# Your Pressure Sewer System

A Homeowner's Guide





### Your Pressure Sewer System A Homeowner's Guide

### CONTENTS

Using this manual	2
Why install a pressure sewer system?	2
What is a pressure sewer system?	3
What makes up a pressure sewer system?	3
How do pressure sewer systems work?	4
Pump unit repairs, maintenance and warranties	4
Avoiding blockage and damage	5
Responsibilities on your property	5
What you need to know about alarms, faults and response	6
System failure due to misuse	6
Other considerations	7
Terms & Conditions	8

### **KEY CONTACTS**

Emergencies & Faults (24 Hour - 7 days) (03) 5682 0444

General Enquiries (Mon - Fri 8.30am-5.00pm) 1300 851 636

**Email** 

sgwater@sgwater.com.au

Translating & Interpreting Service 131 450

## Using this manual

This manual is a guide to the operation and maintenance of the pressure sewer system installed on your property. The system is easy to use and we strongly recommend that you take a few minutes to familiarise yourself with how it works.

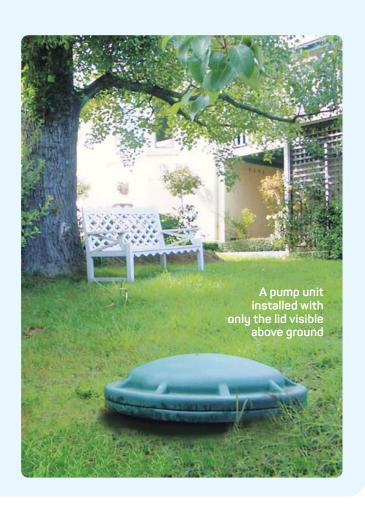
There are some basic things that you should know about your pressure sewer system. These include:

- · what is a pressure sewer system
- · pump unit repairs, maintenance and warranties
- · responsibilities on your property.

# Why install a pressure sewer system?

Pressure sewer systems are utilised in certain areas because of the suitability of ground conditions and/or the cost of a conventional sewerage system.

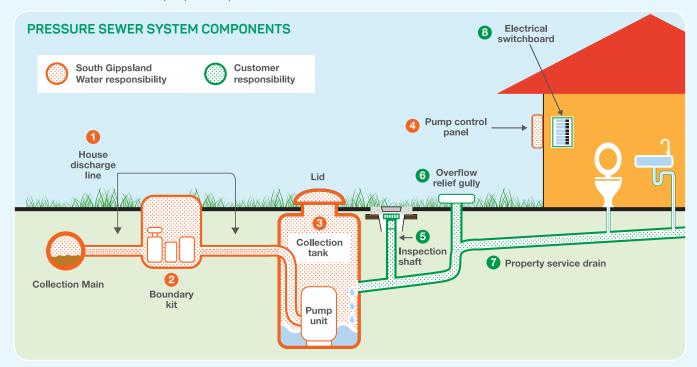
They are an economical and environmentally appropriate way of collecting and transporting household wastewater. They are often used in areas when the landscape is either very hilly or very flat, in areas which regularly flood or have high water tables, or where it is impractical to install other types of sewerage systems.



### What is a pressure sewer system?

A pressure sewer is made up of a network of fully sealed pipes into which pump units discharge household sewage. The pump unit is located on each connected property. The pump unit grinds up the waste into a liquid and transfers this to the collection main (located in the street) via a small pipeline within the property (house discharge line). Once installed the only visible part of the collection tank unit will be the tank lid and pump control panel.

South Gippsland Water will own and operate the pressure sewer system including the pump control panel, pump unit, collection tank and house discharge line. Property owners will be responsible for the connection of their gravity property service drain into the collection tank, and for the provision of an electrical connection from the electrical switchboard of the house to the pump control panel.



### What makes up a pressure sewer system?

The pressure sewer system is made up of four key elements, as shown in **ORANGE** in the diagram above:

#### 1. House Discharge Line

The house discharge line is a small diameter pipe (not dissimilar to a large sprinkler system pipe) which connects the property's pump unit to the pressure sewer in the street.

### 2. Boundary Kit

The boundary kit ensures that wastewater which is already in the pressure sewer cannot re-enter your property and enables maintenance staff to isolate the pump unit from the system in the event of an emergency.

