

Sewer blockages and surcharges

A guide for the licenced drainer
and property owner



ActewAGL
Always.

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1. Sewage surcharge into the property

Emergency procedures by the resident

If sewage flows (surcharges) into a building, house or yard:

- turn off water appliances, washing machines and dishwashers
- do not flush toilets, do not release baths or tubs
- open outside doors
- use towels or rugs to divert water to the outside
- unblock or remove external sewer grates
- remove the cap of external inspection openings
- phone ActewAGL on 13 11 93.

Tell the ActewAGL operator:

- street name, number and suburb
- the drainer's name (if one is already engaged)
- the customer's name
- a contact telephone number
- explain what you can see and what you have done

An ActewAGL emergency team will attend and determine if the blockage is located in Actew's sewage network or the property owner's sanitary drain. If the blockage is in the ACTEW Corporation system, ActewAGL will clear it as soon as possible.

The property owner is responsible to phone a licensed drainer to clear or repair the internal sanitary drains.

Insurance assessment

If damage has resulted from a surcharge or if there is the potential for damage to occur and you have insurance cover, ActewAGL also suggest you call your insurance company and ask for an assessor to visit immediately.

Access pit (manhole) overflows

If there are overflowing Actew Corporation access pits, phone ActewAGL on 13 11 93, explain the location of the access pit (manhole), give the caller's name and phone number and ask for the ActewAGL emergency team to come and clear the main.

2. Sewer blockages

Signs

Signs of a sewer blockage include:

- toilets, basins, baths or tubs are slow to empty
- toilets overflow or fill higher than usual
- gully-traps and disconnecter traps in the yard overflow when the toilet is flushed, when basins or baths are released
- overflowing sewer access pits (manholes) in the verge or backyard
- gurgling noises in the sanitary drains.

Causes

Causes of a sewer blockage include:

- rubbish, children's toys, tennis balls, nappies, clothing, sanitary pads, fat, loam, sand and other wastes that are not intended for the sewer
- tree roots entering the sewer drain pipes through cracks, faulty joints or loose inspection openings
- crushed or flattened pipes that have been damaged by movement of the sub-soil, penetration of rocks or by overloading the ground with retaining walls, building structures and vehicular traffic
- improperly laid pipes or subsidence in the earth, which causes the pipes to hold water or even fall in the wrong direction
- the illegal connection of stormwater sumps or downpipes to the sewer causing them to overflow when it rains.

Where sewer drains can block

Sewer drains can block:

- in any part of the sanitary drain within the property
- in the tie where the sanitary drains connect to the ACTEW branch line
- in the ACTEW branch line (between the main and the tie)
- in the ACTEW sewer main or access pit (manhole)

Blockages may also occur in vents (from bird's nests or from physical damage).

What householders can do to fix blockages in the property's sanitary drains

- Call a licensed drainer. Explain the symptoms of the blockage then ask the drainer to visit and investigate the cause. Remember to ask the drainer how much the initial call-out will cost. Get a second quote if you think the price is high.
- Repairing blocked sewers can be expensive and time consuming. An experienced drainer works like a detective eliminating causes one by one until the blockage is found. A competent drainer will decide the quickest and cheapest way to fix the problem for the long term.
- After the initial investigation, the drainer should give an estimate of cost to clear the blockage and repair the pipes. If some factors are still unknown, ask for an upper limit of cost. If the price is too much for your budget, ask for alternative solutions.
Note: If the cause of the blockage is in the tie connection or in the property's sanitary drains, the leaseholder is responsible for all costs.
- If the drainer suspects that the cause of the blockage is in the ACTEW branch line or sewer main, the drainer should inform the householder and call ActewAGL.
An ActewAGL emergency crew will visit to check the main and clear the main if it is blocked.
- If the branch line is blocked, ActewAGL may instruct the drainer to undertake a camera inspection or provide access to the tie point so that the branch-line can be inspected, cleaned or repaired. The drainer should keep the householder informed.
- If the drainer believes the sewer main is blocked, the drainer should phone ActewAGL's emergency phone line on 13 11 93 (for example, manholes full or overflowing).
- If evidence is found that the blockage is in the ACTEW network, the leaseholder's drainer may submit their accounts to ActewAGL for evaluation and reimbursement. The leaseholder **should not** pay the drainer if a claim is being made to ActewAGL by the drainer. ActewAGL will pay the drainer direct if it accepts the claim.

