



VS1200 PASSIVE TREATMENT SYSTEM

# Owner's Manual

Valley Septics are specialists in the wastewater industry designing and installing wastewater systems for both domestic and commercial projects.

Our systems produce a high-quality effluent, with minimal maintenance when compared with other systems, treating wastewater to an advanced secondary level.

With a full range of wastewater treatment systems from a *Standard System* to the newly approved *Secondary Passive System*, Valley Septics can provide septic solutions for any project.



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# Congratulations

**Congratulations and thank you for choosing Valley Septics to design and install your new septic system. Our systems are cost efficient, safe, environmentally friendly and designed to efficiently treat domestic and commercial wastewater.**

Valley Septics are one of the most respected installers in Eastern Victoria and have been a leader in installing septic systems for over 30 years. Our products are designed specifically for local conditions with integrity to provide an environmentally-friendly septic solution for users.

This *Owner's Manual* explains the proper use, procedures and maintenance required to ensure the correct operation of your septic system.

It is your responsibility to ensure the system is used:

- correctly and within its treatment capacity
- in compliance with your local Council and government regulations.

To maintain the performance of your treatment system for many years this *Owner's Manual* must be followed.

Please carefully read through this entire document and retain it for future reference.



# Understanding your system



The *VS1200 Passive Treatment System* is an easy to use and low maintenance aerobic sand filter system which utilises a natural process to treat effluent with minimal environmental impact. It is designed to treat effluent to a high quality, allowing owners to reuse the wastewater generated from your home in a safe environment.

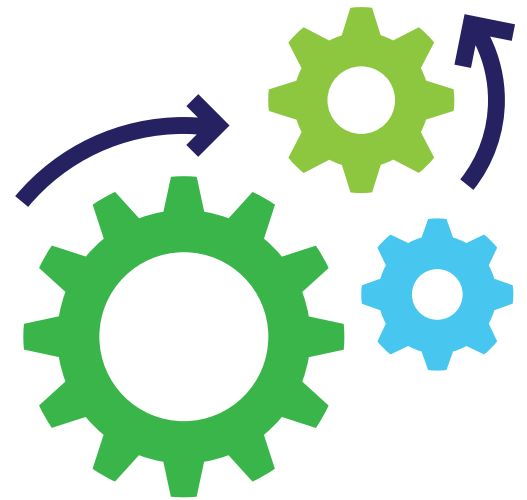
The system is designed to treat 1,200 litres of wastewater per day. It conforms to the *Australian Standard AS/NZS1546.3 (2017)*, including amendments, and has passed a rigorous testing program over a 34-week period, achieving an advanced secondary standard effluent quality.

Without the use of mechanical aerators, diffusers, blowers, or other costly moving parts. The *VS1200 Passive Treatment System* provides a method of treating effluent to a secondary standard in a completely natural way. It is one of the most environmentally-friendly and cost-effective systems available and requires minimal maintenance with only one service per year.

It is an extremely strong and durable system, withstanding wide fluctuations in both hydraulic and organic loading, without any reduction in effluent quality to ensure the effluent irrigated throughout your property is of the highest quality. Designed to operate with zero inflows for several weeks, it will cover holiday periods and periodic use.

Minimal power is used during the treatment process and there is low visual impact on the environment. By respecting the system and ensuring you complete the required maintenance, you should get many years of trouble-free use from your *VS1200 Passive Treatment System*.

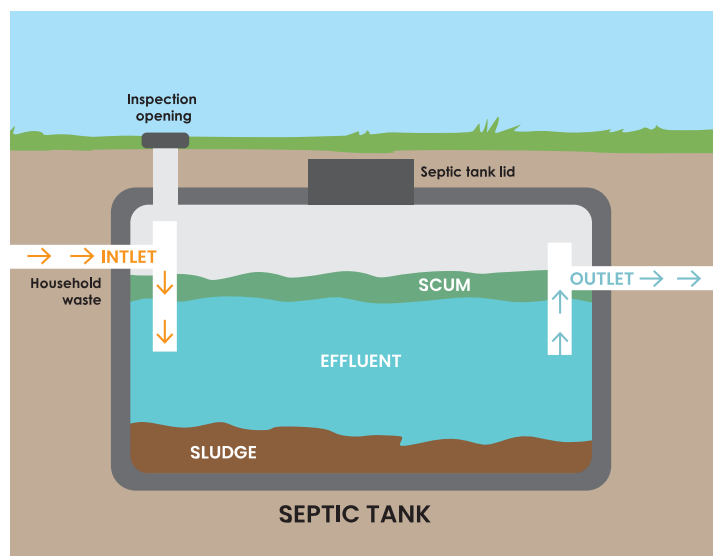
# How your system works



All wastewater from your kitchens, laundries, toilets and bathrooms is directed to one sewer outlet drain which is connected to a large capacity concrete primary septic tank.

Naturally occurring bacterial micro-organisms in the septic tank provide the first stage of the treatment process by decomposing settled solids through anaerobic digestion. Semi liquid solids settle at the bottom of the septic tank to form a sludge layer. Fats and other light matter float to the surface and form a scum layer.

Liquid wastewater which has now had a large proportion of the suspended solids removed exits from the outlet of the septic tank into a dosing chamber.