### 3. Collection Tank and Pump Unit

Installed underground, with only the top of the collection tank (or lid) visible, this component of the system includes a pump unit, collection tank and level monitors.

### 4. Pump Control Panel

A small box mounted to the wall of the house, the pump control panel contains all the electrical controls for the pump unit including both the audible and visual alarm systems and is linked by telemetry to South Gippsland Water's sewer monitoring system. The pump control panel has an audible and visual alarm to provide adequate warning when the pump unit needs to be serviced by South Gippsland Water staff.

### 5. Inspection Shaft

The inspection shaft is a plumbing fixture that allows plumbers to inspect and service your property service drain. It is a key fixture for future inspections and maintenance works that may be required on the property. It is important that property owners maintain access to this fixture. The inspection shaft is the responsibility of the property owner.

### 6. Overflow Relief Gully

An overflow relief gully (ORG) protects the interior of your home or building from sewerage overflow. It is a drain-like fitting located outside the property that is an important part of the plumbing system. In the event of a sewer blockage, the ORG is designed to release any sewerage overflow away from the interior of the building and outside to a garden or external area. It is important for property owners to keep the ORG clear and unimpeded at all times. The ORG is the responsibility of the property owner.

#### 7. Property Service Drain

The property service drain is the section of gravity pipeline connecting the sewage pipe outlets from the house to the South Gippsland Water collection tank. The property service drain is the responsibility of the property owner.

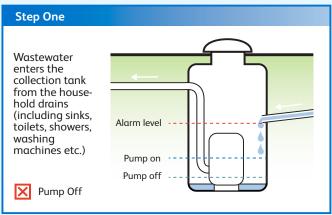
### 8. Electrical Switchboard

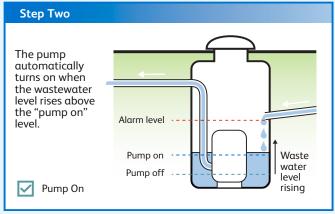
The electrical switchboard is a standard electrical switchboard which connects the property to the power supply system. It will have a connection point and circuit breaker designated to the power supply for the on-property collection tank and pump unit. The associated power and operational costs are the responsibility of the property owner.

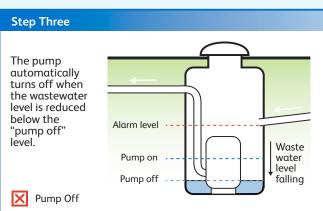
### Your Pressure Sewer System A Homeowner's Guide

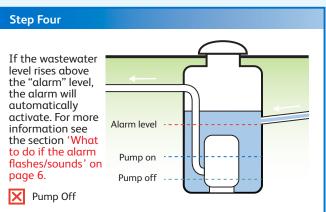
### How do pressure sewer systems work?

The main component of the pressure sewer system is the pump unit which is installed on your property. The pump unit works in the following way:









## Pump unit repairs, maintenance and warranties

The pump unit, collections tank and house discharge line is owned and operated by South Gippsland Water. The property owner is only responsible for the property service drain connecting the household wastewater outlets to the collection unit. If for any reason the pump unit or pump-control panel fails, then the wastewater level in the tank will rise to a point where an alarm will be sent by telemetry to South Gippsland Water's 24 hour operations centre.



A service operator will monitor the problem and if it does not self-correct then an authorised service person will attend to rectify any problem with the pump unit. If the problem is found to be difficult to solve, the pump unit or pump control panel can be easily replaced on site. In no circumstance is the owner or resident required to operate any of the equipment.

If the wastewater level in the collection tank reaches a set high

level due to abnormal operating conditions, then an audible alarm will sound. The property owner can press a button to stop and re-set the audible alarm. If the alarm is activated the resident should contact South Gippsland Water on (03) 5682 0444 (24 hours) and minimise the use of any in-house water fixtures until a South Gippsland Water representative attends the property.

You are responsible for ensuring that the collection tank lid is readily accessible at all times.

### Power supply to the pump unit

The property owner is responsible for providing the power supply, the independent circuit breaker in the electrical switchboard and the power cable to the pump control panel for the pumping system on the property.

The property owner is also responsible for the payment of power usage charges associated with this pumping system. For commercial properties, a 3 phase power supply is usually required for reliability purposes. Please ensure power is always available to the pump unit.

