

19 July 2022

Vacuum wastewater system operation during high rainfall

Dear Customer

We apologise for the disruptions to vacuum wastewater services during the multiple extended rainfall events we experienced between February and July this year.

There are some short-term and long-term actions we are investigating that should improve the reliability of the vacuum wastewater system. There are also things you can do to help us operate a reliable system.

Wastewater systems are designed to cater for sewer flows only. We have noticed that during high rainfall, the system can become inundated by rainwater. This can happen because of the following:

- Stormwater pipes are connected to the wastewater system
- Localised flooding is directed into vacuum pots or gullies
- Swimming pools are emptied into the wastewater system

We ask that you refrain from emptying swimming pools into the wastewater system during rainfall, and not to direct floodwater to the vacuum pots or gullies. If you have stormwater pipes or drains connected to the wastewater system, these need to be disconnected.

We also ask that you ensure there is clear access to the Sydney Water vacuum pots so that maintenance can be attended to efficiently to minimise disruption to you and your neighbours.

By following these requirements, it will help prevent the system failing, which in turn prevents wastewater overflows to the environment and local waterways.

Please see the enclosed factsheet for more information. Alternatively, if you any questions, you can contact 13 20 92 for more information. Remember to report any faults on the system to our 24/7 emergency line 13 20 90.

Yours sincerely



Shaun Gardner
Operations Leader - South

Protecting the vacuum wastewater system on your property

Sydney Water operates and maintains over 25,000 km of pipes as part of its wastewater system.

Vacuum wastewater systems are used to service nearly 3,000 properties in 11 suburbs of Sydney and the Illawarra.

Vacuum wastewater systems

We use vacuum wastewater systems in flat or low lying areas where it is not possible to have a conventional gravity wastewater system.

We have been operating vacuum wastewater systems since the mid-1970s. Our vacuum systems are located in:

- Bonnet Bay
- Botany
- Bundeena
- Greenhills Beach
- Haywards Bay
- Kurnell
- Minnamurra
- Palm Beach
- Penrith
- Sylvania Waters
- Woronora

How vacuum wastewater systems work

Vacuum systems transport wastewater from multiple properties. The private wastewater pipes from each property are connected to a vacuum pot located on Council land or in the front or back yard of one of the properties.

When the pot fills to a certain level, a valve inside the pot opens and the wastewater is sucked by vacuum into plastic airtight pipes. The wastewater then moves along our network of pipes in the street to a specially designed pumping station, which is pumped to the nearest point in our gravity wastewater system.

We own and maintain the vacuum system equipment for eligible properties. This equipment includes:

- a vacuum pot that typically services two to six properties
- a valve chamber that transfers wastewater from the pot to our wastewater system.

