



NATIONWIDE INDEPENDENT DRAIN TESTING

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WASTE WATER TREATMENT SYSTEMS FREQUENTLY ASKED QUESTIONS

The following information relates to frequently asked questions regarding the wastewater treatment systems for single houses.

Please contact us if you have any further questions or would like to book an appointment for any of the tests or [Home Buyers Pre-Purchase Survey](#) outlined on our website: www.drintesting.ie

General Waste Water

What is included in the term domestic wastewater?

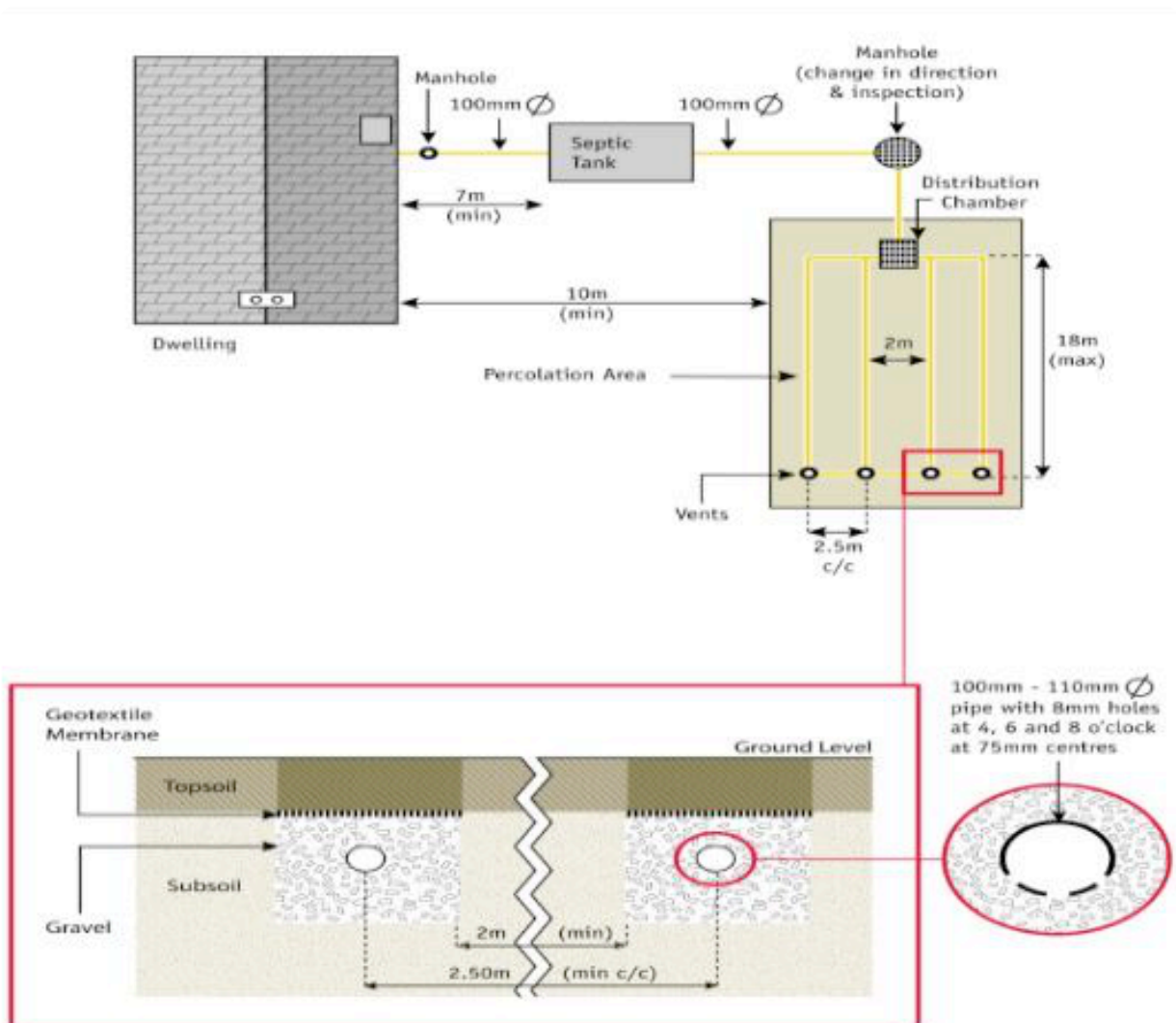
Domestic wastewater includes grey water and sewage from domestic dwellings. Grey water is defined as wastewater that comes from sinks and washing machines, i.e. the wastewater that contains some bleach and detergents. The grey water from your household is treated in the same way as sewage whereby it is collected in a septic tank and undergoes treatment either in a percolation area or in a secondary treatment unit prior to being discharged via a polishing filter to ground. Rainwater is not classified as grey water and therefore should not be discharged into your wastewater treatment unit.

What happens to wastewater from my home?

