

How to safely spread sludge from your septic tank



Information for farmers who want to spread
sludge from their own septic tanks
or wastewater treatment systems
on their own agricultural land.

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You must de-sludge septic tanks and wastewater systems regularly

Around 500,000 households in Ireland have a septic tank or a wastewater treatment system. These systems generate about 580,000 cubic meters of sludge every year, of which just over one quarter comes from farm households.

Regulations put significant responsibilities on owners of septic tanks and wastewater treatment systems. You are responsible for the running of your wastewater system. This means that you must maintain your wastewater system, including regularly de-sludging it.

What is septic tank sludge?

A typical septic tank sludge consists of the following:

- **scum** – which floats to the top and contains fats, oil and grease as well as any floating solid waste;
- **effluent** – which is the semi-treated wastewater that makes up most of the material in the septic tank; and
- **sludge** – which is the solids that collect at the bottom of the tank and where most of the bacteria involved in the breakdown of biodegradable material – in the absence of oxygen – live.

What is found in septic tank sludge?

1. Nutrients

- nitrogen
- ammonium
- phosphorus
- potassium
- sodium



2. Contaminants

Most contaminants found in septic tank sludge are not suitable to spread on land that is used to produce food. They pose a risk to human health and the environment. Contaminants include:

- pathogens (anything that can produce disease), faecal coliform bacteria (bacteria from human waste) and viruses;
- detergents (including chlorine and bleach), toxins, colourings and solvents; and
- fats, oils and greases.

Most pathogens take a 100 days to die off, but they never fully die in septic tank sludge. This is mainly due to the constant inflow of pathogens.

The sludge from septic tanks is more harmful than animal sludge or slurry. This is because human waste contains harmful pathogens, which contain viruses and other agents that can cause diseases. All of these pathogens can cause serious illness to human health.

What can you do with the contents of your tank, or wastewater treatment system?

You can only spread the contents of your own septic tank or wastewater treatment system on your own land. When spreading sludge, you must do this in line with the requirements of the requirements of the Waste Management (Use of Sewage Sludge in Agriculture) Regulations SI No 148/1998. **Sludge** is not suitable for all types of agricultural land.

You can use residual sludge from your septic tank on grassland provided that certain conditions are followed. For example, the grassland must not be grazed within six months after you apply the residual sludge. If you are using residual sludge on your land, you should inject or work it into the soil.



Do's and don'ts



1. Do limit the area

Limit the area where you spread the contents of your septic tank to a small area of the farm that, for at least six months, is not going to be used:

- for food production; or
- silage.

The area where you spread sludge should also be fenced off from livestock for at least six months.

2. Do know your soil

You should know the nutrient management plan and soil analysis of the land on which you are spreading sludge. You should make sure to avoid spreading excessive nutrients.

3. Do avoid causing damage

Make sure that spreading this sludge does not damage the quality of the:

- soil;
- surface water; and
- groundwater.

4. Do know requirements of the quality assurance scheme

You should know that if you are taking part in a quality assurance scheme, you may be prohibited from spreading any septic tank sludge on your lands. Before applying any septic tank sludge on your land, it is important that you check with companies that you do business with to make sure that this complies with any quality assurance schemes they have.

5. Do use a permitted contractor

Use a permitted contractor to de-sludge your septic tank or wastewater treatment system and make sure that you have receipts for the work they carry out. You will need to produce these if your system is inspected. Contact your local authority for details of permitted contractors.

1. Don't spread sludge from other tanks

Do not transport or spread the contents or sludge from other septic tanks onto your land. Only a permitted contractor is allowed to do so.

2. Don't mix into slurry

Do not mix the contents of your septic tanks or wastewater treatment systems into your slurry tanks. This would mean that a greater area would be affected and you would not be able to use it for grazing for six months, or for making silage for three weeks.

3. Don't spread near harvesting

Within 10 months before harvesting or during harvesting, do not spread untreated sludge on land where:

- fruit is grown (other than fruit trees);
- vegetable crops are grown;
- it is intended to cultivate fruit or vegetable crops that are normally in direct contact with the soil and eaten raw.

4. Don't spread on crops

Do not use untreated sludge on any crops including:

- cereals;
- fodder;
- sugar beet; and
- fruit trees.

You may only apply untreated sludge when you work it into the land during cultivation, or inject it into the soil before planting.

5. Don't spread during or after rain

Do not spread untreated sludge during or after a period of rain or if rainfall is forecast in the next 48 hours.

FAQs - Frequently asked questions

1. Should I mix the contents of my septic tank with my slurry tank?

No, if you mix the contents of a septic tank with agricultural slurry and spread on agricultural land, a larger area will need to be isolated and unused.

2. Can I hire a contractor to empty my tank and spread it on my own land?

Yes, you can spread the contents of your own septic tank on your own land if you comply with the guidelines in this leaflet. (In particular, see the Do's and Don'ts section and Q5 below.)

3. Can I lend my slurry tanker to someone to spread the contents of their septic tank?

Yes, you can lend your slurry tanker to someone, but only to empty their own tank and spread the contents on their own land.

4. How much land do I need to spread the contents of a septic tank?

The average septic tank will hold about 4,000 litres (880 gallons). If you allow an application rate of up to 3,000 gallons per acre, you'd need an area of 0.29 (just under a third) acres for one septic tank.

5. What is the 'setback distance' for spreading?

The required distance between a building, road, streams and so, and the spreading of slurry is called the 'setback distance'. The setback distances in metres for different structures is indicated below.

- dwelling houses – 100m;
- public roads – 10m;
- streams and drains – 10m;
- lakes and main river channels – 20m;
- domestic wells – 50m; or
- public water supplies – 50-300m depending on how much water is used.

This is called abstraction.

Flow chart for land spreading





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**You can find more information
in the EPA Code of Practice:
Waste Water Treatment
Systems for Single Houses at
www.epa.ie/water/wastewater/info/**