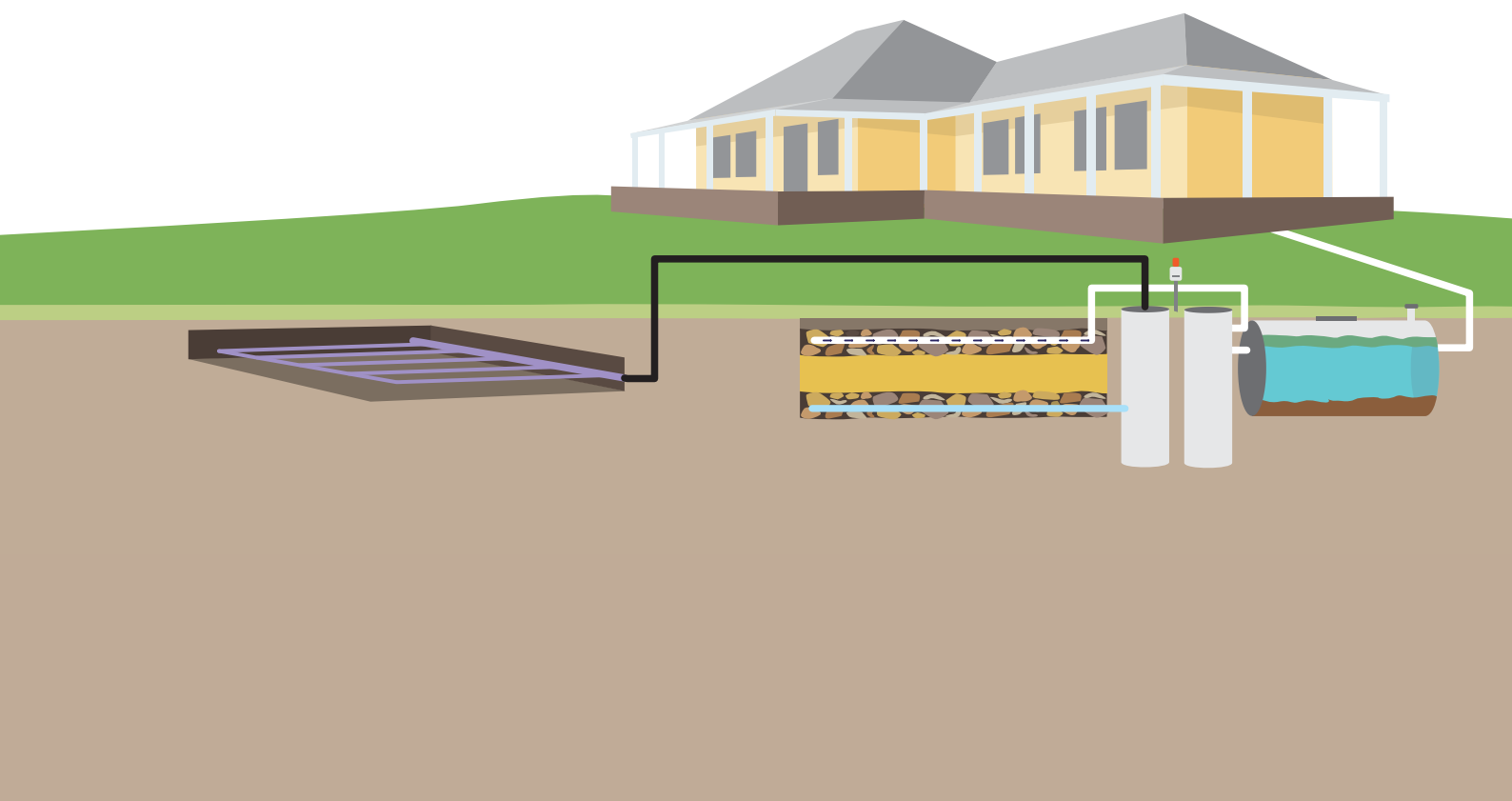
The dosing pump chamber collects the primary treated wastewater and a submersible pump moves the treated effluent from the pump chamber to the sand filter. The dosing submersible pump operates via a float attached to the pump and activates when the wastewater reaches a certain level in the pump chamber. Once the wastewater has subsided below the float level, the pump will stop operating. The dosing pump chamber is fitted with a high-water alarm to advise when there is concern regarding the water level in the pump chamber.

During the second stage of the treatment process, the wastewater is evenly distributed across the top of the underground sand filter. The submersible pump directs the wastewater through a manifold at the top of the sand filter which doses the sand filter evenly. The wastewater slowly passes through different layers of aggregate before reaching the bed of sand and filtering through additional layers of aggregate. Sand is a highly effective, naturally absorptive material that can treat effluent to a very high standard.

Physical, chemical, and biological processes occur naturally within the VS1200 Passive Treatment System to remove organic material and treat the primary effluent.

The treated effluent is gathered via a collection pipe at the bottom of the sand filter and is drained into a dispersal pump chamber. The secondary treated wastewater is pumped to the effluent field which soaks into the soil and disperses via absorption and evaporation.

The system is designed to treat wastewater to an acceptable level for it to be reintroduced into the environment. Nutrients from the treated effluent are returned to ground via lawns and gardens. The irrigation field is ideally placed in a dedicated lawn area, in a garden bed or between fruit trees which receive the benefit of regular watering.



# Do's & don'ts



For your septic system to run efficiently, it relies on the establishment of a bacteria colony to break down the solids in your septic tank. Disposing of poisons, chemicals, and cleaners down your sinks and into your treatment system can kill the bacteria and result in poor quality wastewater being produced.

We encourage you to adopt practical measures to limit the use of disinfectants when cleaning.

Follow these tips to keep your system working to its full capacity.