Many houses in towns and cities are served by a public sewerage system. All drains on your property as far as the communal pipe are your responsibility. IDT will carry out a full survey to ascertain the condition of the pipes on your property and make sure that there are no defects, breaks or open joints that could be allowing water to escape and damage the surrounding area. When houses are not served by a public sewerage system, the wastewater from a house should be treated by a septic tank and percolation area or advanced wastewater treatment system. With new houses the type of system used is determined by testing ground/soil conditions at planning stage.

How should a septic tank wastewater treatment system work?

A modern septic tank system includes a double chamber tank and percolation area. Wastewater is partially digested by bacteria in the septic tank and the effluent then passes through a percolation area where effluent is further treated.



Should 'grey water' from dishwashers, sinks and washing machines be directed to my wastewater treatment system?

YES - grey water should in all circumstances be directed to the wastewater treatment system. Grey water is also a pollutant and if directed to the rain water system may cause contamination of waters. Take care with house extensions or alterations – don't connect any wastewater pipes to the rain water disposal system.

Should water from roofs and yards be connected to my wastewater treatment system?

NO - Roof and yard waters should not be connected to your wastewater treatment system. Clean water should be collected and discharged separately to a local watercourse or soak-away.

How do I dispose of the rainwater and clean surface runoff from my site?

Uncontaminated water should be disposed of by means of a soak pit/soak-away. The soak-away should be designed in accordance with the guidance provided in BS8301 and in BRE Soak-away Design (1991). It should not be located within 5m of any dwelling and as far away as possible from the percolation area (at least a minimum of 5m separation distances should be used).

How do I know if my wastewater treatment system is not working properly?

These are some signs to watch out for:

- Smell of sewage from the general area of the tank and percolation area.
- Slow draining toilets, sinks or drains or backing up of sewage at the inlet.
- Overflow of wastewater from the tank or ponding of sewage on the percolation area.
- Discoloration of nearby watercourses (greyish slime growths).



**Discharge
from a
defective
septic tank**

**If any of
these signs are
present call IDT
immediately for a
drain survey.**

My house is over 20 years old – how do I know if it is working effectively?

Septic tanks prior to the 1990's may not be built to current standards and performance should be checked. IDT have over 15 years experience in surveying drains and can pinpoint any defects in pipework or septic tank operation.

I have noticed ponding in my garden close to my wastewater treatment system, what should I do?

First of all you should arrange to have your system de-sludged. If it is an advanced wastewater treatment system you should contact the supplier/installer of your system and have your system serviced.



Could my wastewater treatment system pollute my well?

Yes it is possible. If you suspect that your wastewater treatment system is affecting your well you should have it checked. If you are concerned you should contact your local authority's Environmental Section or local Environmental Health Officer for advice.

If you suspect contamination of your well you need to have a full assessment of your wastewater treatment system carried out by a suitably qualified person.

New Sites or Houses

When buying a house what do I need to do?

Before buying a house you should have the drains tested and a CCTV survey carried out. IDT have over 15 years experience surveying foul and storm systems all over Ireland.

The septic tank or wastewater treatment system should also be inspected if present. You should ask for installation and maintenance records for the system. You should check that the treatment system will adequately serve the anticipated number of occupants of the house. If the house is served by a DWWTS, the seller of the house should provide you with a copy of the certificate of registration for the domestic waste water treatment system as provided for in [Section 70 D of the Water Services \(Amendment\) Act 2012](#).

The new homeowner is obliged to inform the local authority of the change of ownership and such that the register can be updated.

I want to extend – can I build over my septic tank system and percolation area?

Under no circumstances should you build over a septic tank or percolation area. Access to the tank is needed for regular maintenance and the percolation area should not be compacted. Even with a hard standing area located above a percolation area traffic may damage percolation pipes and result in ponding or escape of untreated effluent.

Can I place a car park or driveway over the percolation area or polishing filter?

Roads, driveways or paved areas or any underground services must not be located within the disposal area. This is due to the need to have easy access to the site for maintenance and also to prevent problems with the system due to the potential for damage to the pipework and compaction of the filter materials.

Are all sites suitable for septic tanks and other individual wastewater treatment systems?

NO– not all sites are suitable. The following are possible reasons for site unsuitability:

- A high water table.
- A slow percolation rate of the soil which would result in ponding on the surface because effluent cannot get away
- A fast percolation rate of the soil, which would result in effluent moving through the soil too quickly without effective treatment.
- Site restriction issues i.e., not enough space to achieve the minimum separation distances between the treatment system and domestic wells, watercourses, other houses

The site suitability assessment process will determine the suitability of a site but the ultimate decision will rest with the local authority or planning authority

Maintenance

Why do I need to de-sludge my domestic wastewater treatment system?

If the level of sludge builds up in the tank it may make its way out of the tank and block the distribution box and the percolation area or polishing filter. And if the percolation area or polishing filter becomes blocked it is very difficult to clean and may require replacement – an expensive option!

The minister has published new regulations ([Performance Standards S.I. No 223 of 2012](#)) governing the operation and maintenance for domestic wastewater treatment systems (DWWTSs). These require owners of DWWTS to operate and maintain their systems and this includes de-sludging.

How do I care for my domestic wastewater treatment system?

