contents of the primary chamber while any heavier solids will sink to the bottom of the chamber forming sludge.

The clearer wastewater is therefore found in the middle section of the chamber and after being filtered through the outlet filter it then overflows into a secondary stage.

Aeration Chamber

In this chamber, the clearer wastewater that has been passed from the primary chamber has air bubbled up through the contents of the tank to speed up the digestion of any remaining solid material. Air is

AERATION CHAMBER

blown through large round diffusers that are located in the bottom of the vessel which maximises the bubbles generated and the spread of these bubbles throughout the chamber.

Also within the aeration chamber is a large amount of 'media'. This media takes the form of large unusually shaped plastic discs. These discs bounce and float around in the circulating aerated wastewater providing extra surface area for the digesting bacteria to live on which increases the level of aerobic bacteria (bacteria with air) present in the chamber and in turn speeds up the rate at which the system can process the waste within.



One of the media discs

Clarification Chamber

The third stage of the process is referred to as clarification. Again,

CLARIFICATION/PUMP OUT CHAMBER

the mid-water overflows from the aeration chamber into the third chamber, clarification. Any remaining minute solids settle out of the liquid to the bottom of the chamber where a continuous vacuum sucks them up and returns them to the primary chamber.

Pump-out Chamber

The remaining clear odourless liquid from the upper area of the clarification stage overflows into a fourth chamber, the pump out chamber. When the pump chamber fills to a certain level the Grundfos Hi-lift submersible pump float switch kicks the pump in and the contents is pumped out to the irrigation field.

Irrigation Field

The irrigation field is normally constructed of dripper line and can be beneath a lawn helping keep it green and lush, or amongst plantings removing the need for watering. The size of the irrigation field is dictated by the soil type at your site and can be installed above ground with mulch mounded up over top of it.

GENERAL GUIDELINES

The information to follow is crucial to the running of the wastewater treatment system and must be adhered to in order to preserve the conditions of your warranty policy.

Your new home now has a modern wastewater treatment system. This system treats your household wastewater and requires bacteria to be present in order to operate correctly and efficiently.

Keeping the bacteria alive

In order to maintain these bacteria you need to consider what chemicals end up going down your drains. You need to refrain from using any bleaches or chlorine (i.e. Napisan – Bleach – Janola).

These products are designed to kill bugs and will kill off the desirable bacteria in the tank causing smells and blocked filters. Powdered laundry detergents and dish washing powders are also powerful bacteria killers along with toilet bowl rim sanitizers. Within this manual is a

detailed list of products that should be avoided and other products that are ideal for the same purpose without the harmful effect on your new system.

Fats and oils also have a negative impact on a wastewater treatment system as they may block the tank filters and kill the bacteria in the tank. Tea leaves and coffee grinds can also have a similar effect

The washing of paint brushes and disposal of paint and stains down drains will certainly kill your bacteria and need to be avoided. Not only will they kill the bacteria in the tank, but the residue is very difficult and costly to remove.

Disposable nappies, feminine hygiene products and condoms are difficult or impossible to be broken down within the system and should be disposed off by other means

Power supply

It is important that you do not turn off the power to the system as there are electrical parts that require power in order for the system to operate. These items include the air blower (situated in the box above the ground) that supplies air to the aeration chamber for the aerobic bacteria to survive. This blower uses the same amount of power as a light bulb and is not costly to operate.

Electrical alarm panel

The waste treatment system has a controller with a built in buzzer alarm and red warning light.

The alarm will be activated if either the high level alarm is tripped or the air blower fails. The buzzer alarm can be muted by pressing the mute button. If the fault has not been rectified in 24 hours, the buzzer alarm will automatically reset and continue the audible alarm until muted again or the fault is remedied. If one of these alarms come on, please refer to your service agent who will assist you remotely or if this fails will come to site to troubleshoot any problems.



