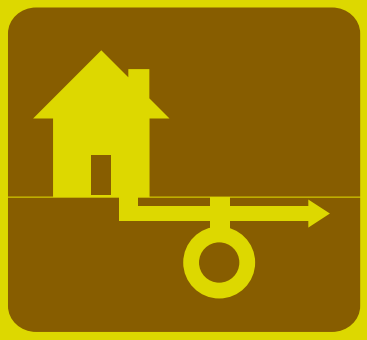
serious**



septic tank

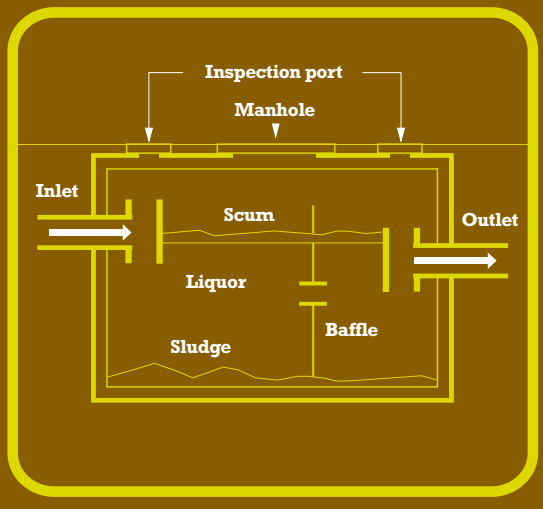
Septic tanks allow solids to settle from the liquid, which then soaks away through a land drain. Septic tanks can only be used only when the type of soil allows liquid to drain away easily.

The Environment Agency will usually only give single dwellings a 'consent for discharge' from a septic tank, if at all.

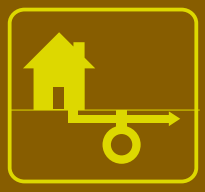
How it works

Waste water leaves your house via the plumbing system and enters the septic tank. The tank holds wastes for primary treatment i.e. the separation of solids and liquids by gravity. The heavy solids, 'sludge', accumulate at the bottom of the tank. The lighter greases and oils, called scum, float to the top of the liquid. Bacteria partially decompose the sludge in the tank and reduce its volume. Gases generated as a natural part of the decomposition process are released through plumbing vents.

The liquid in the tank, called effluent, flows by gravity to a soakaway system. The preferred design for a soakaway is in the form of perforated pipes set underground in a bed of crushed rock that allows the effluent to seep slowly into the ground. Where land is not available for a drainage run, the soakaway may be constructed using a large hole filled with crushed rock. Naturally occurring bacteria and the filtering action further break down the waste.



septic tank (2)



Maintenance requirements

Tankerage of the sludge is required at least annually to maintain the tanks efficiency to prevent damage to the soakaway system. We de-sludge septic tanks using a vacuum tanker ensuring that the sludge and scum is completely removed (in the case of small domestic tanks we simply empty the tank completely).

Controlling flow

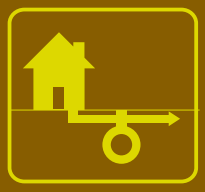
Every septic tank system is designed to handle a certain volume of flow. If the number of people using the tank increases you might need to have your tank emptied more frequently or increase your tank or soakaway size to handle the additional volume. For more info, scroll down to Septic Tank Dos and Don'ts.

Failure to maintain

If you don't de-sludge your septic tank regularly, sludge builds up. Firstly, this means there is less space for settlement to occur, so in peak flow times solids may be carried into the soakaway causing pollution to the surrounding land. Secondly, the level of sludge can build to the outlet level so there is no settlement and all solids are carried into the soakaway system. Both scenarios lead to eventual 'blinding' or blocking of the soakaway, and the whole system becomes ineffective. This kind of damage to the soakaway is often irreversible.

Signs of soakaway failure

- Sinks and toilets do not drain away quickly
- Sewage backs up in the house
- Inspection chambers (manholes leading to tank) overflow or the tank itself overflows or pools appear around tank or soakaway area



dos & don'ts

Don't overload the septic system. Systems are designed for a specified number of users and waste flow. Typically, septic tanks are sized according to the number of bedrooms, which relates to the number of people using the system and the amount of waste flow.

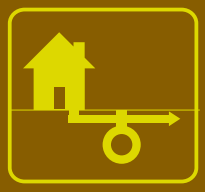
Don't dispose of anything but domestic waste in a septic system. Standard septic systems are designed to handle flow from showers, washing machines, toilets and sinks. Eliminating or reducing the amount of waste discharged to the septic tank will extend the life of the soil absorption soakaway, save money over the long run and decrease the possibility of a system failure.

Don't dispose of pesticides and other household hazardous wastes down your sink. Septic tank systems can't treat pesticides and other household hazardous wastes such as paint products, stain removers, petroleum products, and cleaners. These chemicals will pass through the system and may contaminate ground water.

Don't use kitchen sink garbage disposal units, or reduce use by putting grease, fats, coffee grounds, and waste foods into your carry out garbage. These wastes contribute to the build-up of solids in your tank and may increase the frequency with which your tank will need to be emptied.

Do use 'septic tank safe' products and eliminate wastes that don't easily degrade, such as paper towels, facial tissues, wet strength towels, sanitary ware, disposable nappies etc. Dispose of these items in your 'dry waste' bins.

septic tank (4)



Don't use detergents with phosphorus and other filler solids. Ordinary amounts of non-chlorinated bleaches, caustics, soaps, detergents, and drain cleaners do not harm the system. However, some stronger household cleaning chemicals can damage the bacteria that treat and degrade wastes.

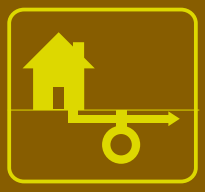
Do reduce the amount of water entering the system by installing water saving devices in your home. Reducing the amount of water that enters your septic tank will extend the life of the system. These devices may include:

- Low water-use toilets
- Composting toilets
- Reduced-flow showerheads and sink faucets
- Clothes and dishwashers with adjustable cycles.

Do consider installing a separate septic tank/soakaway system for the washing machine.

Do reduce your water use.
Take shorter showers, turn off the water while brushing your teeth, and wash full loads in the dishwasher and washing machine.

septic tank (5)



Do keep plumbing in good repair by eliminating all leaks and drips.

Do maintain the minimum water pressure needed in the house so that appliances function properly but no more than necessary.

Don't divert rain water from gutters or storm drains into septic tank systems.