



clarenc e
V A L L E Y C O U N C I L

Pressure Sewer Manual

Emergency Council Contacts

Office Hours – 6643 0200

After Hours – 6626 6858

General Enquires – 6643 0200

It is strongly recommended that you read this manual and thereafter keep it in a safe, but readily accessible place. You should re-familiarise yourself with it each year. If the property is rented then the manual should be provided to the tenant along with an instruction for them to familiarise themselves with the document. Additional copies of the document are available from Council's website.

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About your Pressure Sewerage System

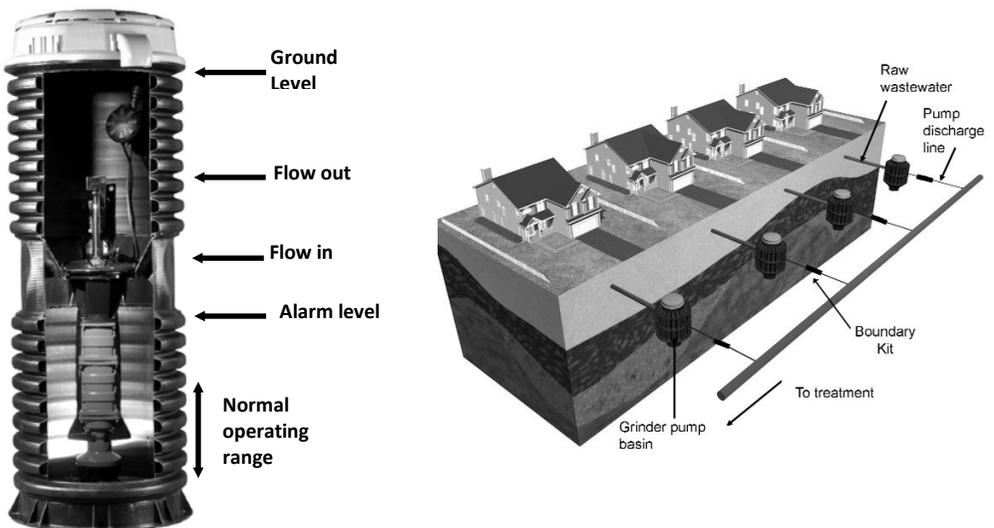
Your property's sewerage service is provided by a pressure sewerage system. Pressure sewer is utilized on properties in certain areas because of the unsuitability and/or cost of a conventional sewer system. These systems have been in operation for around 30 years overseas and should require little more thought or effort on your part than the need to contact Council if the alarm sounds. This should not be very often and there should be no preventative maintenance required.

This manual has been put together to assist you on how to operate your pressure sewerage system and what to do if things go wrong.

The pumping station on each property operates automatically, turning itself on and off based upon the level of the sewerage in the storage vessel. You as the resident need do nothing in relation to the normal operation of the pumping unit.

There is no specific cost for normal repairs carried out by Council, as the units are owned by Council and repairs covered in your sewerage rates. **However Council may charge property owners for repairing damage if the pump or pipeline is not operated in accordance with this manual.**

The diagrams below and over the page will help give you a visual appreciation of how pressure sewer works.



The Golden Rules

There are a few golden rules for operating pressure sewerage systems that you need to be aware of, and comply with at all times. These are:

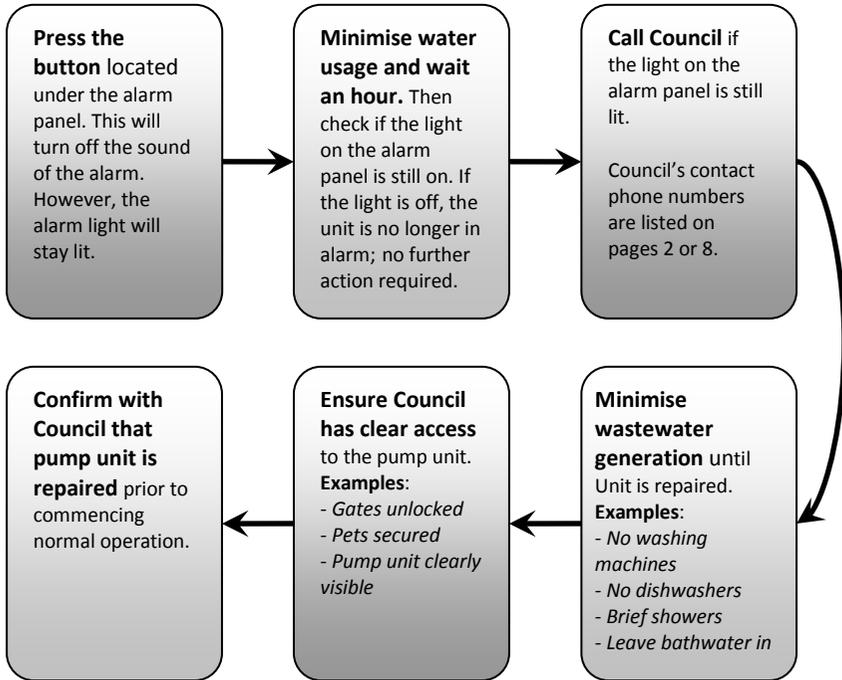
1. **The pressure unit and control panel are Council assets - do not attempt to repair the unit yourself.** Council will maintain your unit on your behalf (as part of your sewer service).
2. Do not go into the pumping unit; do not even take the lid off. The inside of the pumping unit may contain gases which could be lethal.
3. Do not discharge any of the prohibited substances set out below to your household sewer drains.
4. Do not turn off the power supply to the pumps except under emergency situations or in response to a broken pressure sewerage pipe.
5. Do not connect your roof or yard drains into the pressure sewerage system, as the system is not designed to accommodate stormwater flows.
6. Do not touch the valves in the Boundary Kit.
7. When going on holidays, flush the pressure sewerage system.
8. If evacuating in an emergency such as a flood, turn off all power, including the power to the pumping unit.
9. When in doubt about your pressure sewerage system ask Council.

Items that should not be put down the sewer

As was the case with your septic system, the following are just some of the substances that should never be discharged into your pressure sewerage system:

- *Cooking oils or fats*
- *Glass*
- *Metal*
- *Gravel/Sand etc*
- *Seafood Shells*
- *Aquarium Gravel*
- *Nappies*
- *Sanitary Napkin / Tampons*
- *Kitty Litter*
- *Explosives*
- *Plastic Objects*
- *Socks*
- *Rags*
- *Clothes*
- *Flammable Materials*
- *Lubricating Oils / Grease*
- *Strong Chemicals*
- *Petrol*
- *Diesel*
- *Paints (water or oil based)*
- *Salt water*
- *storm water,*
- *Chemicals other than those used in normal domestic products (dishwasher liquid, detergents, hair dyes, etc).*

What to do if the alarm sounds?



You can still use your sewerage system if the alarm sounds as the pumping unit still has about a full day's of storage above the level where the alarm will sound. Use of this emergency storage is one of the main advantages of pressure sewerage systems over other sewerage systems.

If a breakdown occurs after normal business hours, the repairs will normally be carried out the next morning as the pressure system has this emergency storage capability. However, you should report it immediately.

Sometimes the alarm sounds immediately after a power failure. If so, wait for one hour before calling Council. In these instances the alarm sounds due to the fact that the storage volume has risen during the power outage. Therefore there could be a number of units trying to pump at the same time, (...continued over)

What to do if the alarm sounds? (cont.)

but the system will limit to pump at the same time, but the system will limit the number of units that can pump at the same time. The system will therefore take a short time to clear.

Check whether sewage is discharging from the property's overflow relief gully. When you are speaking to the Council Operator please advise them whether it is just the alarm sounding or if there are other problems as well. Normally, out of hours repairs will be undertaken the next morning, for the following reasons.

- To minimise inconvenience to residents and their neighbours,
- To minimise any potential damage to householder's property (particularly the landscaping) if the alarm occurs at night, and
- It keeps overall system operational costs down by avoiding costly after hours call outs and this helps Council to keep sewerage rates lower.

However, it may be necessary to have repairs carried out immediately. An example of when urgent repairs would be required is when there is sewage flowing from the property's overflow relief gully.

