

**Seventeen Seventy
Low Pressure
Sewerage System
(LPSS)
Owner / Occupant Manual**



Acknowledgement of Country

Gladstone Regional Council would like to acknowledge the traditional custodians of this land, the Bailai, the Gurang, the Gooreng Gooreng and the Taribelang Bunda people.

We pay respect to their Elders past, present and emerging.

Gladstone Regional Council is committed to cultivating a culture of inclusion and connectedness, acknowledging that our communities are richer when diversity is embraced.

PURPOSE

This manual has been prepared for property owners, property owner representatives and occupants of properties which are connected to sewer using pressure systems. It provides important information regarding the operation and maintenance of your on-site pressure sewerage system.

Council strongly recommends that you take a few minutes to familiarise yourself with this manual to understand:

- what is a pressure sewerage system;
- operational and maintenance responsibilities;
- what to do if the alarm sounds; and
- what procedures you need to be put in place if you are going away.

PLEASE NOTE:

This document does not apply if you have not entered into an agreement with Council to maintain your low-pressure sewerage system. If this is the case, the maintenance of the system is entirely the responsibility of the property owner (or property owner representative) to up to the boundary kit. If any maintenance is required, you will need to contact a licensed plumber or electrician, privately, to carry this out on your behalf.

It is strongly recommended that you read this entirety of this manual and thereafter keep it in a safe, readily accessible place for future reference. You should refamiliarise yourself with it each year. If the property is rented, or available for short-term accommodation, then it should be provided to the occupant/s along with instructions for them to familiarise themselves with the manual. If required, additional copies of this manual are available from Council's website.

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WHY INSTALL A PRESSURE SEWERAGE SYSTEM?

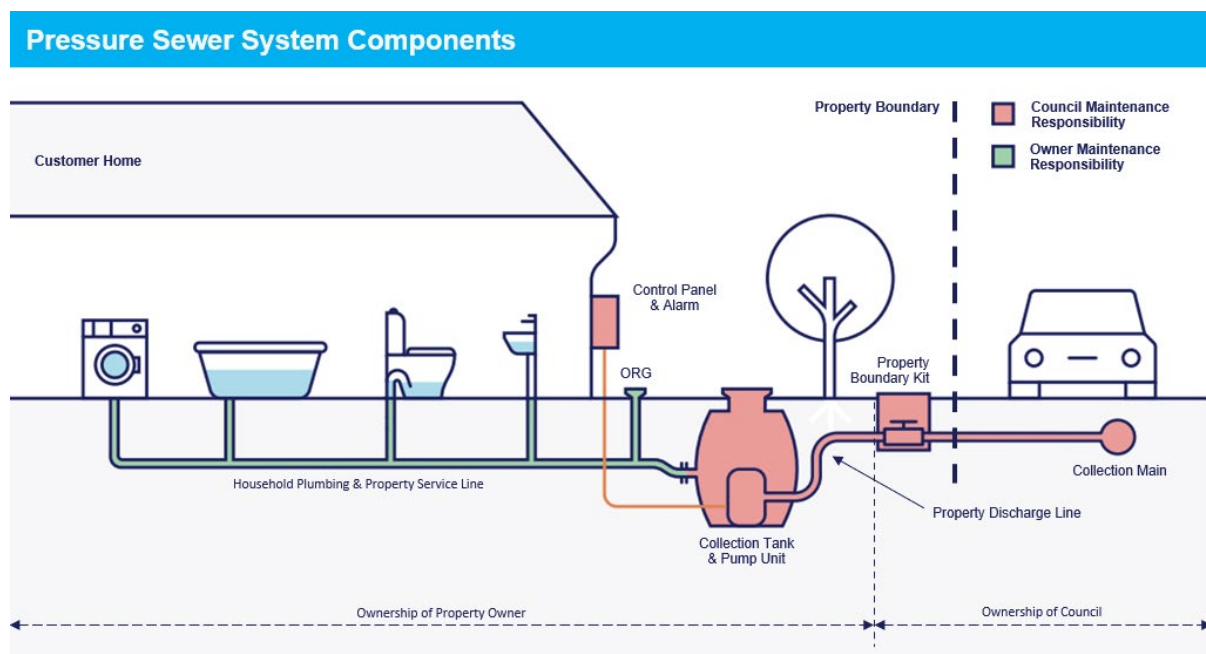
A pressure sewerage system is an economical and environmentally friendly way of collecting, transporting and disposing of wastewater from households. They are often used in areas where the landscape is either very hilly or very flat, in areas which regularly flood or have high water tables, or where it is impractical to install other types of sewerage systems such as gravity sewerage systems. They can also be installed with very low impact on the amenity of the area.