INTEGRA SPECIFICATIONS

S15 Specifications

Voltage: 240 V/50Hz Daily Flow Rate: 1,500L House size: 5 Bedroom Air Blower: AP-60

Operation: Continuous, 80% or Holiday mode

Alarms: High Level, Blower fault and 24 hour mute reset

Effluent quality: 20:30 BOD:TSS

Standards achieved: 1546.1:2008, 1546.3:2008, Rotorua OSET trial

S20 Specifications

Voltage: 240 V/50Hz Daily Flow Rate: 2,000L

House size: 6 Bedroom + office

Air Blower: LP-100

Operation: Continuous, 80% or Holiday mode

Alarms: High Level, Blower fault and 24 hour mute reset

Effluent quality: 20:30 BOD:TSS

Standards achieved: 1546.1:2008, 1546.3:2008

S25 Specifications

Voltage: 240 V/50Hz Daily Flow Rate: 2,500L

House size: 8 Bedroom + office

Air Blower: LP-100

Operation: Continuous, 80% or Holiday mode

Alarms: High Level, Blower fault and 24 hour mute reset

Effluent quality: 20:30 BOD:TSS

Standards achieved: 1546.1:2008, 1546.3:2008



SERVICING REQUIREMENTS

The system is designed so that it can be simply serviced. The company has developed a recording system for the monitoring of each installation.

The owner may be required to submit to the company, certification that the servicing has been carried out in

accordance with the service schedule specified to follow. The servicing requirements for componentry as recommended by Devan are as follows.

After installation the system must be commissioned by the installer and

the Devan Commossioning sheet completed. After the first month of use a final commission must be undertaken to ensure the system is working as expected and to validate that the installation has been undertaken correctly.

COMPONENT SERVICING

Component	Service requirement	
Anaerobic chamber	Check annually, desludge every five years or as required	
Outlet effluent filter	Remove, check and clean twice annually	
Air blower	Clean air filter twice per year	
Air system	Check diffuser/sludge return/air flow twice annually	
Effluent pump	General check of pump and flow pressure annually	
Arkal outlet filter	Check and wash four times per year	
Alarm system	Check system twice per year	
Effluent disposal field	Check disposal area and flush field twice per year	

SERVICING FREQUENCY

Component	3 monthly	6 monthly	9 monthly	Annually
Anaerobic chamber		Service agent		Service agent
Outlet effluent filter		Service agent		Service agent
Air blower		Service agent		Service agent
Air system		Service agent		Service agent
Effluent pump		Service agent		Service agent
Arkal outlet filter	Owner	Service agent	Owner	Service agent
Alarm system		Service agent		Service agent
Effluent disposal field		Service agent		Service agent

SUITABLE AND AVOIDABLE PRODUCTS

Avoidable Products

Ajax

Antibiotics & Antidepressants

Aussa

Alcohol & Spirits

Bio-Ad Bubble Bath

Caustic Oven Cleaners

Blue Loo Coffee Grounds

Detol

Cooking Oils Domestos

Cooking Fats and Grease

Down to Earth Diesel and Petrol

Draino

Flea or Tick Wash Exit Mould

Floor Cleaners

Fiesta Kerosene

Finish Dish Wash

Powder Milk Green Choice

Paint (water and oil based)

Handy Andy

Harpic Toilet Cleaners

Marvolinn

Sprays, Herbicides& Pesticides

Milton Tablets

Petrol, turps and petroleum products

Napisan Nappy Fresh Nappy Plus Tea Leaves Nappy Soft Persil Automatic

Pineoclean

Waste Disposal Unit

Power Ball Preen Soaker

Sun Advance Dish Wash Powder

Swipol

Shower Power

Blood Pressure Medication Toilet Bowl Rim Cleaners Heart Medication

Chemotherapy Treatment
Toilet Duck

Suitable Products

Dish washing liquids

- BEE Dish washing Liquid
- Ecostore Dish Wash Liquid
- Green Works
- Palmolive
- Morning Fresh
- Sunlight

Dish washing powders

• Ecostore Auto Dish Wash Powder

Surface cleaners

- BEE Multi Surface Cleaner
- Bio-Zyme Cleaner
- Ecostore Spray Cleaner
- Green Works
- Jiff cream cleaner
- Spray & Wipe (limited quantity)

Toilet cleaners

- Ecostore Toilet Cleaner
- Green Works
- Cream cleaners (ie: Jiff in limited

quantities)

Laundry powders

- BEE Fabric Wash & Whitener
- Ecostore Laundry Powder
- Ecostore Oxygen Whitener (soaking)
- EarthOn

NOTE 1: Liquid laundry detergents are better suited to septic and waste treatment systems than traditional powdered laundry detergents (powder fillers are used in powder laundry detergents)

NOTE 2: A waste disposal unit will substantially increase the waste load into the Primary Tank. This will necessitate more frequent pumping out (approx. 2 yearly) of the Primary Tank.

