



Waste Control Systems

Information Sheet

Are you considering one of the following?

- Purchasing a house,
- Own a house and want to upgrade the waste system,
- Planning to build additions to your existing home (including new wet areas), or
- Purchasing a vacant block and/or building a new house.

Unlike the Adelaide metropolitan area, the sewer infrastructure in the district is limited (refer appendix). Some townships have Community Wastewater Management System (CWMS) whilst the remaining properties have (or require) on-site wastewater systems.

The Adelaide Hills Council region is the primary catchment area for Adelaide's water supply, hence the zoning "Watershed Primary Production". Without proper management, increased animal and human habitation in the region increases the actual or potential threat to water quality.

Consequently it is a requirement of Council's Development Plan that a wastewater system must be approved before Planning Consent (when applicable) can be granted.

This Information Sheet is designed to provide general comments on waste disposal issues for your consideration. Please also speak to Council's Environmental Health Officers for further information, however in some instances definite opinions, consents or approvals cannot be given without first lodging the necessary application(s).

Purchasing an existing house

There are many issues to consider when purchasing a house in the Adelaide Hills area (in addition to size, location, finance etc). Other important points to consider are water supply, fire protection and human waste disposal.

Ask the Real Estate Agent (or owner) if the property is connected to mains sewer, community wastewater management system or an independent on-site wastewater system. The agent might be able to answer some of these questions but check this fact sheet (or contact us) if you need more information on these important property issues. Ask the agent (or owner) to show you the 'Schedule 2 document' (required by Section 7 of the Land and Business Sale and Conveyancing Act 1994) which will inform you if any legal notices apply to the property.

Own a house and want to upgrade the wastewater system?



Previous Council surveys have indicated that there are existing homes with wastewater systems that are failing to operate in a sanitary condition. Sometimes the remedy is simple, for example replacing missing lids, vent caps, or education on better maintenance can ensure the wastewater system will give many more years of satisfactory service.

In more extreme circumstances, mal functioning systems require a complete upgrade. Contact our Environmental Health Unit for further information.

Building additions to your existing home, including new wet areas?



Extending your house doesn't necessarily mean that you will be obliged to upgrade your wastewater system. If you are only undertaking minor alterations (and additions) and the existing system is working satisfactorily then you are only obliged to lodge an application with the council for any changes to the sanitary plumbing (drains).

If your additions/alterations are significant and result in your house offering increased accommodation (e.g. more people could live in the house), or spa bath(s) are intended, or the system is already failing – then an upgrade of the waste control system will be required.

Here also an application is required for the new sanitary drainage and waste system. Please now refer to the following section ("purchasing a vacant block and/or building a new house").

Purchasing a vacant block and/or building a new house?



If you're building a new house (or purchasing a vacant block with the intention to eventually build a house) you need to consider waste (sewage) disposal. The following options should be considered in this order of priority

1. Can we connect to SA Water sewer?

Because the district is Adelaide's primary water catchment area, connection to sewer is always Council's preferred option for new developments (if available).

If a sewer connection point has been installed on the block then a direct connection to sewer becomes mandatory for any new dwelling. Please contact SA Water for more information on sewer extensions or connections.

If a sewer connection point has not been installed and sewer is available nearby, an 'indirect connection' to sewer might be feasible and would certainly be Council's preference for your development. Please contact SA Water for more information on indirect sewer connections.

2. Can we connect to a Community Wastewater Management System (CWMS formerly known as STEDs or CED)?

As with sewer, if CWMS is available (or can be made available) to your block, connection will be mandatory for any new house (and/or commercial development).

The following townships have CWMS; Birdwood, Charleston, Kersbrook, Mt. Torrens, Stirling East (near golf course), Woodside and Verdun.

If the CWMS drain can be extended to your block, an application for the drain extension and connection point is required to be lodged with Council.