## In the bathroom

- ✓ Use bio-degradable detergents with low alkaline and sodium, low-phosphorus or phosphorus free products to clean
- ✓ Use bleaches, antibacterial, or antiseptic solutions in a bucket and dispose of the water in yard
- ✓ Install water-saving fixtures (shower roses, tap nozzles, etc.)
- ✓ Inspect your plumbing fixtures regularly for any leaks or damages
- \* Do not use harsh or abrasive chemicals, bleaches, antiseptics, disinfectants, dyes or ammonia acids

## In the kitchen

- ✓ Use bio-degradable detergents with low alkaline and sodium, low-phosphorus or phosphorus free products to clean
- ✓ Scrape all dishes to remove fats, grease etc. before washing
- ✓ Use a sink strainer to restrict food scraps entering the system
- ✓ Install water-saving fixtures
- ✓ Run your dishwasher only when full
- ✓ Inspect your plumbing fixtures regularly for any leaks or damages.
- \* Do not use harsh or abrasive chemicals, bleaches, antiseptics, disinfectants, dyes or ammonia acids
- \* Do not dispose of vegetables, milk, yoghurt, meats, coffee beans, oils, grease or fats down the sink into the system
- \* Do not use a food waste disposal unit



## In the laundry

- ✓ Use phosphate free and low sodium detergents, preferably in liquid form
- ✓ Spread your loads of laundry throughout the week and run your washing machine only when full
- ✓ Use a bucket and dispose of bleaches, antibacterial or antiseptic solutions in the yard
- ✓ Use washing soda as an alternative to fabric softener
- ✓ Install water-saving fixtures
- ✓ Inspect your plumbing fixtures regularly for any leaks or damages.
- \* Do not use harsh or abrasive chemicals, bleaches, whiteners, nappy soakers, spot removers or fabric softener

## In the toilet

- ✓ Inspect your plumbing fixtures regularly for any leaks or damages.
- ✓ Use full flush and minimal toilet paper. Pay particular attention to the amount used by children in the dwelling
- \* Do not use toilet cleaners
- \* Do not flush sanitary napkins, disposable nappies or 'flushable' moist wipes down the toilet

## Outside

- ✓ Inspect the system regularly
- ✓ De-sludge the tank and pump chambers at least once every three years
- ✓ Divert drainage, roof, surface and rain water away from septic system
- ✓ Wash the dog in the yard
- ✓ Clean paint brushes outside using a bucket of water and don't dispose of water down sink
- \* Do not concrete or pave over any system components
- \* Do not cover any system components with extra soil
- \* Do not plant trees or plants with invasive root systems near or on system
- \* Do not drive vehicles over any system components
- \* Do not discharge the water from roof gutters, drainage pipes, swimming pool, spa or other appliances into your septic system
- \* Do not dispose of solvents, paints, antifreeze, engine oil or other chemicals in the septic system
- \* Do not allow humans or animals to consume the treated effluent
- \* Do not turn off the power to your system
- \* Do not allow unauthorised people to tamper with your system

## Around the house

- ✓ Use hot water and natural bacterial cleaners such as vinegar, bicarbonate of soda or tea tree oil to wash your floors.
- \* Do not dispose of unused antibiotics into the system
- \* Do not alter or disconnect any components of the system without local authority approval and the use of a licensed plumber

## Items strictly not to be used or placed down your drains

- Nappy San
- Milton Sterilising Solution
- Antibacterial solutions (ie Pine-O-Clean, dishwashing liquid, hand wash)
- Exit Mould or anything remotely similar
- Ajax powders or any chlorine-based product
- Toilet Blues, Toilet Ducks or similar products
- Antibiotics
- Dairy products, cooking oils, food scraps
- Bleach, disinfectants, whiteners, oven or drain cleaners
- Paints, thinners, petroleum products
- Sanitary products, wipes, condoms, plastic, cigarette butts etc.



### REMEMBER

Every drain and basin in your house is connected to your septic, so any product you put in your drains will end up in your septic system.

# Suggested products



Septic systems rely on bacteria to help reduce the solids within the system and treat the wastewater. Maintaining a healthy level of bacteria is vital to keep the system operating.

Disinfectants in large quantities can be harmful and have serious implications on the processes of a healthy septic system. You need to restrict the use of harsh chemicals or bleaches and avoid all caustic products, as these can kill the micro-organisms and reduce the effectiveness of the system.

The list below is a sample of products labelled as 'safe for grey water systems' on their packaging, however we have not tested or verified these products.

These products should be used in moderation, based on the dosage amount recommended by the product manufacturer. Always read the labels on household products to determine if they are safe for septic systems and monitor the level of use. When selecting cleaning products, we recommend you look for products that are phosphate free or low phosphate.

## Front loader laundry powder

- Ecostore
- Aldi Laundrite
- Earth Choice

## Top loader laundry powder

- Ecostore
- Aldi Laundrite
- Earth Choice

## Surface/kitchen cleaners

- Jiff Cream Cleanser
- Koala Eco Natural

## Front loader laundry liquid

- Ecostore
- Aldi Trimat
- Aldi Green Action
- Dynamo Professional
- Earth Choice
- Aldi Laundrite
- Cold Power

## Top loader laundry liquid

- Earth Choice
- Aldi Green Action
- Ecostore
- Dymano Professional
- Cold Power
- Aldi Trimat
- Aldi Laundrite

## Fabric softeners

(Use minimally, once weekly)

- Jiff Cream Cleanser
- Koala Eco Natural

## Dishwashing powder

- Finish
- Earth Choice
- Woolworths Shine
- Coles Ultra
- Aldi Logix
- Ecostore
- Koh