### Power failures and blackouts

In the event of a power outage facilities such as showers and toilets can still be used. In these circumstances, the tanks are sized to allow a minimum of 24 hours household wastewater storage capacity. This will allow for continued use for long power outage periods. On restoration of power, the pump unit will start and pump stored wastewater until normal operating levels are obtained.

### Odours and noise from pump units

Pump units are located in the ground so any sound will be practically unnoticeable. The collection tank is vented to avoid any odour problems.

### Avoiding blockage and damage

The system will operate like a normal sewage system taking liquid waste from your toilet, sink, shower, bath, dishwasher and washing machine and transferring it to the wastewater treatment plant.

To avoid blockages and damage to the pressure sewer system the following items should NOT be placed into sinks or toilets:

- Glass
- Metal
- Gravel, sand (including aquarium stone and coffee grinds)
- · Seafood shells
- Socks, rags, clothes
- Plastic
- Paint

- · Nappies, sanitary napkins, tampons
- Nappy/wet wipes
- · Kitty litter
- Explosives
- · Flammable materials
- · Lubricating oil or grease, cooking oil or grease
- · Petrol or diesel
- · Stormwater/rainwater run-off

### Responsibilities on your property

### Be mindful of the location of the collection tank pump unit and pipelines.

The following points are important requirements in maintaining the condition and effective operation of the pressure sewer system:

- The collection tank's lid is plastic and not designed to carry weight. Avoid walking, riding, driving or placing heavy weights (e.g. large pot plants) over the top of it.
- Keep the power to the pump unit on at all times, only turn power off in response to a broken discharge line.
- The valves in the boundary kit and the vent on the collection tank must only be accessed and attended to by South Gippsland Water staff.
- A one metre space, clear of growth and other debris, around the collection tank lid is needed at all times for maintenance purposes.

# Why can't rainwater go into the pressure sewer system?

Pressure sewers, like all sewer systems, are only designed to accept household wastewater, not stormwater or rainwater. Rainwater must not be directed into the pressure sewer system because:

- It will increase the amount of pumping the pump unit will do and this will cost you more money in running the pump unit.
- The added volume of rainwater can lead to alarms being activated and, in some cases, the collection tank over-flowing. If the alarm regularly activates during or after rain, you should contact South Gippsland Water.

### Trade waste

If the property is used for commercial purposes, or a change in dwelling use is sought (i.e. residential to commercial), the proprty owner may be required to have a trade waste agreement with South Gippsland Water, and some form of pre-treatment in place before waste enters the pump unit.

Information about trade waste can be found on the South Gippsland Water website under the business section, or by contacting South Gippsland Water's trade waste officer to assist you with determining requirements.

### Extending or modifying your home

The property owner must contact South Gippsland Water if making property modifications which may affect the system, e.g. extending the house near or over the location of the collection tank or pipelines.

Advice should be sought regarding the suitability of the collection tank and pump unit prior to commencing any construction activities. Moving the collection tank will be dependent on the layout of the land, as all wastewater from the house must gravitate into the collection tank.

The house discharge line can be moved to accommodate extensions to the house or the construction of a shed etc. When contemplating any such modifications to the property, the property owner must contact South Gippsland Water. There can be no building or structure over the collection tank or the property service line, this includes decking.

Upsizing, modification or enhancement of on property infrastructure which triggers upgrades in the wastewater collection system shall be payable by the property owner.

### Going on holiday

If going on holiday for more than three days, the property's pump unit will need to be flushed out to prevent potential odour problems.

To flush the unit run approximately 190 Litres of water into household drains. This can be achieved by using the washing machine or shower just prior to going on holiday, or filling the bath and then emptying it. Do not turn off the main electrical switchboard power switch to the pump unit. If no water is being used, the pump unit will not operate. Without the power turned on, if there is a leaking fixture in the house, the pump unit cannot pump any water and the collection tank may overflow.

# Ensure that the power to your pump unit is turned ON at all times

Leaking fixtures or appliances within the home may discharge water into the collection tank and pump unit. Power needs to be turned on to pump any of this wastewater out to avoid odour and to prevent the collection tank over-flowing.