WHAT IS A PRESSURE SEWERAGE SYSTEM?

A pressure sewerage system consists of a network of fully sealed pipes into which pump units on each connected property discharge household wastewater.

These pump units process and grind up household wastewater into a liquid and transfer it to a collection main (located in the road reserve) which forms part of the overall sewerage network and ultimately transfers the wastewater to the wastewater treatment facility.

After installation, the only visible components of the system will be the collection tank lid, pump control panel and boundary kit lid (see below general arrangement).



PRESSURE SEWERAGE SYSTEM COMPONENTS

The pressure sewerage system on your property is made up of the following key elements:

1. Collection Tank and Pump Unit

The collection tank and pump unit are installed underground with only the top of the collection tank (or lid) visible. This includes a small grinder pump, polyethylene storage tank and level sensor to control the operation of the pump based on volume of wastewater.

2. Property Discharge Line

The property discharge line is a small diameter pipe (typical diameter of 40 mm) which connects the property's pump unit to the pressure sewer main outside the property via the boundary kit.

3. Property Boundary Kit

The boundary kit is a collection of fittings and valves that ensures wastewater which is already in the pressure sewerage system cannot re-enter your property and provides the ability for your pump unit to be isolated from the network in the event of an emergency or for planned maintenance.

4. Control Panel & Alarm

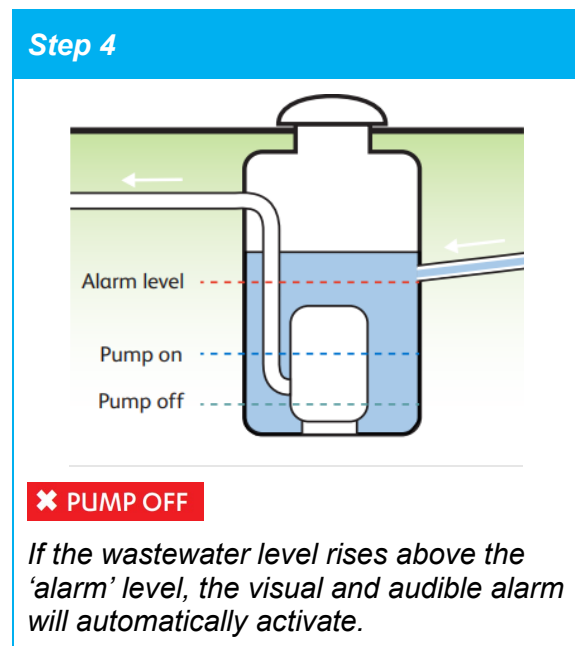
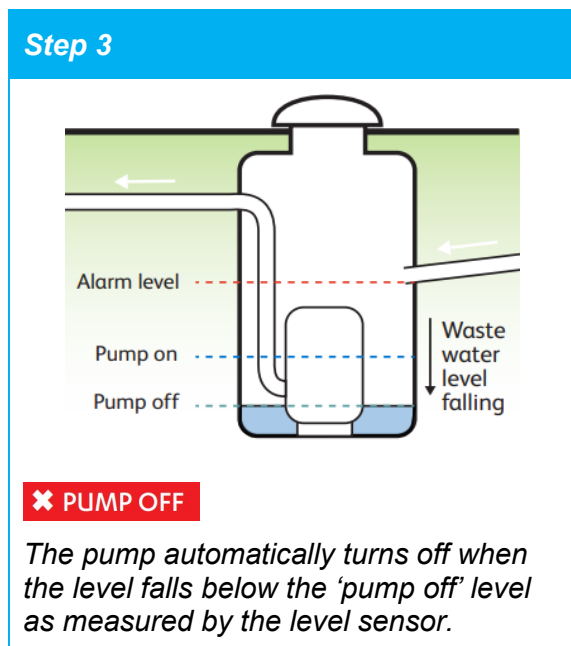
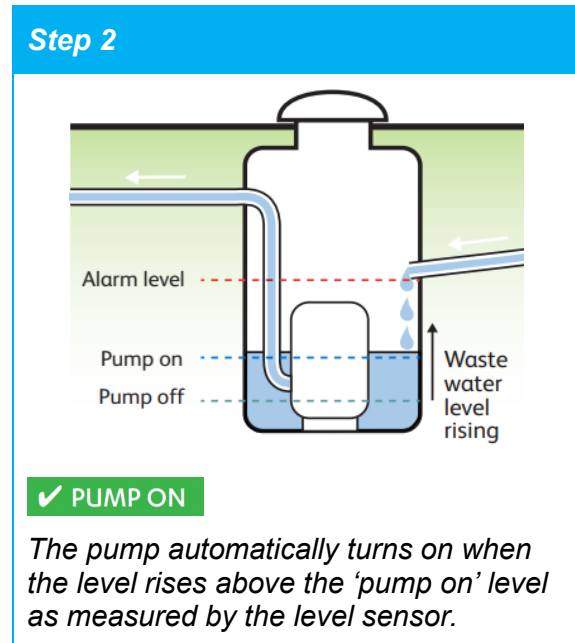
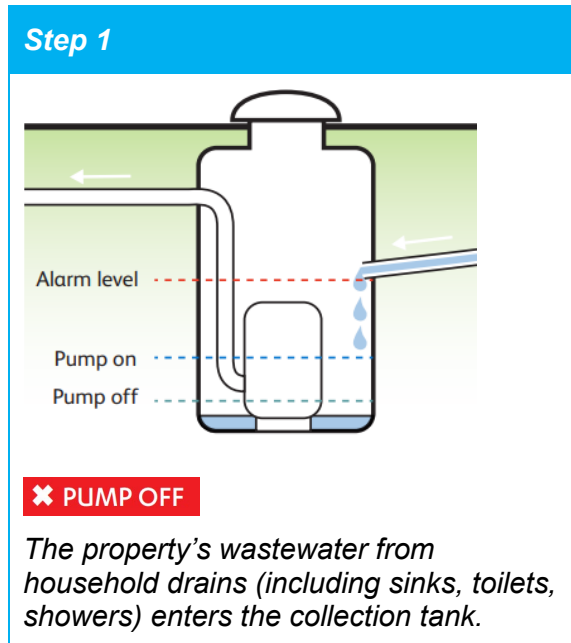
The control panel is a small box typically mounted to an external wall of your house and contains all the electrical controls for the pump unit including both the audible and visual alarms. This unit is powered via the property's electrical switchboard.

As highlighted previously:

- a) the property owner will retain ownership of all components of the pressure sewerage system located on the property to the boundary kit and will be responsible for all running costs (i.e. electricity);
- b) Council (or authorised service provider/s) will be responsible for the maintenance (including repair / replacement) of the pressure sewerage system located on the property to the collection tank inlet coupling.

HOW DOES THE PRESSURE SEWERAGE SYSTEM OPERATE?

The primary component of the pressure sewerage system is the collection tank and pumping unit which is installed on your property. The pump unit works in the following way:



As the on-property pressure sewerage system operates as a fully sealed unit and is predominantly installed underground, there will be negligible noise and odour as a result of normal operation.

OPERATION AND MAINTENANCE RESPONSIBILITIES

The operation and maintenance of the pressure sewerage system is a joint responsibility shared between Council, individual property owners (or representative) and occupants in instances where the property is rented or available for short-term accommodation.

COUNCIL RESPONSIBILITIES

The responsibilities of Council relating to the operation and maintenance of the pressure sewerage system is as follows:

- preventative maintenance inspections of on-property pressure sewerage system infrastructure in accordance with manufacturer guidelines and industry standard practice;
- preventative, corrective and reactive maintenance of off-property pressure sewerage system infrastructure in accordance with manufacturer guidelines and industry standard practice;
 - o advance notification of any planned maintenance activities will be provided to property owners (or nominated representative and/or occupants if there will be a disruption your service and will include an expected timeframe for works to be completed
- reactive maintenance including repair and/or replacement of on-property pressure sewerage system infrastructure as a result of normal operation and/or general wear and tear including costs; and
- maintain a register of on-property pressure sewerage system infrastructure (e.g. pump unit serial number).