## Multipurpose cleaner

- Organic Choice
- Coles Green Choice
- Earth Choice
- Bosistos

## Floor cleaner

- Hot water
- Bosistos
- Earth Choice

## Dishwashing liquid

- Koala Eco Natural
- Coles Green Choice
- Earth Choice
- Woolworths Shine
- Aldi Green Action
- Aldi Tandil

## Bathroom cleaner

- Macro Bath & Shower
- Coles Green Choice
- Bosistos
- CLR Bathroom
- OzKleen Shower Power Gel

## Toilet cleaner

**(Toilet fresheners are not recommended)**

- Jiff or any cream cleanser
- Avoid any Anti-Bacterial, Bleach or Ammonia based products

**Disclaimer:** Please note the above list of products is not intended to promote or discredit any product or any company and is provided as a guide only. Always read product labels.

## Bath salts

When using epsom salts in your bath, use:

- less than two cups of epsom salts per bath
- no more than once per week.

## Toilet paper

- Check toilet paper packaging is recommended for septic tank use.
- It is very important to use minimal toilet paper to prevent blockages at the opening of the septic tank and to reduce the frequency the septic tank will need to be desludged.
- Particular attention should be paid to the amount of toilet paper placed in the system by children.

## Floor cleaner

- We highly recommend that you wash your floors with hot water and a natural bacterial cleaner such as vinegar, bicarbonate of soda or tea tree oil.
- We also recommend you dispose of the water on the lawn or garden rather than flushing it down the sink.

# Planting guide for septic system areas

Your septic system does not have to restrict the landscaping of your property. Plenty of plants can and will contribute to the look, feel and function of your garden without causing damage.

Grass is always the best option surrounding your septic tank, pump chamber and sand filter area. The best plants for landscaping around your septic system are those with shallow roots, non-water seeking and non-root invasive plants which are happy in dry conditions. Plants should draw water but not shade the system.

You do have to be mindful that some vegetation can cause major problems to your septic system. Trees on top of any part of the septic system must be avoided. Roots can infiltrate the system, effluent field and associated pipes, causing blockages or breakages, preventing the septic system from functioning as it should. These situations can be minimised by the careful planning and appropriate placement of plants, shrubs and trees.

Below is a list of plants that should not be planted on or within 10m of your septic system due to the risk of roots blocking the pipes.

## Never plant on or within 10m of your system

- River Red Gum *Eucalyptus camaldulensis*
- Lemon Scented Gum *Eucalyptus citriodora*
- Claret Ash *Fraxinus raywoodi*
- Sugar Gum *Eucalyptus cladocalyx*
- Plane Tree *Platanus – all species*
- Poplar *Populus nigra*
- Weeping Willow *Salix babylonica*
- Alder *Alnus – all species*



Below is a list of suitable plants, although extensive it is not exhaustive. For further advice about the best plants to use on your property, we recommend you contact your local nursery or ask an appropriately qualified person to help you.

## Grasses, sedges, rushes and lilies

- Tussock Grass *Poa labillardierei*
- Tall Wheat Grass *Thinopyrum ponticum*
- Lawn Turf Grass
- Weeping Grass *Microlaena stipoides*
- Knobby Club-rush *Isolepis nodosa*
- Tall Spike-rush *Eleocharis spachelata*
- Common Spike-rush *Eleocharis palustris*
- Soft Bog-rush *Schoenus tesquorum*
- Tall Rush *Juncus procerus*
- Sea Rush *Juncus kraussii*
- Slender Bog-rush *Schoenus lepidosperma*
- Zig-zag Bog-rush *Schoenus brevifolius*
- Spiny-headed Mat-rush *Lomandra longifolia*
- Common Spike-rush *Eleocharis acuta*
- Hydrangea *Hydrangea*
- Common Rapier-sedge *Lepidosperma filiforme*
- Saw-sedge *Gahnia filum*
- Wire Rapier-sedge *Lepidosperma semiteres*
- Common Grass-sedge *Carex breviculmis*
- Swamp Club-sedge *Isolepis inundata*
- Tall Saw-sedge *Gahnia clarkei*
- Pale Twig-sedge *Baumea acuta*
- Common Sword-sedge *Lepidosperma longitudinale*
- Tall sedge *Carex appressa*
- Black-anther Flax-lilly *Dianell revoluta*
- Tasman Flax-lily *Dianella tasmanica*
- Pale Flax-lily *Dianella longifolia*
- Short Purple-flag *Patersonia fragilis*
- Cannas *Eleocharis acuta*

## Trees and shrubs

- Swamp Paperbark *Melaleuca ericifolia*
- Salt Paperbark *Melaleuca halmaturorum*
- Scented Paperbark *Melaleuca squarrosa*
- Hop Goodenia *Goodenia ovata*
- Cross Honey Myrtle *Melaleuca decussata*
- Creeping Saltbush *Atriplex semibaccata*
- Coast Saltbush *Atriplex cinerea*
- Marsh Saltbush *Atriplex paludosa*
- Austral Indigo *Indigofera australis*
- Heath Tea-tree *Leptospermum myrsinoides*
- Woolly Tea-tree *Leptospermum lanigerum*
- Prickly Tea-tree *Leptospermum continentale*
- Sticky Wattle *Acacia howittii*
- Crimson Bottlebrush *Callistemon citrinus*
- Scarlet Bottlebrush *Callistemon macropunctatus*
- Flowering Tamarisk *Tamarix juniperina*