If a blockage is caused by unapproved waste entering the sewer from the leaseholder's property, ActewAGL will not reimburse these claims. Costs are to be paid by the leaseholder. (See Section 4, 'Minimising Risks')

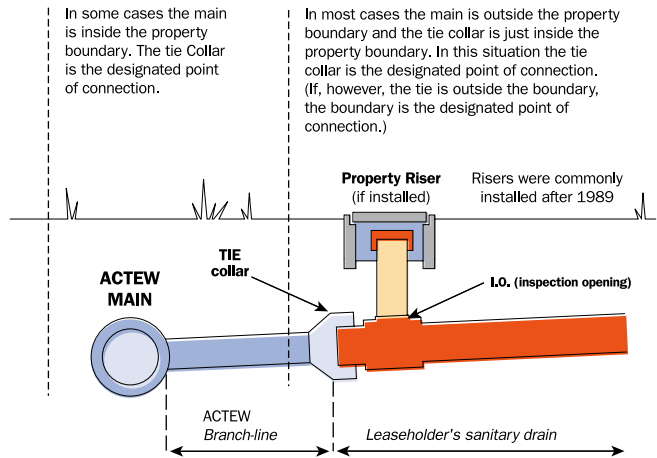
Note: Only approved persons are permitted to work on the sewerage system.

Toxic wastes and explosive atmospheres

If toxic wastes or explosive atmospheres are suspected to be in the sewer, phone **ActewAGL on 13 11 93** and the ACT Fire Brigade on 000, immediately. Do not, under any circumstances, enter access pits or re-enter excavations. Do not permit fire in the area.

3. Components of the sewer system

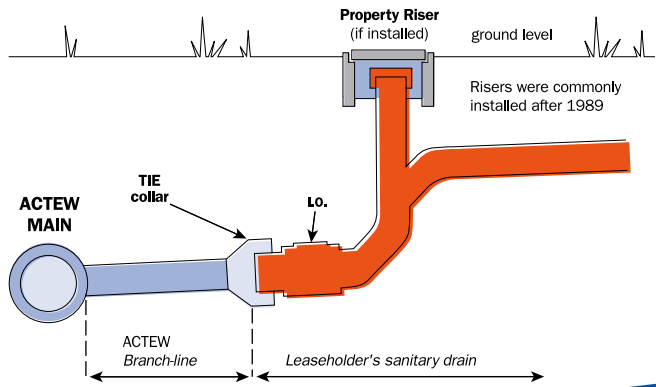
Shallow sewer tie



NOTE: The leaseholder pays for the clearance of roots that enter at the designated point of connection (usually the tie collar), and damage to the tie caused by root entry or excavation works

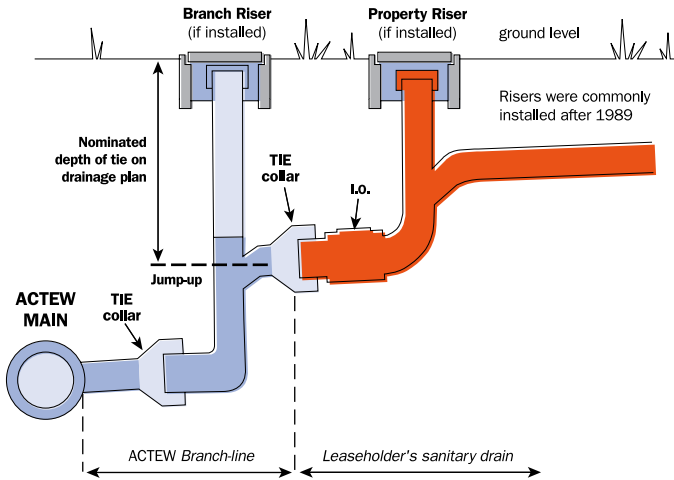
Deep sewer tie

See notes regarding boundary conditions on the 'Shallow Sewer Tie' illustration.



Multiple risers to deep main

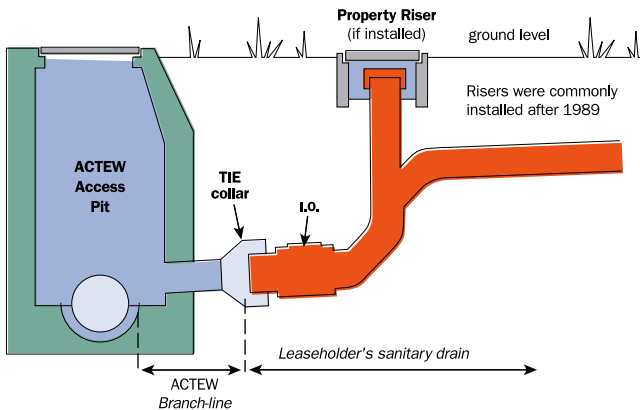
See notes regarding boundary conditions on the 'Shallow Sewer Tie' illustration.