NOTE 3: The lists above are not intended to promote or discredit the product of any company. It is provided to assist in ensuring the correct operation of your waste water treatment system. If you consider some of the avoidable products as essential in your home, dispose of the outfall in an alternative manner such as throwing the bucket of cleaning water out on the lawn rather than down the drain. All drains lead to the wastewater treatment system, not just the toilet.



SUITABLE PLANTINGS FOR DISPOSAL AREA

The following is a guide to general matters to consider when planting out a disposal field and a listing of water tolerant plants suitable for use with onsite wastewater disposal systems.

Plants that are suitable for planting in moist conditions, such as those associated with wastewater land disposal fields need to be selected on the basis of both their tolerance for such moist conditions and for their potential for high level of growth/high transpiration of moisture in such conditions.

Standard lawn grass is a proven effective high transpiration plant

species in such conditions, as are a large number of other plant species seen in typical domestic gardens.

Consideration needs to be given to effects of roots from plants and from trees in particular on wastewater distribution pipe networks/emitter lines in land application systems. Potential for root intrusion/disruption to the pipe system must be considered prior to selection and planting of a plant or tree species. Advice on such matters for particular plant species can be obtained from garden centre specialists and landscaping consultants.

Native plants suitable for moist conditions

The following list covers native plant species that are considered to be suitable for planting in moist conditions, such as those associated with wastewater disposal fields. They are all tolerant or fond of moist conditions. Much of this information has been adapted from one of the ARC Botanic Gardens advisory leaflets; "14— New Zealand plants for wet places" and the list edited and reviewed by Dr. Rhys Gardner Consulting Botanist, Auckland War Memorial Museum (August 2004).

Grasses, ground covers, and other p	plants	
Astelia grandis (swamp astelia)	Large clump forming plant with bright green, flax-like foliage. Female plants produce upright panicles of orange berries in the centre of the plant. This endemic species will not tolerate eutrophic conditions and prefers peat soils.	
Blechnum novaezealandiae (kiokio)	Large, robust fern growing to 1 or even 2m, Hardy species that tolerates most conditions, but does best in well drained, shady areas.	
Elatostema rugosum (parataniwha)	Herbaceous plant up to 0.5m tall that spreads by rhizomes. Bronze coloured foliage with serrated edge. Grows on moist sites in light to heavy shade. Intolerant of dry habitats.	
Hypolepis dicksonioldes	Large fern that prefers fertile moist, but well-drained ground, grows vigorously and spores into planted areas with abundance. Does however, die back during winter.	
Phormium tenax (harakeke,, flax)	Fast growing clump-forming flax with large stiff leaves, to 3m. Full exposure and sun. Moist to wet conditions. Does not have deep or wide roots. Easily propagated from split fans or grown from seed. Attracts birds, especially Tui.	
Trees and shrubs		
Consideration needs to be given to the problem can be more significant for la	e effects of roots land application on wastewater distribution pipe networks. This arge tree species.	
Carpodetus serratus (putaputaweta, marbleleaf)	Lowland forest tree up to 7m tall. Large bunches of cream coloured flowers appear in spring followed by black berries.	
Coprosma areolata	Species that grows to 4m tall. Low tolerance to drought, with medium to high fertility.	
Coprosma robusta (karamu, shining karamu)	Shrubs or small trees growing to 3m+, with glossy green leaves. Masses of orangered fruit in autumn are attractive to birds. Hardy plant.	

Coprosma tenuicaulis (swamp coprosma)	Endemic species that grows to 3m tall. Leaves pale green with slender branches. Will tolerate a range of swampy to boggy habitats including standing water.
Cord yline australis (ti kouka, cabbage tree)	Palm-like in appearance with large heads of linear leaves and panicles of scented flowers. Sun to semishade. Prefers damp to moist soil. Grows eventually to 12m+height.
Carex	There are many members of this genus which grow naturally in damp to wet areas. They all have quite fine drooping foliage and are vigorous in moist conditions. Most prefer very light shade. The following species have been identified for their suitability: Carex dissita, Carex flagellifera, Carex geminata, Carex lessoniana, Carex secta, Carex virgata
Cortaderia fulvida (toetoe)	Branching from the base and forming a clump to 4m high. Long strap-shaped leaves with red-orange coloured veins, flower heads cream yellow. New shoots exhibit pale waxy cover on lower parts (unlike pampas grass) Prefers good drainage and semi-shade. Will struggle to compete if dried out in summer.
Cyperus ustulatus (toetoe upoko- tangata, giant umbrella sedge)	Vigorous leafy sedge growing to im in open damp places. Tolerates mmersion in standing water within a range of habitats from seepages to wetlands.
Dicksonia squarrosa (wheki, tree fern)	Tree fern up to 7m tall that exhibits tolerance of wet open ground, and floods. Found to shelter and accumulate with other native plants. The base of the fern attracts biodiversity. Useful application to streambank and seepage habitats.
Elatostema rugosum (parataniwha)	Herbaceous plant up to O.5m tall that spreads by rhizomes. Bronze coloured foliage with serrated edge. Grows on moist sites in light to heavy shade. Intolerant of dry habitats.
Dacrycarpus dacrydioides (kahikatea, white pine)	Tree that grows to 40m. Moderately growing species, which prefers wetland and boggy environments. Application of this species must consider the possible impact of its root systems on the wastewater disposal field.
Geniostoma rupestre (hangehange)	Common forest shrub with pale green glossy foliage, growing to 2-3m. Tiny flowers give off strong scent in spring. Looks best in sunny position where it retains a bushy habit, and prefers well-drained soil.