## Groundcovers

- Oyster Plant *Acanthus mollis*
- Royal Mantle *Laurifolia x willsii*
- Blue Star Creeper *Isotoma fluviatilis*
- Lily Turf *Liriope giganteum*
- Native Violet *Viola hederacea*
- Geranium *Geraniaceae*
- Strawberry Clover *Trifolium Fragiferum*
- White Clover *Trifolium repens*
- Perennials

## Climbers

- Snake Vine *Hibbertia scandens*
- Glory Vine *Vitis coignetiae*
- Ivy *Hederas*
- Happy Wanderer *Hardenbergia violacea*
- Japanese Honeysuckle *Lonicera japonica*
- Bougainvillea
- Jasmine

## Trees and shrubs - over 2m way from system

- Western Coastal Wattle *Acacia cyclops*
- Swallow Wattle *Acacia longifolia*
- Wirilda *Acacia retinoides*
- Weeping Bottlebrush *Callistemon viminalis*
- Lilac Bottlebrush *Callistemon lilacinus*
- Bell-fruit Mallee *Eucalyptus pressiana*
- Willow leaf Hakea *Hakea saligna*

# Maintenance



Your septic system works via a natural biological process and needs ongoing maintenance and care to ensure it works properly. What you put down your drains and toilets will affect how well your septic system functions.

All sewage treatment systems require regular maintenance to ensure the effluent quality consistently meets the required standard set by the regulating authority.

As the system owner, it is your responsibility and you are legally obliged to ensure your septic system is maintained. We recommend (and it is generally a requirement of the septic permit approval) that you complete a routine inspection of your septic system regularly. You can conduct an inspection yourself to ascertain if you think the system is operating correctly. If, however, you are in any doubt you should contact either the installer or a licensed plumber/drainer to carry out the appropriate inspections and if necessary, repairs as not all plumbers are knowledgeable in the use and maintenance of septic system.

We offer an annual maintenance program where we will come and complete a service of the system to ensure it is working as it should be.

Your local authority may require water quality tests to be conducted on your septic system once it has been installed. The frequency of these tests is determined by your local authority. If you are contacted by your local authority, please contact us and we can organise an inspection, complete a septic service and commission the water sample on your behalf. All records are kept, and reports are sent to you and the local authority.

It is a requirement of the septic permit approval that your septic tank be desludged (pumped out) every three years to help maintain your septic system's optimum performance.

Failure to desludge the septic tank every three years:

- could cause build-up of solids within the tank which can overflow into the passive treatment system
- will void any warranties.

The entry to the septic tank is buried below ground. You will need to uncover the entry to the septic tank before your septic tank can be desludged. The measurements on your as installed plan will show where the entry to the septic tank is located.

The desludging of the septic tank should always be completed by a qualified person and a company specialised in this field. If you need, we can provide a list of desludge contractors in your local area.

All openings of the septic system including the septic tank need to be secured in place and remain accessible at all times for us to complete inspections and maintenance.

Be aware there are pipes buried near your septic system. Please speak to us before digging or excavating near your septic system to eliminate any potential damage. You will also find an installation plan attached to this manual which shows the location of all components of your septic system.

# Annual service inspection sheet



**To service your system each year, complete this checklist:**

If you wish us to complete the recommended annual service, please contact us to arrange for an additional cost.

## Visual inspection of septic system

- ✓ Check all components of the system are structurally sound, not damaged, cracked, etc.
- ✓ Check concrete lids are easily accessible
- ✓ Check power points and warning lights are not cracked or damaged
- ✓ Check electrical leads are insulated correctly and not showing any bare wires
- ✓ Inspect the area near the septic tank and effluent field to ensure there are no abnormal wet spots
- ✓ Check additional soil been not been placed over the effluent area
- ✓ Check there has been no vehicular traffic driven over the system and possibly caused damage
- ✓ Check no part of the system has been altered or damaged

## Manual maintenance of septic system

- ✓ **Check the pumps:**
  - Turn off pumps.
  - Remove pumps through small square lids at the top of the pump chambers.
  - Hose down pumps to remove any substance or algae build up.
  - Reinstall pump into pump chamber.
  - Turn pumps on and check operation okay.



✓ **Flush the irrigation field**

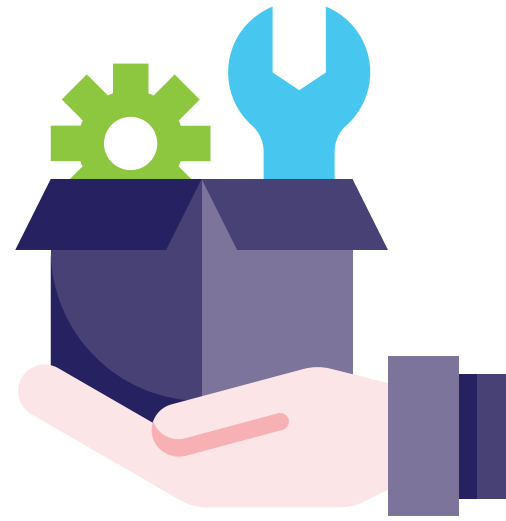
- Identify clean water pump from installation plan attached to this manual.
- Turn off power point at clean water pump.
- Open irrigation flush tap at flush point (in purple box) by turning it 90 degrees clockwise.
- Half fill pump chamber with fresh water.
- Turn pump on at power point. This will flush clean water through the irrigation pipework to remove any sludge or algae.
- When finished, don't forget to close the flush tap in purple box.