### Your Pressure Sewer System A Homeowner's Guide

# What you need to know about alarms, faults and response

### Why is my pump control alarm going off?

There are a number of reasons why the pump control alarm may be activated. The following table provides a step-by-step guide to dealing with an activated alarm.

Symptom	Action	What response is required
Alarm sounds	Turn off the audible alarm	Press the button on the top of the control panel to disable the audible alarm.  The audible alarm will automatically shut off after about 10 minutes (regardless of whether the button on the top side of the control panel is pressed).
LED light	Report alarm activation to South Gipsland Water	The LED light will only turn off if a South Gippsland Water representative resets it, or the problem which has triggered the alarm is resolved. Contact (03) 5682 0444.
Power outage for longer than 8 hours	Minimise wastewater generation and contact us	Take steps to minimise wastewater generation by:  not turning on clothes washers while the alarm is active  keeping showers brief  leaving the plug in a filled bath until after the alarm is canceled  switching off any drainage (automated or not) from swimming pools or spas until the power is restored  Advise us of extended power outages, particularly if it appears that the duration may exceed eight hours (excluding time when the residents are asleep).  In the event of extended power outage events, South Gippsland Water may need to organise for the collection tank to be pumped out.
If a neighbour's alarm sounds	Contact us	If you suspect a neighbour is not home, please contact us to inspect the property.  The audible alarm will automatically shut off after a period of 10 minutes.
Officer attendance	Create clear access	Ensure our representative has access to and from the collection tank as transportation of a faulty pump may be required.
Pump unit fault or repairs	Contact us	South Gippsland Water will carry out repairs to all points of the pressure sewer system.  Property owners will not incur any cost for repairs which result from the normal operation of the system.  A replacement pump will be inserted into the collection tank if the existing pump unit requires significant repairs.  If repairs are required to the pressure sewer or the pump unit, minimise wastewater production until repairs are completed.
Boundary valve kit fault or repairs	Do not access them yourself  Contact us and wait for our representative to operate the valve	Ensure our representative has access to and from the collection tank as transportation of a faulty pump may be required.  South Gippsland Water operate the valves in your boundary kit if required.  Under no circumstances should property owners open or tamper with the valves inside the boundary kit.

## System failure due to misuse

Should the house discharge line/pump unit fail due to misuse, the cost of and failure will be borne by the resident causing the failure/s.

If you are in any doubt about any substances entering the sewerage system call South Gippsland Water 24 Hour Emergency & Faults (7 days) on (03) 5682 0444.

### Other considerations

# Properties with swimming pools, external showers and wash down areas

Due to the high discharge rate of pumps serving swimming pools, external showers and wash down areas, South Gippsland Water is unable to provide connection of these facilities to pressure sewer systems.

### Roof and rain water

The collection tank and pump unit have not been designed to accommodate rainwater, which should never be plumbed into any sewerage system in accordance with relevant plumbing standards.

If rainwater was to enter the system, alarms will activate and the collection tank may overflow. If you notice the alarm regularly coming on during or after rain, report to South Gippsland Water.

### Additional occupants and/or visitors

Sudden increases in use of a property's pump unit as a result of increased wastewater flows, either through increased activity at the residence or large numbers of visitors staying for a holiday period, will not impact upon the pressure sewerage system. However, the pump unit might have to pump more frequently.

### Garages, car parks and garden sheds

Please ensure that temporary or permanent structures are not built over the house discharge line. A minimum horizontal clearance of one metre is required from the outside diameter, either side of the property discharge line and a minimum of two metres clearance is required from the collection tank lid.

The property owner is required to ensure no additional load is placed on the pipe works or collection tank.

### Landscaping

Landscaping over the house discharge line is permitted, but the collection tank lid and boundary kit are not to be covered.

If the line requires repair, South Gippsland Water staff will need access to the pipe. This may mean that landscaping will need to be removed. In this case South Gippsland Water will endeavour to minimise disruption to the garden.

It is also important that sufficient space is always available to access the collection tank, in case maintenance is required. A one metre clearance zone must be left around the collection tank lid to enable access for a pump lifting trolley.

### Now that your pressure sewer system has been carefully sited and installed, please remember...







The collection tank lid must never be buried, built over or covered in any way.

A minimum clearance of one metre around the lid is required.