Council's Emergency Contact Numbers:

Time	Phone No.
Monday to Friday 8:30am – 5:00pm	6643 0200
Outside Business Hours	6626 6858

Do not access any part of the pressure sewer system under any circumstances!

What if a pipeline bursts?

All properties have previously been sent a Plan of the layout of pressure sewer pipe work on the property. It is important you familiarise yourself with the location of the property delivery line, and avoid damage to the pipeline and pumping station. If you would like another copy of your property's pipe work, please contact Council on 6643 0200.

The pipeline from the pumping unit to Council's sewerage reticulation mains is:

- Polyethylene Class 16 (flexible)
- Black Only in Colour (the pipe should have no coloured stripe)
- Buried at a depth of around 450mm
- Under Pressure

Being a sealed pipe system there are no (or few) joints, so it is unlikely the pipe will be affected by tree roots or ground movement. The most likely cause of pipe breaks will be people accidentally digging up the main. **Always ensure you are aware of where the pipe is before commencing any digging**, and in the unlikely event that the line should break it will behave like a broken water main. If this occurs then you should take the following steps (see over):

What if a pipeline bursts? (cont.)

Step	Action
1	<p>Try and determine if the broken pipe is a water pipe or a sewer pipe. Guides as to whether the broken pipe is a sewer main are:</p> <ul style="list-style-type: none">• Smell• Colour of the Pipe• Location of the pipe (is it where you expected the sewer pipe to be?)• Pulsing of flows, as the sewerage is pumped generally in short bursts. A water pipe will flow fairly constantly until isolated.• If the above are inconclusive turn off the household water meter or the sewer pump and see if this makes a difference.
2	<p>If you believe it is a broken sewer pipeline, turn off the power to the pumps, in the household electrical switchboard. These pumps have a separate circuit and will not impact the remainder of the house if they are turned off.</p>
3	<p>Report the broken pipe to Council and tell them you have switched off the pumps.</p>
4	<p>Minimise the amount of wastewater discharged into the sewerage system, until repairs are carried out.</p>
5	<p>Recommence normal operation, once Council has concluded their repairs to the pipe and the alarm light has gone out.</p>

I'm going on holidays

When you are going on holidays, even a weekend away (and there is no one at home) then the pump unit needs to be flushed out before going away. This is to avoid any potential for odour generation. It is suggested:

- You run clean water into the pumping unit until the pump activates and runs for about 30 seconds. Filling the bathtub and discharging it will achieve such a flush.
- Do not turn off the power to the pumping unit even if you are turning off the power to the rest of the house. This is in case there are any leaking taps which might fill the storage vessel.

Where residents fail to clean their systems before going on holidays and Council has to carry out a flush of the units in response to complaints from surrounding neighbours, Council may choose to invoice the resident for the costs to carry out that work.

Landscaping around your pump unit

Landscaping over the property discharge line is permitted, provided the collection tank cover remains accessible for service, and is not covered or put into a low lying depression.

The pumping unit may be covered by bark or pot plants that can be moved by the resident when repairs are required. The unit is not to be buried, nor paved over, nor concreted over, nor permanently covered in any other manner. Council may choose to impose fines for this covering of the asset under Section 635 of the Local Government Act (1993) where it has been covered in a more permanent nature.

If the property discharge line requires repairs, Council will need to access the line. If landscaping needs to be removed, Council will endeavour to minimise disruption to the garden.

Mowing around your pump unit

The lid of the pressure pump unit is plastic and can be damaged by mowers. If Council is required to replace the pump lid as a result of damage from mowing, the cost of replacement may be recovered from the property owner.

During Floods

If there is going to be a flood and your property is subject to some level of inundation, residents will need to make a decision as to whether to stay in the home or to evacuate.

For properties with overflow relief gullies susceptible to either local ponding flood or river flood events, Council required the installation of an overflow relief gully cap that prevents stormwater and other foreign materials from entering into the sewer while also lifts under pressure to accommodate surge relief. Should the property not have an appropriate cap Council will no doubt be alerted to the fact by high level flow alarms coinciding with rainfall events. Council will then either require the property owner to install the cap in a given period of time.

If such a cap is installed then the pressure sewer system should continue to operate as normal during flood events.