✓ **Checking the alarm warning light**

- Turn off power to pumps via the power points.
- Fill each pump chamber with water above warning float (approx. 1/2 full) one at a time.
- The warning light should come on each time.
- Finally, turn on power to pumps at power point to see if the pumps disperse the water.

- ✓ Desludge (pump out) septic tank, and pump chambers every three years

# Servicing requirements



The **VS1200 Passive Treatment System** requires annual servicing either by yourself with the instructions provided or by a licensed and fully-trained service person. This is to ensure pumps and float switches are functioning well, there are no leaks or obstructions, and to inspect the effluent quality.

Use this *Service Record* to keep track of your annual servicing. Please advise us if you complete the servicing yourself, so we can keep a service history record.

<b>Date</b>	<b>Service Agent</b>	<b>Note any issues addressed by service agent</b>

# Desludging requirements



**Every three years, your septic tank must be desludged** (emptied). It is recommended that sludge and scum levels are recorded at each annual service.

Use this *Desludge Record* to keep track of your three-yearly desludge of the septic tank and pump chambers.

Date	Desludge Agent	Receipt received

# Your responsibilities



The new *EPA Regulations 2021* places heavy responsibilities on the system owner to ensure their septic system is maintained to an acceptable standard. For more information on the system owners responsibilities we encourage you to visit the EPA website.

The system owner is solely responsible for the operation and maintenance of the septic system on their property. To ensure you are taking responsibility for your septic system, we encourage system owners to:

- View your septic system each day, even if it is just to ensure the alarm light is not on.
- Each week, walk around the septic system components to make sure there are no abnormal wet-spots and your septic system components are free from weeds and debris. Check that power leads are plugged in tight.
- Each week, check the house switch board that delivers power to the treatment system to ensure it is still in the on position.
- Every 12 months, contact us to arrange for the routine annual service.
- If the service detects any irregularities or deficiencies with the system, we encourage you to acknowledge them and quickly authorise repairs to be completed.
- Maintain accurate and complete records of your septic system - set up a file to ensure accurate and complete records are on hand.

# Alarm box instructions



The VS1200 *Passive Treatment System* is designed to operate automatically without any issues. The alarm box monitors and controls the system's water levels and provides visual and audible indicators of potential fault conditions in the pump chambers.

The power outlets for the submersible pumps are located below the alarm box and each powerpoint must be in the **ON** position at all times. If any or all switches are **OFF**, the submersible pumps will not function.

## **A** Visual Alarm

The light at the top of the alarm box will indicate a fault by a continuous bright coloured light.

## **B** Test Alarm

A flick switch that when pressed, tests the audible and visual alarms.

## **C** Mute Alarm

A flick switch that when pressed, silences the audible alarm but the light will still be activated.

All faults are indicated by the activation of the bright light and audio alarm. To silence the audible alarm, press Mute Alarm (C) briefly once. This will silence the alarm, but the coloured light will remain on. The visual alarm will remain on until all faults are rectified.



# Troubleshooting



When you notice a problem with your system, we encourage you to review the following list to determine what might be occurring with your system.

In some instances, it is likely you may be able to fix the problem yourself, follow the instructions on what to do in these instances.

If however, after a short attempt you are able to fix the issue, please call us. We will try our best to determine the cause of the issue and advise if a visit from our service agent is required.

## Red light on and audio on

### *Description*

Usually this indicates high water levels in one of the pump chambers.

If not addressed rapidly, could lead to flooding of the system and major damage or failure of the system or other components and surrounding areas. This would then incur large repair costs.

### *Potential cause*

Has power just been connected to system?

If power has just been connected to the septic system, the red light and audio alarm may activate. This is due to high water in the pump chambers.

### *Potential cause*

Has the pump plugs come out of the power point?

If pump plugs come out of the power point, even slightly, this will cause the pump to stop working and lead to high water in the pump chamber.

### *Action*

1. Simply turn the audio alarm onto silent and leave the system for 2 to 3 hours to allow time for the water to be removed from the pump chambers.
2. Try to limit water usage during this time.
3. Once the water level drops, the coloured light on the alarm will turn off and the alarm will reset itself.

### *Action*

1. Turn the silent button on the alarm to silence the audio alarm.
2. Check both pumps are plugged into the power points properly hard in the socket, both switches are turned on at the power points and the switch is on at circuit breaker in the meter box. Ensure they are positioned firmly all the way into power points.
3. Leave the system for 2 to 3 hours to allow time for the water to be removed from the pump chambers.
4. Try to limit water usage during this time.
5. Once the water level drops, the red light on the alarm will turn off and the alarm will reset itself.

### *Potential cause*

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Is there an electrical issue with power point?

In some instances, there may be an issue with the power point.

### *Potential cause*

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Has your electrical circuit for the septic system been tripped?

### *Action*

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1. Check power at the power points is working by plugging a household appliance (hairdryer, drill, etc.) into each of the powerpoints one at a time.
2. If the appliance does not turn on, there may be an issue with the power point. It will have to be repaired by an electrician. Your servicing agent will not be able to complete this.

### *Action*

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Check your circuit breaker to ensure there is power to the septic system.