### Terms and conditions as determined under Section 145 of the Water Act 1989

#### 1. Definitions

- In these terms and conditions: you and your, refers to the owner of the property connected, or to be connected, to our pressure sewer system.
   We, us and our, refers to South Gippsland Water.
- These terms and conditions apply to the property and owner who returned the signed Terms and Conditions Application Form to South Gippsland Water.
- If there is any inconsistency between our Customer Service Charter and the conditions of connection contained within the Your Pressure Sewer Owner's Guide, the manual prevails.

#### 2. Consent to Connection

We consent to connection:

- a. under Section 145 of the Water Act 1989
- b. subject to these terms and conditions
- c. on the basis that these terms and conditions are binding on future owners
- d. in accordance with the South Gippsland Water Customer Charter and the Your Pressure Sewer System A Home Owner's Guide.

#### Power

We will arrange for a pump unit to be connected to the power supply on your property. If your electrical supply needs to be upgraded to comply with current electrical standards, you will be liable for any costs.

You will be required to pay for the ongoing cost of power used by the pump

### 4. Property Service Drain

You will be required to arrange for a licensed plumber to connect your property service drain to the capped inspection shaft (also referred to as the 27A) provided by us on the inlet of the tank. You are liable for the cost of these works.

#### 5. Installation

We will install a boundary kit, the collection tank, pump unit and connecting pipe work. In addition we will install the pump control panel and the associated electrical cabling to the pump unit and your electrical switchboard. We will pay for the cost of these works.

### 6. Ownership and Maintenance

- a. You will own and be responsible for any costs associated with, maintaining the capped inspection shaft and riser and property service drain, in good working order. Any work must be carried out by a licensed plumber.
- b. We will own and maintain the boundary kit, collection tank, pump unit, house discharge line up to the pump unit.
- c. We will own and maintain the pump control panel, and the electrical cabling from it to the pump unit and you are responsible for your electrical switchboard and cabling between the switchboard and pump control panel
- d. In an emergency when you discover anything wrong with the pump unit (including a power failure), the pump control panel, electrical cables or connecting pipework excluding the property service drain, you must notify South Gippsland Water immediately.

### 7. Damage

- a. If you, or someone else for whom we are not responsible (such as visitors) damages the boundary kit, pump unit, control panel, electrical cabling, connecting pipe work or any other part of the system, we will arrange for the repairs to be made. You must reimburse us for the cost of any such repairs.
- If South Gippsland Water, or someone for whom we are responsible, damages your land or anything on it while carrying out work, the legislation under which we operate imposes obligations on us in relation to rectifying the damage or compensating you.
- c. If you become aware of any damage to any part of the pressure sewer system you must report it to us as soon as reasonably possible.

#### 8. Trade Waste Customers

Trade waste is any liquid waste that is generally generated by industrial and commercial business activities. All trade waste customers must:

- have a trade waste consent or trade waste agreement with us prior to the discharge of trade waste
- meet the cost of purchasing, installing and maintaining any flow limiting valve, or additional pump including any work (installation or maintenance) performed by a licensed plumber
- c. comply with the terms of any trade waste consent or agreement in addition to these terms and conditions.

### 9. Restricting water use

Whenever you discover anything wrong with the pump unit (including any power failure) or your property service drain, you must restrict the amount of water discharged to your property service drain. This will reduce the amount of wastewater generated from your property while the fault persists and will help to avoid any overflows from the collection tank.

#### 10. Pressure sewer system Owners Guide

You must ensure that a copy of Your Pressure Sewer System Owner's Guide is kept at the property at all times, even if the property is leased or rented. Copies of the Guide are available from our website.

### 11. Decommissioning existing systems

When your house is connected to the pressure sewer system, you must arrange for a licensed plumber to decommission your existing wastewater treatment system (septic tank), in accordance with EPA Victoria requirements. You must pay for this work.

#### 12. Selling your property

When we provide an Information Statement about your property (for example, to a potential purchaser), it will state that the property is in a pressure sewer area and that special connection conditions apply to it.

### 13. Costs and charges

- If you are not included in an South Gippsland Water sewer scheme, you
  must pay the full cost associated with connection to the pressure sewer
  system, subject to capacity and availability or augmentations.
- b. You must also meet the annual sewerage service charges which apply to all residential or business properties.



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South Gippsland Water