NOTE: The leaseholder pays for the clearance of roots that enter at the tie, and damage to the tie caused by root entry or excavation works

Direct connection into an access pit

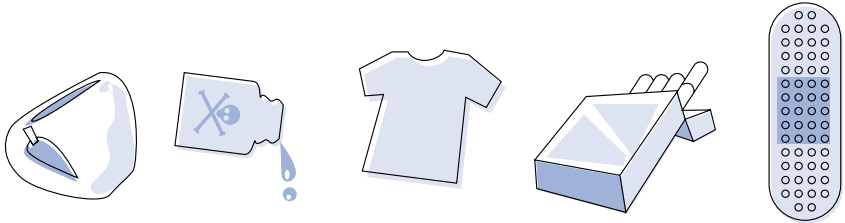
See notes regarding boundary conditions on the 'Shallow Sewer Tie' illustration.



4. Minimising risks

Preventive maintenance

Sewer systems age. Roots find their way into the slightest fault. Pipes get squashed and rubbish can get into the drains in many different ways. Unfortunately, many blockages cannot be prevented without replacement of pipework. However, preventive measures can reduce the cost and incidence of blockage or surcharge.

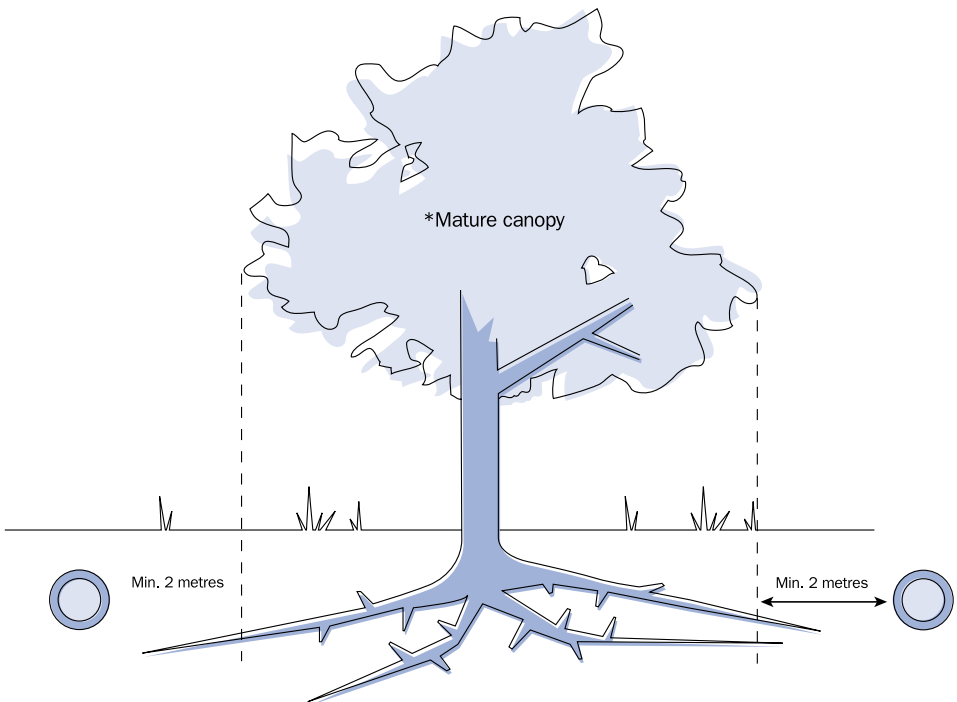


- Do not flush fabric, plastic, toxic substances or any non-biodegradable products into the sewer. These may include clothing, nappies, sanitary napkins, tampons, incontinence pads, surgical bandages, cotton buds, pantihose, paint, petrol, solvents, pesticides, chemicals, oils and rubber, razor blades, condoms, dog faeces, pharmaceutical products, cigarette butts, nail polish remover, toilet deodorant dispensers, and so on. The sewerage system is designed to carry human excrement and washing water. Blockages caused by unapproved wastes will not be reimbursed.
- Put cooking fat into the rubbish bin instead of flushing it down the sink.
- Put food scraps, tea leaves or coffee grounds into the bin or compost.
- Check with a garden centre before purchasing trees, vines and shrubs. Avoid plants that are known to have invasive roots.
- Do not plant trees or large shrubs over the sewer. (See Section 5, 'Trees and shrubs')
- Do not connect stormwater drains, sumps or downpipes to the sewer.
- Keep external grates and covers in place to stop foreign objects entering the drains. Ensure external relief gullies are at least 150 mm below the lowest internal fixture outlet or floor waste.
- Check the location of pipes, drains and electricity cables before excavating.
- Engage a licensed drainer to attend to blockages as soon as you suspect a problem exists.