- If the power does not trip straight away, simply monitor the septic system by checking the circuit breaker each time you are in the area to ensure power is on at the septic system.
- If the power trips instantly when you turn the power on at the circuit breaker, check to see if one of the pumps may be causing the circuit breaker to trip. Turn off power to both pumps and test other appliances on the same circuit. Once you have tested all other appliances, turn on the pumps one at a time.
- If the power trips immediately when the first pump is turned on, unplug, and plug it into the other power point at the alarm box. If the power trips straight away once it has been turned on in the other power point, the pump will have to be replaced.
- If the power does not trip, repeat the above with the opposite plug with the same outcome in mind.
- If you have turned on both plugs at power point and also switched plugs in the opposite power points, and the power has not tripped straight away, there may be an issue with the power point. Obtain extension leads and connect them to the pumps at the closest power source to the septic system to ensure the septic system has power connect to it. Call an electrician to determine what may be occurring with the power point.

### *Potential cause*

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Have you experienced a power failure?

The system may be full (no power to operate submersible pumps) if a power failure has occurred or the system has just had power connected.

### *Action*

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1. Make sure power is at the alarm box.
2. Simply turn the audio alarm onto silent and leave the system for 2 to 3 hours to allow time for the water to be removed from the pump chambers.
3. Try to limit water usage during this time.
4. Once the water level drops, the red light on the alarm will turn off and the alarm will reset itself.
5. To check if the water levels are going down, you can remove the top of the pump chambers or remove the square at the top of the pump chambers and view the water levels.

### *Potential cause*

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Have had excessive amount of rain?

Ground water may have overfilled the system.

### *Action*

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1. Simply turn the audio alarm onto silent and leave the system for 2 to 3 hours to allow time for the water to be removed from the pump chambers.
2. Try to limit water usage during this time.
3. Once the water level drops, the red light on the alarm will turn off and the alarm will reset itself.
4. To check if the water levels are going down, you can remove the top of the pump chambers or remove the square at the top of the pump chambers and view the water levels.

### *Potential cause*

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Float caught on wall.

The float attached to the side of the submersible pump, or the alarm float can become stuck and wedged against the wall of the pump chamber and prevents the pump from turning on.

### *Action*

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1. Turn on the silent button. Inspect both pump chambers by opening the small square lids in top of round concrete covers to see if the water level is high.
2. If there is high water in the pump chamber, reposition the pump and alarm float so it is not against wall by moving/ shaking the pipe at the top of the pump chamber which the pump and float are connected to.
3. You should hear and feel the pump vibrate to show the pump is activated and the water will begin to pump down.

### *Potential cause*

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Failed pump.

### *Action*

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1. If all of the above fails to remove the red light and audio alarm, the submersible pump may have failed and will need to be replaced.
2. Simply call us and we will assist to get the submersible pump replaced.



## Red light on, no audio

### Description

Usually indicates an issue with one of the alarm floats or the alarm box.

### Potential cause

Dull light.

If the seal on one of the alarm floats has failed, a small amount of current may leak up float lead which powers the dull light on the alarm box

### Action

- To check if there is a dull light on your alarm box, we ask you to press the test button. The audio alarm should come on and the light will become brighter.
- There is no need for concern, the dull light is not detrimental to the system and the septic system will still be functioning as it should. If the dull light is a nuisance to you, we can organise to come and replace this for you. Otherwise, no action is required

### Potential cause

Water in alarm box.

With large amount of rain, there is a chance water has seeped into the alarm box.

### Action

1. Remove the alarm box cover.
2. If water is present, dry it out and replace the cover and the light should turn off.
3. If the light does not turn off, please call us and we will attend your property.

### Potential cause

Insects in alarm box.

Insects can sometime crawl into alarm box

### Action

1. Remove the alarm box cover.
2. If insects are present, remove the insects and replace the cover and the light should turn off.
3. If the light does not turn off, please call us and we will attend your property.

## Wetness near septic system

### Description

Surface ponding or puddles in effluent field

### Potential cause

Irrigation line may be blocked, crushed or broken.

A blocked or broken irrigation system can not empty as intended. You may find one area of the irrigation is very wet and other parts are dry

### Action

If this has occurred, please call us to arrange a site inspection to determine the cause.

### Description

Wetness over all of effluent field

### Potential cause

- Excessive amount of rain
- After extensive rain the irrigation field may be saturated.

### Action

- The irrigation field will dry naturally with time.
- Please do not drive over the septic system.

*Potential cause*

Pumps not working.

*Action*

- Make sure there is power to the system by checking the circuit board is turned on.
- If there is power, you will need to check the plugs are in tight in the power points, and also check there is power to each of the power points.
- If this fails, the irrigation pump may have failed. Please contact us and we will arrange to get this submersible pump replaced for you.

*Potential cause*

Damaged pipe.

*Action*

- Please call us to arrange a site inspection to determine the cause.

## **Abnormal odours**

*Description*

Septic odour inside and outside house.

*Potential cause*

Septic odour trapped within pipes.

*Action*

It is recommended you run the water in all of the bathrooms and toilets to ensure the pipes are full and create a water seal to ensure the odour no longer occurs

*Potential cause*

Breather in roof too short.

*Action*

- In some instances, the breather in the roof of the dwelling is too short which produces a septic odour in close proximity to the house.
- We recommend you call a plumber to see if the breather pipe needs to be extended

*Description*

Septic odour close to septic system.

*Potential cause*

Excess greases and fats inhibiting the treatment process.

*Action*

Monitor what is placed in your septic system as this could be causing the bacteria to die in the septic tank. Strictly avoid using all products harmful to the septic system identified in our *Do's & Don'ts* list.

You can return the treatment system to normal operation by adding Actizyme (available from supermarkets) for 2-3 weeks and wait for the system to naturally correct itself.

### *Description*

Reduced biological activity in system.

### *Potential cause*

Inflow of acidic, caustic, disinfectant, or antibacterial liquids.