If your block has a CWMS connection point installed, your new house will require a septic tank that is plumbed into this connection point. An application is required to be lodged with the Council

3. Can we install an on-site waste system?

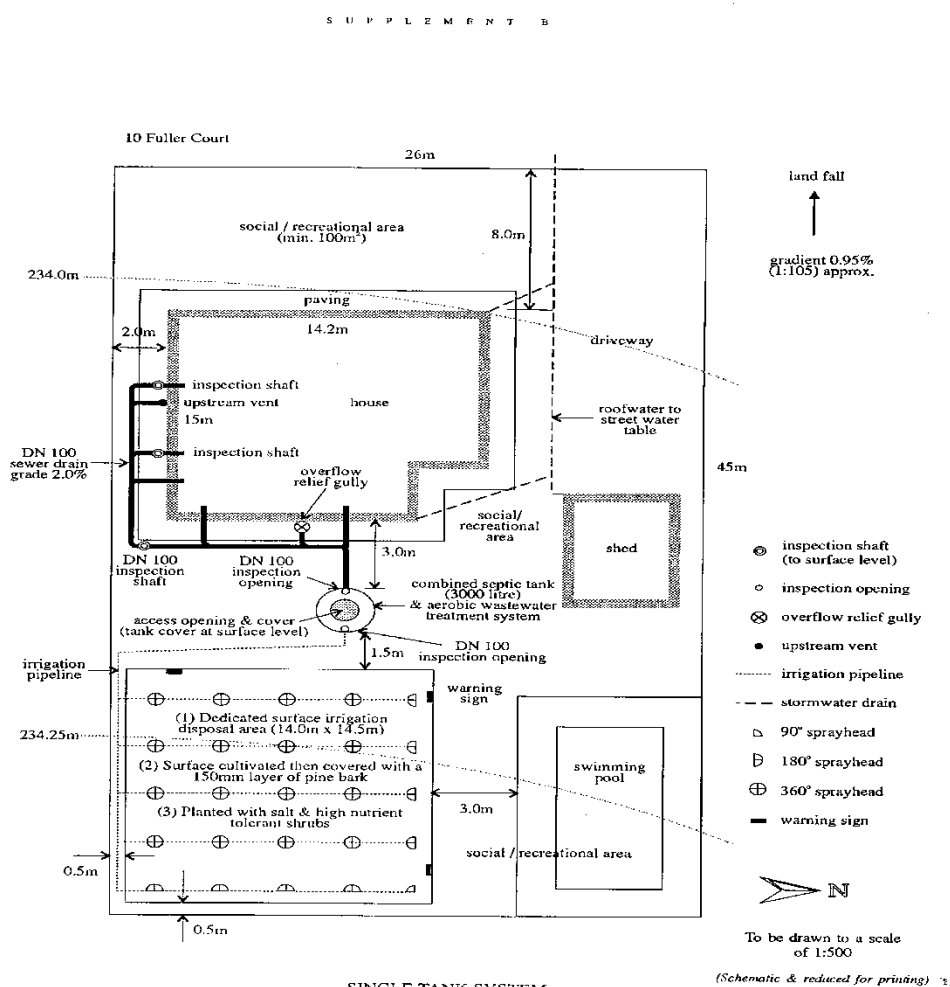


FIGURE 3: TYPICAL SITE LAYOUT PLAN

If your block doesn't have sewer or CMWS available then an on-site system is the only solution - providing it can meet State Health requirements. Compliance with these legal requirements is established after a "wastewater works application" is lodged with the Council.

The following criteria must be evaluated when considering an on-site system eg

- **Land slope** - not greater than 20% (1 in 5) or site engineering solution required.
- **Flooding** - the site should not be subjected to inundation or flooding more frequently than 1 in 10 years.
- **Site and soil characteristics** - assessed for depth and permeability.
- **Setbacks** – minimum distances from buildings, boundaries or swimming pool and importantly 50m from watercourses (rivers, creeks, dams, bores etc).
- **System size and capacity** – number of potential occupants (min 6) and sanitary fixtures.