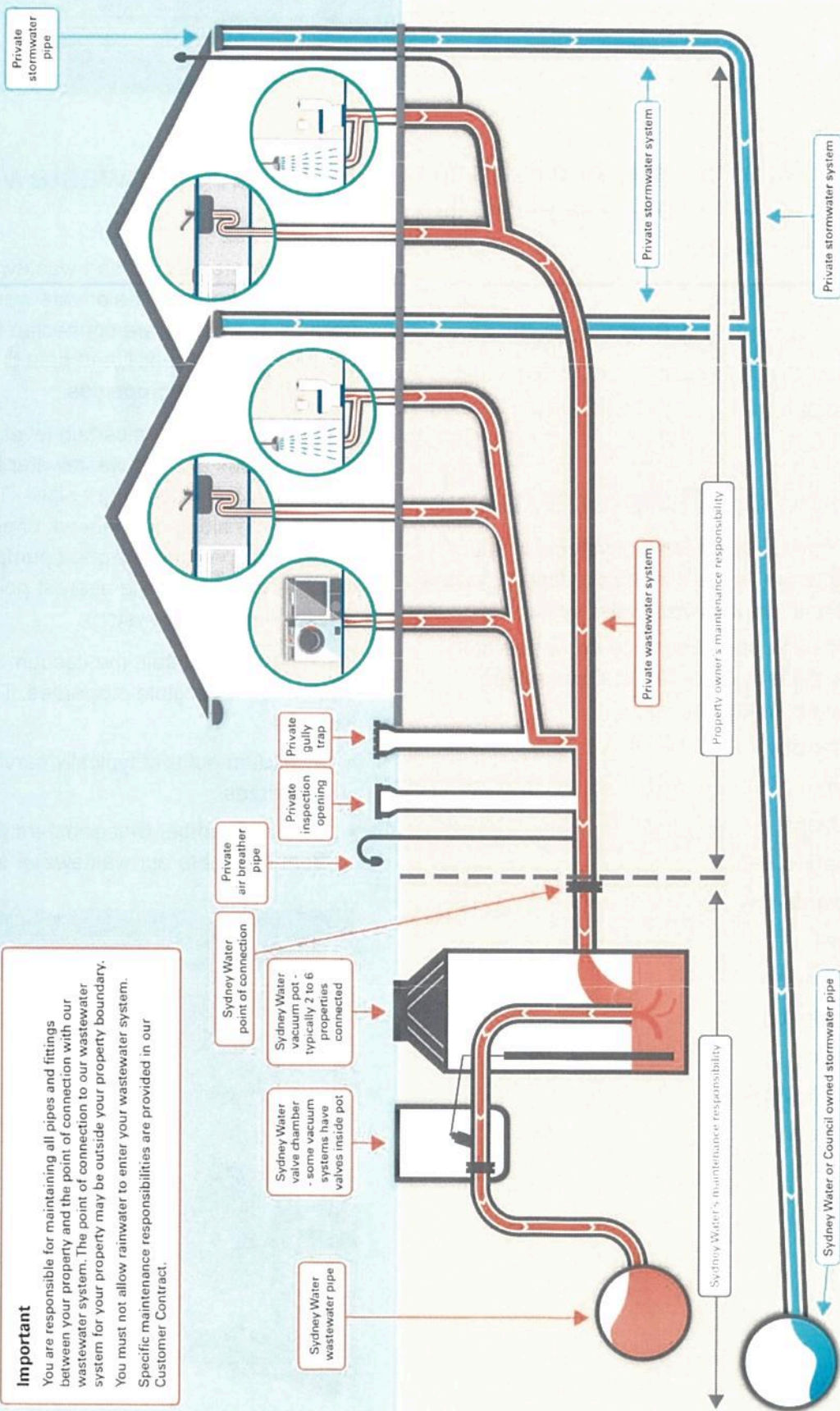


It's important to keep the vacuum pot and valve chamber lids accessible and clear for maintenance.

Vacuum Wastewater System Maintenance responsibilities

Important

You are responsible for maintaining all pipes and fittings between your property and the point of connection with our wastewater system. The point of connection to our wastewater system for your property may be outside your property boundary. You must not allow rainwater to enter your wastewater system. Specific maintenance responsibilities are provided in our Customer Contract.



Wastewater and stormwater systems

Wastewater and stormwater are managed using two separate pipes and plumbing systems.

Wastewater is all the water that Sydney Water collects from your kitchen, laundry, bathroom and toilet.

Stormwater is rainwater that runs from your roof and over land into stormwater drains, which flows into local waterways. In most Sydney suburbs, stormwater street gutters are managed by local Councils.

When stormwater enters our wastewater pipes, the vacuum system can overload and fail. This can cause wastewater to overflow into local waterways, as well as on your property or inside your house.

Protecting the vacuum equipment and wastewater system

Putting the wrong things down your toilet, sink or outdoor drain can cause problems in your private plumbing system, our wastewater pipes or the vacuum system equipment on your property.

They can damage the valve in the vacuum pot and block your pipes or our vacuum system, leading to a costly plumbing bill.

Blocked pipes can also cause wastewater overflows on your property or other neighbours connected to the vacuum pot.

Please never flush any of these items down the toilet or put them down the drain - dispose of them in the rubbish instead:

- ✗ wet wipes and tissues
- ✗ cotton tips
- ✗ nappies
- ✗ sanitary items
- ✗ cigarette butts
- ✗ food scraps
- ✗ grease, oil and fatty liquids (pour them into a container before putting them in the bin).

Vacuum equipment maintenance, repairs and tips

Vacuum pots and valve chambers are an important asset and are part of Sydney Water's vacuum wastewater system equipment, located on private properties and public land.

We may need to access the vacuum pot or valve chamber on your property to carry out repairs and regular maintenance. If we are unable to access our vacuum equipment on your property, you may have to pay for any required modifications.