5. Trees and shrubs

Guide to planting trees and shrubs near sewerage drains

Trees must be planted so that their mature canopy does not come within two metres of ACTEW assets.



Tree, vine and shrub roots are a major cause of pipe blockages. Roots tap into soil moisture and nutrients. When these are not readily available, many species will detect the slightest leak or fault in drainage systems.

Once tree roots break into a sewer or stormwater pipe, they continue to grow and restrict the passage of water and sewage. In severe cases, the roots can break the pipe.

When planting it is advisable to locate trees no closer than the recommended distance from sewer pipes. The trees in the following table are intended as a guide. For professional advice on suitable trees and shrubs, talk to your local nursery.

Examples of trees and shrubs that are suitable for planting with the mature canopy* no closer than two metres from pipes:

Botanical name	Local name
Acacia buxifolia	Box-leaved Wattle
Banksia ericifolia	Heath Banksia
Callistemon citrinus	Crimson Bottlebrush
Euonymus japonica	Evergreen Spindle Tree
Genista tinctoria	Broom
Logerstroemia indica	Pink Crepe Myrtle
Malus (species)	Flowering Crabapples
Nerium oeander	Oleander
Pyracantha (species)	Firethorn
Viburnum linus	Laurustinus

Examples of trees and shrubs that are suitable for planting with the mature canopy* no closer than four metres from pipes:

Botanical name	Local name
Angophora costata	Smooth-barked Apple Myrtle
Betula pendula	Silver Birch
Eucalyptus cinerea	Argyle Apple
Fraxinus excelsior "Aurea"	Golden Ash
Melaleuca armillaris	Bracelet Honeymyrtle
M. styphelioides	Prickly Paperbark
Sophora japonica	Pagoda Tree
Sorbus aucuparia	Rowan, Mountain Ash
Wisteria sinensis	Chinese Wisteria

Examples of trees that are NOT suitable for planting in the suburban environment:

Botanical name	Local name
Acer negundo	Box Elder Maple
Casuarina cunninghamiana	River Oak
Celtis australis	Southern Nettle Tree
E. globulus	Californian Blue Gum
E. sideroxyton	Mugga or Red Ironbark
Fraxinus oxycarpa	Desert or Caucasian Ash
Pinus (species)	Pines
Populus (species)	Poplars
Quercus (species)	Oaks
Salix (species)	Willows
Ulmus (species)	Elms

* To minimise the risk of roots causing damage to sanitary drains and sewer mains, trees and bushes should be planted so that the mature canopy does not extend over the pipe alignment.

For a complete list of trees and shrubs that are suitable for planting in the suburban environment please contact ActewAGL by calling 6248 3555.

6. Guidelines for drainers

It is ActewAGL's policy to ensure that remedial work is carried out:

- with a minimum disruption to supply
- with a high level of customer service and respect
- to avoid any harmful impact on the environment
- in a manner that minimises cost to the property owner and ActewAGL
- respecting the drainer's skills and right to profit.

Work sequence guide for drainers

The following steps are offered to drainers as a guide to achieving ActewAGL policies.

1. Check the impact of internal discharge on the DT, ORG and boundary riser.
2. Check accessible manholes (call ActewAGL on 13 11 93 if overflowing).
3. Attempt to clear the internal sanitary drains from a suitable access point.
4. Locate, clear and repair blockages upstream of the tie point.
5. Catch and remove blockage material for inspection by the customer.
6. Locate blockages at the tie point or downstream in the branch line.
7. If there is strong evidence that the blockage is in the main, do not excavate before calling ActewAGL to check/clear the main. Ask ActewAGL to advise you of the outcome.
8. If the sewer main is clear, but the blockage remains, accurately determine the location and depth of the tie point and the relationship of the branch to the main or manhole.
9. If the drainer is able to clear the branch-line without calling ActewAGL, the property owner is responsible for costs. If the blockage cannot be cleared by conventional means or the drainer considers that replacement of pipes may be required, proceed with step 10.
10. If there is an existing riser at the tie point, and sewage flows from it when opened, proceed to step 12.
11. If there is no boundary riser, provide practical and sufficient access to the tie point/riser/branch line in accordance with ActewAGL's need to inspect, rod, eel, camera or repair. Access methods may include excavation of jump-ups, excavation of the tie IO, CCTV camera and electronic locator.