Council will be responsible for all costs associated with planned, corrective and reactive maintenance including any repairs or replacements which result from the normal operation of the system and in accordance with the service agreement.

PROPERTY OWNER / OCCUPANT RESPONSIBILITIES

The responsibilities of the property owner relating to the operation and maintenance of the pressure sewerage system is as follows:

- ownership of on-property pressure sewerage system infrastructure to the property boundary kit;
- maintenance of the electrical connection to the control panel of the pump unit on the property;
- connection of internal sanitary plumbing to the collection tank (this excludes any roof or property stormwater drainage which must be discharged to the stormwater network);
- maintenance of the internal sanitary plumbing on the property to the inlet of the collection tank;
- payment of annual sewer charges;
- providing tenants / occupants with a copy of this manual; and
- act in accordance with the formal signed service agreement with Council.

Council recognises that the property owner will not always be the primary occupant of the property and as such the following identifies the responsibilities of the property occupant relating to the operation and maintenance of the pressure sewerage system (unless otherwise determined by the terms of a lease agreement between the owner and tenant/s):

- provision of electrical connection to the control panel of the pump unit on the property (including payment of associated electricity costs) and only disconnect in emergency scenarios requiring evacuation from the property (e.g. cyclone, bushfire) or when otherwise directed;
- ensure and maintain safe access at all times to the property for the purpose of maintenance (including any required repairs / replacements);

- ensure and maintain safe access at all times to the collection tank and pump unit, control panel, property discharge line and property boundary kit for the purpose of maintenance (including any required repairs / replacements);
- immediate notification to Council if the pump unit alarms are activated or of any other problems with the performance of the pressure sewerage system;
- ensure that none of the prohibited materials identified in this manual are discharged into the pressure sewerage system;
- flushing the pressure sewerage system if it will become inactive for an extended period of time (e.g. holidays, weekends away);
- ensure the venting into the collection tank remains clear at all times to maintain proper function;
- familiarise yourself with the location of all on-property pressure sewerage system infrastructure including property discharge line to avoid damage when undertaken any property maintenance or modifications;
- **do not** attempt to repair any part of the on-property pressure sewerage system yourself as this is the responsibility of Council, and any actions otherwise may result in void of any warranties attached to the system or termination of any agreement with Council;
- **do not** enter the collection tank or remove the lid without prior direction from Council as this is considered a confined space and hazardous working environment that could be dangerous without the appropriate training and equipment; and
- **do not** touch the valves in the property boundary kit as these are owned, operated and maintained by Council.

If a fault, defect or overflow occurs within the pressure sewerage system that is the result of the property owner and/or occupant failing to adhere to the responsibilities as set out above the costs associated will be borne by the property owner in accordance with the service agreement.

If there are any doubts as to responsibilities regarding ownership, operation and maintenance of the pressure sewerage system please contact Council on (07) 4970 0700.

PROHIBITED ITEMS

Although your on-property pressure sewerage system includes a grinder pump with the ability to reduce domestic wastewater to a finely ground slurry, it is very important that you do not allow any of the below prohibited items to enter your household drains (sinks, toilets, showers etc.) as this may result in blockages and/or damage to the system.

- | | |
|-----------------------------------|--|
| - clothing / underwear / socks | - nappies, baby wipes, flushable wipes |
| - coffee grinds | - paints (water or oil based) |
| - cooking oils or fats | - petrol, diesel, coolant |
| - cotton tips / buds | - plastic objects |
| - explosives, flammable materials | - pool or spa water |
| - food packaging / wrappers | - rain or stormwater |
| - glass | - salt water |
| - gravel / sand / rocks | - sanitary napkins, tampons, condoms |
| - kitty litter | - seafood shells |
| - lubricating oils and/or grease | - strong and/or non-domestic chemicals |
| - metal or metal filings | - wooden objects |

If Council identifies the primary cause of any failures and/or overflows as a result of any of the above prohibited items entering the pressure sewerage system, the property owner (in accordance with the service agreement with Council) will be deemed responsible and will be held liable for all costs associated.