You should visually check your system at least every six months and note any ponding of effluent, bad smells or discoloration of nearby drains. Call IDT and we can discuss any issues over the phone and arrange a survey to find out exactly what is going on. If you have an advanced treatment system check the electrical components (pump, blower etc) are operational.

Don't be tempted to turn off the power to save electricity - If there is no air going to the system it becomes an undersized septic tank and treatment is ineffective. You should also check the distribution box i.e. the manhole between the wastewater treatment system and the percolation area to ensure even distribution of effluent and ensure there are no blockages.

How often do I have to de-sludge the septic tank?

It is recommended to de-sludge a septic tank at least once a year but this varies with the system's capacity and use. You must de-sludge the septic tank if scum is present in the second chamber or if the sludge comes up to about 400mm from the bottom of the tank. A minimum of 75mm of sludge should remain in the tank to assist in the re-seeding of the new sludge. Regular maintenance is required to ensure that the septic tank operates effectively and that solids do not enter the percolation area and clog the distribution pipe work.

What effects will oils and greases have on my wastewater treatment system?

Oils and grease from cooking that escape down the drain can damage your system. Food waste and cooking oils can be recycled and avoid the use of food macerators or “in-sink disposal units”. Excess amount of food, grease, coffee grinds or oils will cause blockages, smells, overload your treatment system and damage your percolation area.

What are grease traps and what do they do?

Grease traps capture the oil and grease from the flow of wastewater by slowing down the flow of hot greasy water through the trap and allowing it to cool. As it cools, the grease and oil separate out of the water and float to the top of the trap. The cooler water then flows to the septic tank where it is treated.

Grease traps are usually not included in the design of a domestic wastewater system but are mandatory in systems treating water from restaurants, hotels and any other businesses that supply food. Due to the absence of these systems in single dwellings it is highly important that people do not allow any fats, grease or oils to enter their septic tank systems. The inlet pipes can become clogged up by the fats and grease and therefore can reduce the treatment rate of the septic tank system. To insure that this doesn't happen to your system, all fats, grease and oils must not be disposed down the sink or drains.

What effects could using a macerator or in-sink disposal unit have on my wastewater treatment system?

Adding macerated food waste to your wastewater increases the organic strength of the wastewater. This in turn could result in inadequate treatment, blocked pipes and smells arising from the tank or percolation area.

Will bleach or disinfectants harm the domestic wastewater treatment system?

Normal amounts of household bleach, disinfectants and detergents will not harm the domestic wastewater treatment system. However, excessive amounts of bleach will temporarily reduce the treatment capacity, as the microorganisms needed to treat the biological waste will be killed off. In saying this, the system should return to full performance capacity within a short period of time. It is important to be aware of potential effects that excessive use of these chemicals will have on your wastewater treatment system.

Do I really need to renew my maintenance agreements?

Yes. All on-site wastewater treatment systems require ongoing maintenance to ensure that the system is providing adequate treatment of the wastewater. An on-going maintenance agreement should be made and renewed with an appropriately qualified person to ensure that your wastewater treatment system is working effectively at all times.

How often do I need to empty my domestic waste water treatment system (DWWTS)?

The frequency of de-sludging is dependent on the size of the tank and the number of persons living in the house. Best practice for the management of DWWTS indicates that de-sludging should be undertaken when the level of sludge on the bottom of the tank is greater than approximately 400 mm. A minimum of 75mm of sludge should remain in the tank to assist in the re-seeding of the new sludge. Regular maintenance is required to ensure that the septic tank operates effectively and that solids do not enter the percolation area and clog the distribution pipe

NATIONWIDE INDEPENDENT DRAIN TESTING

Independent Drain Testing, established by Dan Mitchell in 2005 is a privately owned, independent Drain Testing company. Based in Cork, providing a nationwide independent drain testing services, as well as specialized Pre-Purchase Home Buyers Inspections and many other services.

- ✓ Independent Drain Testing
- ✓ Fast 24 Hour Turnaround
- ✓ Nationwide Service
- ✓ Pre-Purchase House Inspections
- ✓ CCTV Camera Surveys
- ✓ Septic Tank & Chimney Inspections



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Using His Services For 10 Years Now ...

We have been using services provided by IDT for around 10 years now. Dan is extremely professional & delivers a quality independent assessment with no vested interest in the results, which differentiates him in this industry. He is highly reliable and takes a lot of pride in delivering a professional service.

John MacCarthy, Engineers
CORK



Most Honest Money I've Spent

Thanks so much. I think you were probably the best and most honest money I've ever spent! Thanks again for everything, it was a pleasure to deal with someone so professional and honest.

Kate, School of BEES
CORK



Dan saved us over €5000 + more!

Dan inspected 2 houses for us, we were ready to buy. However, in both cases, he found issues with the pipework. Underground leaks we would never have discovered until it was too late and damage had been done to the foundations and structure of the house. He saved us over €5000 immediately and a lot more in the long run! I would recommend a drain test for everybody buying a house, it is critical information. Dan did a fantastic job explaining exactly what the issues were, his reports were easy to understand & ready the very next day! 5 STAR SERVICE.

Liam Daly, Feb.2017
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