Hebe stricta (koromiko)	Shrub or small tree growing to 2-5m in height. Natural forms have white to bluish flowers. Plant in full sun. Tolerates exposure. (NB Many cultivars and hybrids are available commercially, but these are all unsuitable for use near existing natural vegetation.)
Laurelia novae-zelandiae (pukatea)	Large upright tree (to 30m) with attractive bright green foliage and distinctive whitish bark. Fast growing and able to handle a wide variety of soils. It will tolerate periodic flooding, breathing roots develop in water logged soils. Can be grown from seed. Tolerant of some sun and frost. Not tolerant of wind.
Leptospermum scoparium (manuka)	Shrub or small tree growing to 4m+ in height. Ubiquitous shrub varying in form throughout New Zealand. Ideal to provide shelter for other plants as it is quick growing and hardy. Requires full sun and. Hardy and tolerant of difficult conditions, including waterlogging and drought
Melicytus ramiflorus (mahoe)	A fast growing yet long lived tree to 7m height. Prefers well drained fertile soils. Tolerates some frost, wind and sun. Birds are attracted to the blue berries.
Pennantia corymbosa (kaikomako)	Slow growing species that will reach 12m in moist, fertile sites. Useful species application in bank stabilisation or wetland habitats.
Rhopalostylis sapida (nikau)	New Zealand's only native palm, with red berries attractive to birds. Requires light shade, plenty of moisture and protection from wind when young. Grows well in areas of permanent dampness.
Syzygium maire (maire tawake)	Attractive and moderately growing wetland tree to 15m with bronze foliage, large bunches of reddish fruit and distinctive whitish bark. Requires a sheltered sunny position. Tolerates some frost.
Vitex lucens (puriri)	Fast growing to 20m in fertile, open but sheltered conditions. Will struggle with poor drainage during adolescence.
Plagianthus betulinus (ribbonwood)	Fast growing species to 15m. Similar application to that of Pennantia



WARRANTY POLICY

Your Devan product has been manufactured to the highest standards utilising advanced technology and production procedures. Devan Plastics Limited ("Devan") warrants their products to be free of defects in workmanship or materials for the period defined in Appendix A, provided the provisions detailed below have been complied with.

A third party manufacturers' warranty applies to all other components used in the manufacture of Devan products. Third party manufacturer's warrant their products are free from defects in material and workmanship at the time of shipment and will make good, by repair or at its option replacement, any defects which occur during the warrantable period as defined in Appendix A provided the provisions below have been complied with.

Necessary provisions

In order for a warranty claim to be accepted by Devan Plastics Limited or a third party manufacturer the following provisions must be met:

- 1) The equipment was correctly installed and in proper use as was intended by the manufacturer in accordance with the Installation and operating instructions supplied, and generally accepted code of practice or national standard/s.
- 2) The warranty period (as defined in Appendix A) from the date of invoice to the end user has not lapsed.
- 3) The claim for goods under warranty arises solely from faulty material or manufacturers' workmanship.
- 4) The customer or agent of the customer must return goods under warranty (where appropriate), stating the date and place of purchase promptly and within the product liability period.
- 5) No repairs must be entered into by anybody other than a specified distributor or repairer as agreed and appointed by Devan Plastics Limited.

6) Devan must be given a reasonable opportunity to inspect the tank and, if deemed necessary by Devan to have an independent engineering or other expert analysis of the cause of failure carried out.

