

# Keep it Clean

# SEPTIC TANK PUMPING

## WHY IS PUMPING YOUR SEPTIC TANK IMPORTANT?

### 1. Your Health

A full or poorly maintained septic system can leach harmful bacteria on your property putting you and your pets at risk. Water- and air-born bacteria can spread over ground, in your home, and into groundwater. Viruses, mold and pathogens can also spread through contaminated wastewater. The Department of Health recommends regularly pumping your septic tank.

### 2. Local Water Quality

In addition to bacteria and other pathogens, untreated wastewater from a septic system also carries high levels of nitrogen and phosphorus. These pollutants can harm wildlife, poison plants, and contaminate nearby streams and waterbodies. The Department of Environmental Quality recommends pumping your septic system at least every 5 years.

### 3. Septic Tank Operation

A septic tank with too much sludge cannot process wastewater effectively or efficiently. The system becomes imbalanced and can fail.



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# SEPTIC SYSTEMS AND WATER QUALITY

The EPA has listed improperly maintained and failing septic systems as one of the top five pollutants for surface water quality. The sludge found in septic tanks contains high levels of nutrients nitrogen and phosphorous, in addition to other pollutants. A poorly maintained septic system will release high amounts of nutrients in drainage water. These nutrients can cause algal blooms that are toxic to humans and wildlife.

Coliform bacteria is a group of bacteria predominantly inhabiting the intestines of humans or other warm-blooded animals. It is an indicator of human fecal contamination.

**Step Six:** The wastewater percolates into the soil, naturally removing harmful coliform bacteria, viruses and nutrients.

**Step Five:** The soil accepts, treats, and disperses wastewater as it percolates through the soil, ultimately discharging to groundwater.

**TIP:**  
If the drainfield is overloaded with too much liquid, it can flood, causing sewage to flow to the ground surface or create backups in toilets and sinks.



Please note: Septic systems vary. Diagram is not to scale.  
Photo and steps adapted from <https://www.epa.gov/septic/how-your-septic-system-works>

**Step One:** Wastewater runs out of your house through a pipe into your septic tank.

**Step Two:** The septic tank is a buried, water-tight container. Its job is to hold the wastewater long enough to allow solids to settle down to the bottom forming sludge, while the oil and grease floats to the top as scum.

**Step Three:** Compartments and a T-shaped outlet prevent the sludge and scum from leaving the tank and traveling into the drainfield area. The liquid wastewater (effluent) then exits the tank into the drainfield.

**Step Four:** The drainfield is a shallow, covered, excavation made in unsaturated soil. Pretreated wastewater is discharged through piping onto porous surfaces that allow wastewater to filter through the soil.

## Do's

- Have your septic tank pumped routinely
- Use water efficiently (with low flowing showerheads and toilets)
- Use mild cleaning products
- Spread laundry days throughout the week (no more than one to two loads a day)

## Don't's

- Pump your septic tank yourself
- Drive heavy vehicles over the area where the tank is located
- Use septic tank additives
- Plant trees or shrubs in or near the absorption area

## Signs of a Septic Tank at Capacity:

- Pooling water, spongy ground
  - Slow drainage in the toilet or other fixtures
  - Odors coming from or around the septic tank
  - Excessive, bright green lawn growth over or near your drain field
- Although these signs are telling, you shouldn't wait for issues to occur to have your tank pumped.

Learn more through your local health district:  
<https://www.vdh.virginia.gov/local-health-districts/>

Learn more about septic systems through the EPA:  
<https://www.epa.gov/septic>