### *Action*

1. Try releasing fresh water into the system to dilute the chemicals.
2. Run a tap for around 10 to 15 minutes to allow clean water into the system.
3. After 24 hours the biological activity should recover, and the odour should reduce or disappear.
4. Fill tank with water during initial use and after de-sludging of tank to reduce odour.
5. Help return the treatment system to normal operation by adding Actizyme (available from supermarkets) for 2-3 weeks and wait for the system to naturally correct itself.

### *Potential cause*

Use of antibiotics and medicines.

### *Action*

Help the septic tank become established with bacteria colony by placing a handful of lime or Actizyme down the toilet every day for about a week or until the smell goes away.

## **Subsidence**

### *Description*

Subsidence around pump chambers and septic tank.

### *Potential cause*

The soil type will determine how well the backfilling process will work. Generally, with heavy clay soils it is difficult to compact around the tank as it is cylindrical

### *Action*

Usually, it takes a couple of heavy rainfalls to dissolve the clay and for it to fill up any air pockets around the tank.

Once this has happened you simply need to back fill the sunken area with top-soil and there should be no further subsidence. The structural integrity of the septic system is not compromised, and subsidence up to 60cm can occur.

## **Blockage**

### *Description*

Slow flushing toilets or other plumbing in the home.

### *Potential cause*

A blockage may have occurred at the entry to your septic tank which is causing the toilet to flush slowly.

### *Action*

- There is an inspection opening (I.O.) at the front of the septic tank (90mm PVC pipe with square or round concrete cover). at ground level. Over time this may have been covered with additional soil, rubble or knocked off.
- Please lift cover off and place the end of a broom stick or stake down the pipe. If there was a blockage you will hear a whoosh sound and water running into the septic tank.
- If this does not work, you might have a blockage in your house pipework which requires a plumber to fix.

# Emergencies

Your VS1200 Passive Treatment System is designed to have sufficient holding and retention capacity to allow minimal use of your system in the case of power or pump failure for a short period of time (up to 24 hours).

If your alarm light and audio alarm activates, we encourage you to follow our troubleshooting guide.

If you are unable to resolve the issue or you have a concern about the operation of your septic system:

- contact us promptly, between 8:00am and 5:00pm for assistance.

**Phone: (03) 5633 2306**

**Email: [info@valleyseptics.com.au](mailto:info@valleyseptics.com.au)**

- please minimise your water usage until we can attend your property. Try not to use washing machines, dishwashers or baths and limit showers to a few minutes.

The audible alarm will NOT be activated if there is a general power failure, or if the power supply to the system is interrupted. Following any general power failure, you should check that the circuit breaker for the system is still set to supply power to the system.

## When to contact a plumber

We encourage you to call a plumber if you are experiencing a toilet or other fixtures failing or slow to drain freely and you have followed the steps in the troubleshooting guide. These problems are usually due to pipe blockages between the house and the septic tank rather than a failure of your wastewater treatment system. The plumber will advise you if there is a problem with the system.



# Warranty

Valley Septics and our suppliers provide the following warranty on all completed septic installations:

- 7 years on concrete components, e.g: septic tank and pump chambers
- 6 years on workmanship
- 6 years on the sand filter
- 3 years on the dispersal (clean/treated water) pump
- 2 years on the dosing (dirty/untreated water) pump
- 12 months on the alarm system

Warranty is effective from the date of installation.

## **This warranty does not cover:**

- Systems which have not had the septic tank and pump chambers desludged at least once every 3 years, as per the EPA guidelines and local authority's Permit To Use.
- Proof of desludge will be required before any warranty claim can be processed.
- Any failure due to neglect, lack of regular maintenance or incorrect use of the septic system. Eg: physical damage or incorrect products used in septic system (Proof of maintenance will be required before any warranty claim can be processed.)
- Any alterations to the septic system as originally installed by Valley Septics are strictly forbidden and will result in a void of all warranties
- Any damages to the system caused by or resulting from misuse, abuse, neglect, repair, maintenance or from use other than normal and ordinary use of the system
- Damages caused by or resulting from failure to use the system in accordance with our instructions or failure to properly inspect and maintain the system
- System failure due to higher than designed wastewater loads.



## **Warranty claim process**

Any warranty claim must be received in writing within thirty days you become aware of the issue. Valley Septics must be provided with an opportunity to inspect and rectify the system. Failure to comply with these requirements renders the warranty null and void.

Valley Septics at our discretion, shall determine whether to repair the system or provide replacement products. We are under no obligation to remove any defective products or to install any replacement products and shall not be liable or responsible for any other damages or claims arising from or relating to defective products, including but not limited to claims for general, consequential, or incidental damages, lost profits, or attorney fees.

# About us

Valley Septics are specialists in the wastewater industry, designing, installing and servicing; in addition to providing reports and assessments for all types of wastewater systems.

Established in 1989, this family business has earned a high reputation with local authorities and regulators as well as builders and plumbers in and around Eastern Victoria for our knowledge and experience of domestic and commercial wastewater treatment.

We have gained *Australian Standard* accreditation for our VS1200 Passive Treatment System, the first and only Victorian based company to have accreditation for a passive treatment system.

With over 4,000 wastewater systems installed, we provide a full range of septic solutions for any project including a standard system to the newly approved *Secondary Passive System*.

We employ qualified and motivated personnel that excel in their field and are committed to providing the highest level of service, reliability and satisfaction to our customers.

If you require any further information please feel free to contact our office as we will be more than happy to help.





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