Special Requirements for Spas and Swimming Pools

Special provisions need to be made to accommodate the high flows from Spas and Swimming Pool backwashing into Pressure Sewerage Systems:

Spas

Sudden discharges from Spas could either trigger the pumping unit high level alarm or, in a worse case scenario, result in an overflow at the residential overflow relief gully. Council may therefore impose special requirements on properties which are proposing the installation of spas, which may include time delays on alarms, provision of a non-standard collection/pumping unit with additional storage in the collection tank or a buffering tank.

The special requirements for spas will be determined on a case by case basis. Spa owners within pressure sewerage areas need to contact Council's Water Cycle section, who will advise on the correct way to discharge the spa into the collection tank. Formal approval will also need to be given to any agreed format of discharge and further approval will be required to vary this at any future stage.

Swimming Pools

Council requires that any property owner within a pressure sewerage system area currently owning a swimming pool (or installing a swimming pool in the future) regulate their pool backwash volumes and rates so as not to exceed the capacity of the pumping unit and to avoid alarms being needlessly generated. The same provisions shall apply to persons wanting to drain their swimming pools.

There are a number of ways to drain or backwash pools without causing an alarm, and in general these will be dealt with on a case by case basis. For any proposed pools, the agreed format of discharge will be covered by a condition of consent for the dwelling or pool.

For existing pools, a format of discharge will be agreed with the property owner as part of the “on property” installation works. Pool owners requiring further information should contact Council’s Water Cycle section.

Cost of special modifications for spas and swimming pools

The costs for any additional equipment over and above the basic collection/pumping unit that is required to be installed to accommodate large sudden discharges from spas and/or swimming pools shall be met by the property owner. Owners proposing new spas or swimming pools are advised to contact Council prior to installation, to ensure that the rate of discharge will not cause any problems with the operation of the pressure sewerage systems.

Other Common Questions:

What if there are wet spots around the unit or pipeline?

The pumping unit and discharge pipe are totally sealed. If you notice wet spots around the unit or pipe and there has not been any recent rain, contact Council.

What if the unit becomes smelly?

When operating normally there should be no noticeable odours coming from the unit. If it gets smelly, the unit may need flushing. Just run clean water down your kitchen, laundry or bathroom sink for about 10 minutes. If the unit remains smelly, contact Council.

Why does the alarm keep going off when it rains?

It means rainwater may be getting into your system and over loading it. Contact your plumber to investigate.

What do I do if my neighbours alarm goes off when they're not home?

Call Council immediately and report the problem. Do not investigate the problem yourself. Inform your neighbours of any action you have taken.

What happens when there is a power failure?

If there is a power failure, reduce water use where possible. The alarm may activate until the unit clears itself. If the alarm remains on for over an hour after the power has been restored, contact Council.

Council access to your unit

Unless you have a secure backyard, you do not have to be home when repairs are carried out on the pump unit if you have read and followed the information below. *Any residents with secured properties must be present to allow the Council repair officers access to the yard at the agreed time, based upon arrangements made when the resident calls to notify Council of the system failure.*

When Council comes to repair the unit it must be accessible. If the Council officers are unable to locate the unit because it has been covered, Council may refuse to carry out repairs until the owner exposes the unit, and it may charge the resident a service call, even if the unit is not repaired.

At minimum, Council may pass on to the resident any costs for it to locate and uncover the pumping unit.

If pets are not secured Council officers may refuse to enter the property and carry out any repair works where they cannot contact the resident to secure the pets. In these instances Council will not be held liable for any repairs not being carried out and it may charge a service call invoice to the resident even if the unit is not repaired.

Access from any gates to the pumping unit for a trolley device will be required. The officer will need to place a lifting frame above the pumping station to lift out the pump and then carry the pumps away to their vehicle, and thus they need access for the trolley. Any resident that closes off this access way will be responsible for any additional costs incurred particularly if additional equipment, such as cranes etc are required.

Council's liability

Council will not be held liable for any overflows that may occur on the property where the resident has failed to notify Council. Residents will be liable for any flows that happen off their property and may be prosecuted for environmental breaches if they have failed to notify Council. A record of all notifications will be maintained by Council.



For More Information...

Council's Pressure Sewer Policy can be found at
www.clarence.nsw.gov.au

For further enquiries phone 6643 0200.