If there are items outside of the above list that you are unsure as to whether they are permitted into the pressure sewerage system, please call Council on (07) 4970 0700. As a general rule and consistent with any sewerage system, if it is not 'pee, poo or (toilet) paper' it should not be discharged into your household sanitary plumbing system.

ALARM TROUBLESHOOTING

There are multiple reasons as to why your audible and/or visual alarm may be activated and should not be a cause for immediate concern provided that certain precautions are taken until the fault can be assessed and repaired.

The following table provides you with step-by-step instructions to deal with an alarm activation.

SYMPTOM	ACTION	HOW-TO
Audible Alarm Activates	Turn Off Audible Alarm	The audible alarm can be deactivated by pressing the button on the control panel OR will automatically turn off after a period of time (regardless of whether the button on the control panel is pressed).
Visual Alarm Activates	Report Alarm Activation to Council	The flashing light will only turn off if Council (or representative) resets it and/or the problem which triggered the alarm has been resolved (e.g. minor blockage cleared by pump). Council can be contacted via (07) 4970 0700.
Power Outage	Minimise Wastewater Generation and Report to Council	If the alarm activates following a power outage, please wait one (1) hour before contacting us. Minimise the generation of wastewater as much as possible (e.g. delay showers, emptying baths, clothes washing) to reduce the risk of overflow. Once the power is restored, the pump will recommence pumping as required but may take an hour or longer for the wastewater level in the collection tank to drop below the alarm level or pump stop level (this will be due to a number of other pumps in the system trying to discharge at the same time). The alarm may sound when the power is restored due to the level of wastewater in the collection tank building up above the 'alarm level' as measured by the level sensor.
Alarm Frequently Sounding / Turns On and Off Repeatedly	Investigate then Report to Council	Identify if there is any sudden discharge (such as from simultaneous use of appliances, plumbing fixtures) and see whether the alarm is in response to this or a similar event. If the alarm sounds during or after rainfall, rainwater may be entering the tank through non-compliant connections or faults in internal plumbing. If the problem continues to occur with insufficient evidence of the cause, contact Council via (07) 4970 0700.
Neighbouring Property Alarm Activates	Investigate then Report to Council	If your neighbours audible and/or visual alarm activates and you suspect they may not be home, contact Council via (07) 4970 0700 to inspect the property. The audible alarm will automatically turn off after a period of time (regardless of whether the button on the control panel is pressed).

In all instances of alarm activation, it is strongly recommended by Council that you minimise or cease wastewater generation until such time that the problem which triggered the alarm has been resolved (whether automatically through normal operation of the system or by Council).

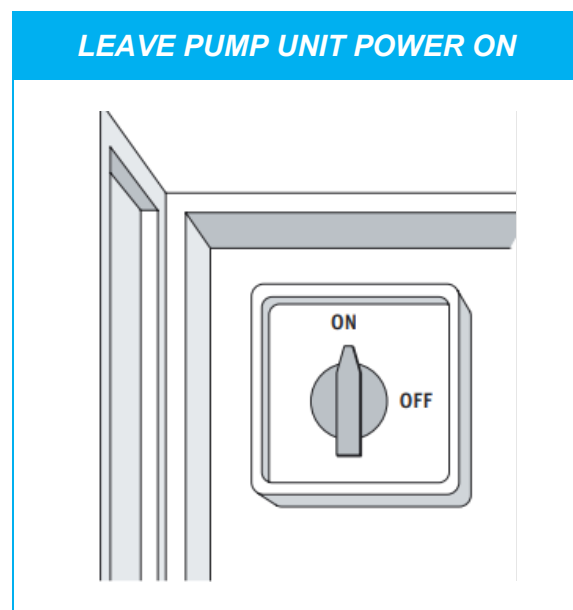
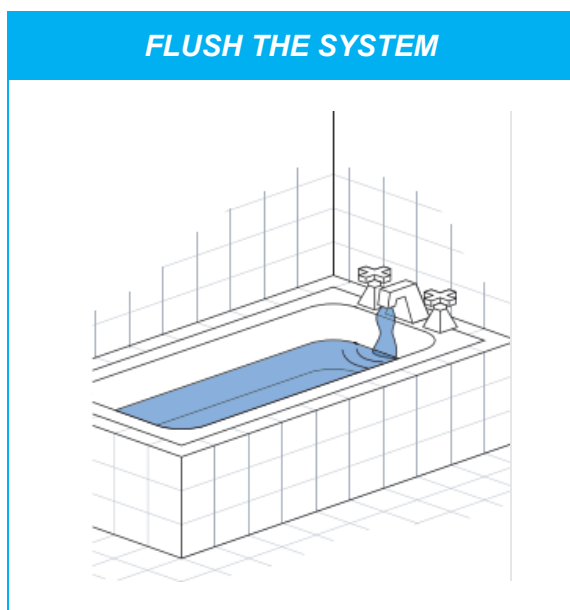
PRECAUTIONS FOR GOING ON HOLIDAY / VACATED PROPERTY