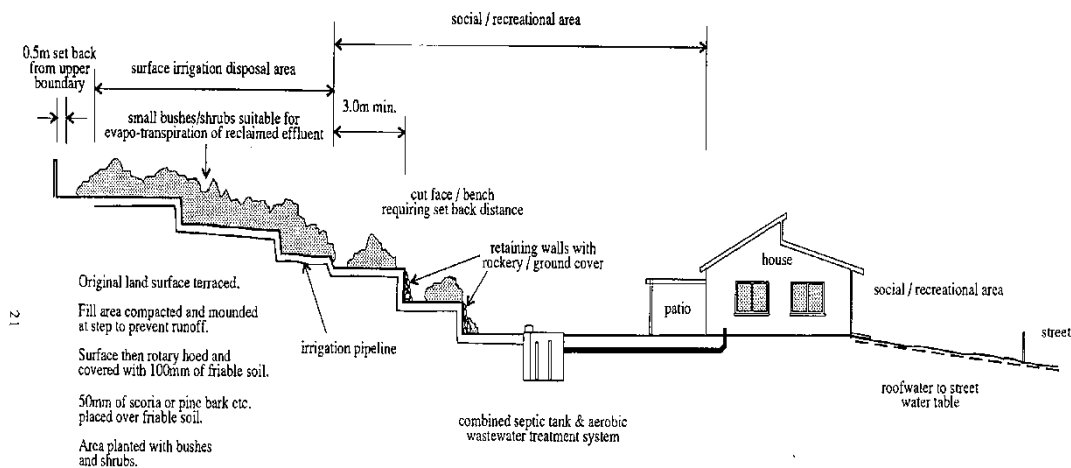


FIGURE 4: TYPICAL SECTION THROUGH CUT / BENCHED SITE

Types of Wastewater Systems

Proprietary wastewater systems are generically approved for use in South Australia by Department of Health & Aging. To install such a system on your block requires approval from your local council. At the Adelaide Hills Council, your local Environmental Health Officer has delegated authority to assess and approve a wastewater system (or alterations to a wastewater system) on your block.

Please be mindful that the appropriate treatment and disposal/recycling of human waste is paramount to the sustainability of not only your project today – but the future of our shared environment tomorrow!

Septic Tank and Trench System: is an elementary form of sewage and wastewater treatment. Bacteria within the tank break down waste into simpler substances. Sludge and scum accumulate over time and the tank must be pumped out periodically (every 4 years minimum) to prevent these solids entering the trench and causing clogging. The liquid wastewater flows from the tank (contaminated effluent) into the subsurface trench or other approved system where it soaks into the soil.



CWMS: (also known as STEDs); In this system the septic tank discharges the liquid wastewater into the council drainage systems via a connection point. Each house has its own septic tank (on site) connected to the system. Periodic pump outs are still required and undertaken by council's contractors every 3-4 years. Effluent collected by the system is conveyed to either SA Water for further treatment or to a Council storage lagoon for further treatment before it can be reused for irrigation purposes.

Aerobic Wastewater Treatment Systems (AWTS): can be used where conventional subsurface disposal methods are ineffective. AWTS incorporate primary treatment, aeration, clarification, settling, disinfection and storage chambers. The resulting effluent is discharged by pumping to a dedicated surface or sub-surface irrigation disposal area (* refer notes on following page).



Aerobic Sand Filter System: is similar to the AWTS above but uses in ground sand filter (constructed on site) to purify effluent prior to disinfection and irrigation.



Note: in addition to the space required for personal recreation (i.e. 100m² min), Aerobic and Aerobic Sand Filter Systems require sufficient space set aside for effluent irrigation. These effluent irrigation areas must be designed by a soil engineer and constructed by the plumber (as per the engineers report) as part of the system installation.

When any application for a wastewater system is submitted to Council it should be accompanied by the engineer's site and soil report. As the effluent is not suitable for human contact the effluent irrigation areas must be installed to as to comply with designing engineers site and soil report.

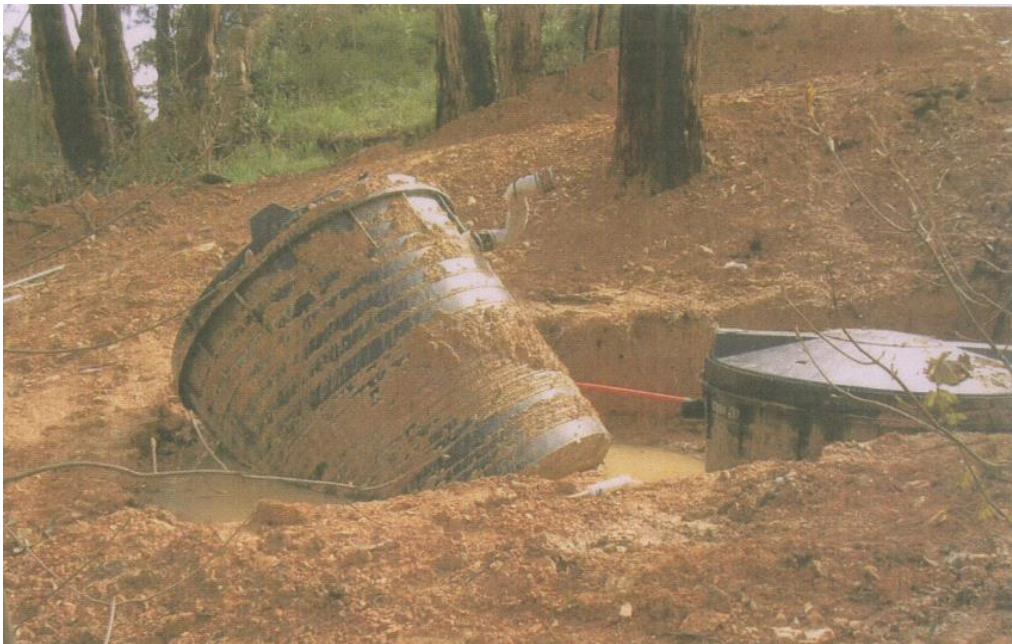
The above criteria can be located in the 'On-site Wastewater Systems Code 2013' which is available on the Department of Health and Aging website.