12. Call ActewAGL on 13 11 93 to have a representative meet you on site to determine the cause of the blockage.
13. Agree who will undertake the rectification works in the ActewAGL network branchline.
14. Record the representative's decision, name and signature.
15. Reinstate the sanitary drains in accordance with BEPCON plumbing notes and AS 3500.2. Install an access (boundary) riser if one exists.
16. Reinstate the excavation. Compact as necessary to support pavements.
17. Reinstate the landscape, pavements and approved structures.
18. Prepare and submit invoices to the responsible parties.

Drainage plans/tie point locations: Internal sanitary drain and tie location plans can be obtained from BEPCON by calling 6207 6907.

Useful technologies and aids: Contractors are strongly urged to make use of exploratory or locating technologies as a preliminary to major excavations to precisely locate the problem and avoid unnecessary costs.

7. Who pays?

The property owner's responsibilities

The property owner pays to remove blockages, make good faulty workmanship or replace faulty materials in the sanitary drains installed on the owner's property, at and upstream of the tie. The property owner pays for the clearance of roots that enter at the tie. The property owner pays for damage to the tie caused by root entry or excavation works.

ActewAGL responsibilities

ActewAGL pays to remove blockages in the sewer lines owned by ACTEW Corporation. ActewAGL is responsible to repair and maintain branch-lines and mains to a standard required to achieve its contractual and statutory obligations.

Conditions for reimbursement of claims by ActewAGL

ActewAGL will reimburse claims for investigatory work on a property owner's sanitary drainage system that are no more extensive than is necessary to demonstrate that a blockage is in the ACTEW Corporation main or branch line. We will not pay for loss, damage or retrieval of equipment, eels or CCTV cameras.

- Where ever possible reimbursement claim invoices are to be submitted by the drainer directly to ActewAGL, not to the customer for payment.
- Work paid directly by the customer is best restricted to work associated with blockages in the internal sanitary drains, not in the ACTEW network. Claims submitted by the leaseholder will be considered, but will require validation from the drainer. Needless processing delays may result.
- Claims must be submitted within three months of the completion of the work.
- Claims must be submitted by a drainer that is licensed to operate in the ACT.
- Drainage work must be done in strict conformity to BEPCON 'Minor Works Permit' conditions, BEPCON plumbing notes and AS 3500 Part 2.
- Claims will not be paid unless objective evidence is supplied to conclusively demonstrate that the blockage was in the ACTEW sewer main or branch-line.
- ActewAGL will not reimburse claims for blockages that have resulted from the entry of unapproved non-domestic wastes from the property. (See Section 4, 'Minimising Risks')
- Claims are to be supported by numbered invoices detailing labour, materials, plant and equipment costs together with a description of the work undertaken. Supporting documentation is to include the customer's name, house number, street name (or block and section), suburb, date(s) attending, a copy of the BEPCON 'Minor Works Permit', drainers phone number, fax and postal address.
- ActewAGL will pay reasonable industry rates commensurate with the scope and complexity of the work. (A guide 'Schedule of rates' is available on request).
- The drainer is to undertake all necessary internal sanitary-drainage work, together with reinstatement of the landscape on the customer's property, to the satisfaction of the customer. ActewAGL will only pay for repairs to paths and driveways outside the lease boundary to the value of standard concrete or bitumen. The additional cost of special (for example, stamped, coloured, cobblestone, and so on) finishes must be borne by the leaseholder. Costs for the repair or replacement of unapproved encumbrances over the drain are to be paid by the property owner.
- Legal action may be taken where there is evidence of fraud.
- Disputes are to be submitted in the first instance to the Manager Network Customer Support (ActewAGL, Water division). The contact number is 6248 3555 (press 2 for water).

www.actewagl.com.au

Faults and emergencies

13 11 93 (24 hours)

- Burst and leaking pipes. ▪ Blocked network sewers. ▪ After hours inspectors.

Customer account enquiries

13 14 93 (24 hours)

For water, sewerage and stormwater, and includes new connections, temporary connections and permanent disconnections.

Service and technical enquiries

Tie, main, manhole location and inspectors

6248 3555 8.30am to 5.00pm weekdays

- Reimbursement administration. ▪ Odour concerns. ▪ Non-domestic sewer waste.

Reimbursement officer assistance and onsite advice

6248 3555 or **0414 514 712** 8.30am to 5.00pm weekdays

Reimbursement claim address

ActewAGL

GPO Box 366

Canberra City ACT 2601

(Attention: Water Division)

BEPCON (Building, Electrical, Plumbing Control)

6207 6907

Drainage plans and tie locations (all suburbs).

Dial-Before-You-Dig

1100

- Locations of services and clearances.



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