How you can help

- **Do not bury the lids** - when landscaping around the vacuum pot and valve chamber on your property, please ensure the surrounding area is level or slightly below the lid surface. Changes to ground levels and surfaces create difficulties for our crews to maintain and repair fittings inside our pot or chamber.
- **Do not cover the lids** – please keep the vacuum pot and valve chamber lids, as well as the surrounding area, free of obstacles so we can safely access our equipment to carry out repairs and maintenance. It's important that the lids are kept clear and not covered with structures, building materials, landscaping, paving, pots, plants or garden ornaments.
- **Direct stormwater flows away from the pot** - ensure that stormwater is not directed to the top of the vacuum pot or valve chamber when landscaping around it. As the vacuum wastewater system is not designed to take in stormwater, the extra water may cause an overflow from the pot.
- **Do not transport heavy items over the pot lid** - the vacuum pot and valve chamber lids are safe to walk on, but vehicles must be kept off the lids as they are too heavy and will damage the vacuum equipment.
- **Keep your private wastewater and stormwater pipes separate** – when stormwater enters the wastewater pipes, the vacuum system can overload and fail. This can cause wastewater to overflow on your property or inside your house.

Stormwater pipes, pools and spas

The vacuum wastewater system that services your property is able to accept the normal wastewater flows from your home, but is not designed to cope with stormwater inflow or high flows from swimming pool backwash systems.

It's important that your stormwater pipes are not diverted to the wastewater system, as this may cause an overflow of the vacuum pot. Backwash water from pools and spas must not be connected to the vacuum pot or your private wastewater system unless a separate holding tank is installed to control and slowly release the water flows. The water should progressively drain into your private wastewater pipes at a rate of less than 30 litres per minute.

Vacuum equipment location

Before starting any work on your property, it's important that you and your contractor refer to Sydney Water's plans that show the location of all vacuum wastewater system equipment in the area.

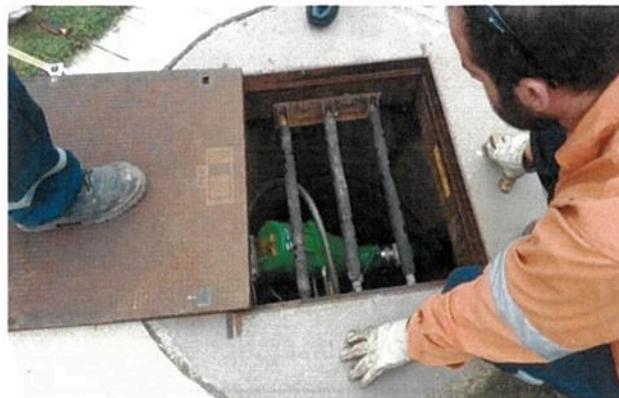
A lot of the equipment is underground, so your plumber, landscaper, builder or electrician needs to be careful of the underground pipes, equipment and electrical cables before they begin and while doing their job.

You or your contractor can also call Dial Before You Dig on 1100 to get details about any plumbing, electrical, gas and telecommunication services your property.

Sydney Water may seek to recover costs from property owners or contractors where their work has damaged our vacuum system assets.

It's important that you let us know if our maintenance crews will have difficulty accessing the vacuum system equipment on your property in an emergency – especially if you have animals or if our equipment is behind locked gates.

To let us know, please call us on **13 20 90** (24 hours).



We own and maintain vacuum system equipment for eligible properties.

Warranties and repair costs

When your property is connected to our wastewater system, you will need to pay a wastewater service charge in your quarterly Sydney Water bill. This charge pays for the operation and maintenance of our vacuum wastewater system that services your property.

We will seek to recover costs from property owners for repairs to the vacuum system if you have:

- deliberately put things into the wastewater system that you have been advised not to
- placed permanent structures or heavy items over the vacuum pot or valve chamber
- interfered with or damaged the vacuum pot, valve chamber and its controls or our wastewater pipes.

Reporting faults

Please contact us if you notice any problems with the vacuum wastewater system that services your property. This includes:

- wastewater overflowing from the vacuum pot
- noise coming from the vacuum pot or valve chamber that continues longer than 30 seconds at a time
- low lying, poorly fitting or damaged vacuum pot or valve chamber lids.

To report faults with the vacuum wastewater system, please call us on 13 20 90 (24 hours).