Alternative Systems: these systems include composting toilets, grey water system, septic tanks and reed beds. Applications can be made to Adelaide Hills Council.

Further Information

New or alternative systems, upgrades, plumbing work or failing system | Adelaide Hills Council
Land Divisions and/or new CWMS connection points | Adelaide Hills Council
Sewer connections | SA Water



What you need for your waste system application

The application should include the following information.

1. Completion of the **wastewater works application form** (available from the Council offices or the website) and payment of prescribed **fee**.
2. A site and soil land application report from a consulting engineers which determines the type of system suitable for your site and how it is to be constructed with a suitable method wastewater disposal
3. Nominate the **type of** existing or proposed **Wastewater System** eg. Septic tank & sub-surface disposal or Aerobic System with effluent irrigation area.
4. A detailed **House Layout Plan** (in duplicate) drawn to a scale on 1 in 100 showing:
 - the position and description of all the sanitary fixtures to be connected to the Waste Control System - eg. Water closet, basin, bath, shower, laundry trough, washing machine, kitchen sink, dishwasher, food waste disposal unit or spa bath(state capacity).
 - Under floor plumbing and external drainage system, including location of the sewer drain, inspection openings, junctions and bends, size and fall of sewer drain, position and size of floor traps, internal pipe sizes and vent size.
 - the intended use of the rooms within the building - eg bedroom, kitchen, family, office, consulting room, dining , bar, etc.
5. **Where a septic tank** is proposed a detailed description and Diagram (Scale 1:50) showing:
 - the positions and internal dimensions of the access shaft and tank access cover;
 - construction materials of the access shaft and cover;
 - where the cover if required to take vehicle traffic, details of the materials ability to carry vehicle loads;
 - method of sealing the access cover or shaft cover to prevent entry of water, egress of gasses and/or water, and access by children.

Appendix

Waste Disposal by District

| Sewer | CWMS | On site |
|-------------|----------------------|----------------|
| Aldgate | Birdwood Township | Ashton |
| Balhannah | Charleston Township | Basket Range |
| Bridgewater | Kersbrook Township | Bradbury |
| Gumeracha | Mt. Torrens Township | Carey Gully |
| Heathfield | Stirling East | Castambul |
| Lobethal | Woodside Township | Chain of Ponds |
| Oakbank | Verdun Township | Cherryville |
| Rostrevor | | Crafers West |
| Stirling | | Cudlee Creek |
| Woodforde | | Forrest Range |
| | | Forreston |
| | | Greenhill |
| | | Houghton |
| | | Horsnell Gully |
| | | Humbug Scrub |
| | | Inglewood |

| Sewer | CWMS | On site |
|--|--|-----------------|
| <p>NOTE: Sewer mains may only service townships or parts of these suburbs – always check for confirmation of sewer drains with SA Water.</p> <p>Application for direct or indirect connections to sewer should be made to SA Water on (ph) 1300 650 951</p> | <p>NOTE: CWMS may only service township or parts of these suburbs – always check with Council for confirmation that CWMS is available.</p> <p>Application for CWMS connection point or septic tanks can be made to Environmental Health Unit at the Council office.</p> | Ironbank |
| | | Kenton Valley |
| | | Lenswood |
| | | Longwood |
| | | Marble Hill |
| | | Millbrook |
| | | Montacute |
| | | Mt. George |
| | | Mylor |
| | | Norton Summit |
| | | Paracombe |
| | | Piccadilly |
| | | Scott Creek |
| | | Summertown |
| | | Upper Hermitage |
| | | Upper Sturt |
| | | Uraidla |
| | | Warren |

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