If going on holiday (e.g. for longer than a couple of days) or if you the property is going to be vacated for an extended period of time, it is recommended that the system be flushed to prevent potential odour problems.

This can be done by discharging clean water into the household drains until the pump activates and runs for approximately thirty (30) seconds through the filling and emptying of a bathtub, running of a shower or usage of a washing machine.

In addition to the flushing of the system with clean water, it is strongly recommended that the electrical supply to the pump unit is maintained regardless as this will ensure that the pump can still operate and prevent an overflow in the event of an internal fixture leaking or appliances within the home discharging water into the collection tank unintentionally.

Alternatively, the water supply to the property should be turned off at the meter.



If Council receives complaints from surrounding properties regarding odours and it is found that the system has not been flushed as specified above and is assessed to be the primary cause of the odour, the property owner (in accordance with the service agreement with Council) will be deemed responsible and will be held liable for all costs associated.

ADDITIONAL INFORMATION

The following information has been provided to provide additional guidance relating to the on-property pressure sewerage systems.

LANDSCAPING AND GARDENS

It is important that Council has clear and safe access to the on-property pressure sewerage system at all times in order to carry out preventative and reactive maintenance as required.

Council will permit landscaping over the **property discharge line** only, however if the line requires maintenance, repair or replacement this may result in the need to remove landscaping as required. Council will endeavour to minimise disruption to the landscaping with the associated costs of reinstatement the responsibility of the property owner.

Council prohibits any landscaping that will result in the **collection tank and pump unit** becoming buried, paved / concreted over, permanently covered in any other matter or placed

into a low-lying depression where surface water may collect. It is advised that a minimum one (1) meter clearance zone is to be provided around the collection tank at all times to ensure sufficient working space for maintenance and/or emergency repairs (as required). If the collection tank and/or pump unit requires maintenance or repair and there is insufficient access, Council may:

- refuse to carry out repairs until the property owner uncovers the collection tank; or
- pass on any costs incurred associated with achieving safe and clear access to the property owner.

ROOF AND RAIN WATER

The discharge of rainwater / stormwater from your property to the pressure sewerage system is prohibited. This is due to the pressure sewerage system, in addition to the downstream network (including the treatment plant), not being designed to accommodate stormwater which should never be plumbed into any sewerage system in accordance with the relevant standards.

If rainwater were to enter the pressure sewerage system, the additional inflow may exceed the capacity of the pump unit and cause the alarm to activate and/or result in an overflow.

POOLS AND SPAS

The connection of swimming pools and spas (including backwash water) to the pressure sewerage system is prohibited. This is due to the typically large amounts of water requiring disposal which in some instances the rate of discharge may exceed the capacity of the pump unit and cause the alarm to activate and/or result in an overflow.

ADDITIONAL OCCUPANTS OR VISITORS

An increase in the volume of wastewater generated as a result of increased wastewater generation through increased activity within the residence or a large number of visitors staying at the property (e.g. during school holidays) will not impact the pressure sewerage system.

However, the pump unit might have to pump more frequently.



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