Exclusions

Both the Devan warranty and third party manufacturer's warranty do not cover the following exclusions:

- 1) Except where otherwise stated by law, the manufacturer shall not be under liability for any injury, damage, or loss, including consequential damage or loss resulting from the use of its products, or resulting from defects therein. This may specifically refer to the cost of carriage, installation, electrical or plumbing requirements etc.
- 2) Damage caused by abnormal operating conditions, war, violence, cataclysm, or any force majeure.
- 3) Damage caused by the equipment being used for an application for which it is not manufactured or recommended by the original manufacturer or Devan Plastics Limited.

- 4) Damage caused by sand or abrasive materials, corrosion due to salt water, hazardous liquids, electrolytic action, and liquid temperatures beyond the recommended range, cavitation, and improper power supply voltage or outages.
- 5) Attempted repair, dismantling or any other tampering with any component of the system without the prior written approval of Devan Plastics Limited will void any warranty.
- 6) If the Devan product or third party component has not been maintained in accordance with Devan Plastics instructions.
- 7) Ingress of water or insect infestation to electrical components due to post-manufacture electrical penetrations not being appropriately protected.
- 8) Incorrect installation or negligent practices of the installer of the product.

This warranty does not exclude any condition or warranty implied by the Consumer Guarantees Act 1993, Fair Trading Act 1986, and the Commerce Act 1986 and is in addition to any rights the purchaser may have at law.

Appendix A - Product warranty periods

Product	Warranty Period
Septric tanks	15 years
WWTS vessels	15 years
Detention/retention tanks	15 years
Third party components	2 years
Grundfos pumps	2 years

YOUR OBLIGATIONS

Local Authority Requirements

The owner of the system must be aware that they are obliged to undertake a formal maintenance service contract with the Devan authorised wastewater agent who supplied and installed the waste treatment system, in accordance with Local Authority Building Consent requirements.

The extent of the required service contract involves the agent carrying out a six monthly site check and inspection of the system and irrigation field, flushing the irrigation pipe work system, checking each vessel in the system for proper operation, checking the installed equipment for correct operation and function, and servicing the filters.

Typical Service Cost

A typical cost of a service contract with a Devan wastewater agent for the maintenance and servicing work involved in fully maintaining a waste treatment system would be expected to be in the range of \$150 to \$170 on a six monthly basis. (Note: Distance travelled and travel time costs may influence this cost).

Ongoing Maintenance

After the two year warranty period has passed, it is still necessary to maintain a service contract for your system. This will help ensure the continued trouble free operation of the waste treatment system and aid in early detection of any faults that have the potential to cause problems in the future. Your local authority will also require you to maintain a service contract for the system.

System Faults

In the event that the owner requires assistance to resolve any issue ranging from a minor query to a fault, or major problem, the owner needs to contact the local Devan agent to progress

and resolve the identified problem. The Agent has been trained and is experienced in fault finding and trouble shooting problem issues.

Important Health Note

Septic service work should not be carried out by the home owner due to the nature of septic waste. Septic waste is a hazardous substance with serious potential associated health risks involved. All service staff are trained and have had various injections to cover Tetanus, Hepatitis A, Typhoid and

Hepatitis B as a minimum requirement to minimize the health risk to workers.

Need to find a new agent?

A list of Devan authorised wastewater agents in the owner's locality can be advised by phoning Devan on their free phone 0800 338 268 where one of the sales team will readily advise contact details.

TROUBLE SHOOTING

Problem	Possible solution
The system is producing an odour.	Double check that you are using products from the list of 'Suitable Products' otherwise you may be killing your desirable bacteria required to keep your system actively operating and healthy.
	The terminal vent may also be affected by wind direction.
	The seals on the lid may be broken.
	If you are still not happy with the results of inspecting the above, please consult your Service Agent.
The high level alarm is activated and/or the system is overflowing.	The filters may be blocked and need cleaning, the effluent pump has failed, or the power is turned off. (Firstly, check that the power is turned on to your system, if it is, check to see if the Arkal Filter is blocked and needs cleaning, lastly call your local Service Agent to resolve problem).
The primary chamber is full and needs emptying.	Do not let your Septic Tank be cleaned and sucked out in winter, or at times when the ground water table is high. It is recommended that the operator leaves a percentage (10%) of the effluent in the tank to reactivate the system. On completion of the septic tank pump out, refill with water to normal operating level ASAP.
The toilet is backed up and doesn't appear to be blocked.	The primary chamber may be full and require emptying. See above point.



