

# Maintenance and Care

## Tank Maintenance

### Frequency of Pumping

In **new home installations**, the tank should be pumped either before occupying the home or after 6-12 months of use as a precautionary measure to ensure good bacterial activity and proper functioning. In new homes, sewage containing paint, varnish, stain, and other construction-related products can reduce the initial levels of bacterial activity causing damage to the soil treatment system. If construction work is yet to be completed, the tank should be pumped before it is used for sewage.

Once a system is known to be operating properly, the worksheet on page 20 can be used as a guideline for pumping frequency. Take into consideration both the calculated guideline results (in months) and the condition of the tank (amount of scum and sludge) at the last pumping. Homeowners should be present when the pumping is done or be sure to get this information from the pumping contractor.

**ALL** septic tanks **MUST** be periodically pumped (cleaned) to remove floating scum and sludge that accumulates. If either floating scum or sludge is allowed to enter the soil treatment system it will cause expensive and often irreparable damage. The pumping frequency depends on tank size, use, and operating condition.

The pumping frequency worksheet calculation for a typical household will usually suggest a pumping frequency of 18-30 months. If your final result is very different from this, recheck your responses and the math. If the result suggests very frequent pumping (less than every 12 months), the system may need to be upgraded and/or use habits changed. If the result suggests more than 36 months, the tank should either be pumped or checked for scum and sludge every 36 months.

The categories on the worksheet where you either lost months or didn't gain credits offer ideas for positive changes. If you need help to interpret the results of the worksheet or if they seem strange, contact a qualified septic system professional for additional advice. Use the space provided in the folder accompanying this guide to record the cleaning dates.

**Freezing Protection** - In cold climates where freezing may be a problem, the tank may be insulated by exposing the top of the tank and adding appropriate insulation or covering the surface with hay or straw. Late fall pumping is discouraged.

**A few dollars spent every one to three years on proper cleaning is much less expensive and easier to plan for than an unexpected \$2,000 to \$10,000 repair bill!**

**Never go more than 36 months between cleanings or evaluations!**

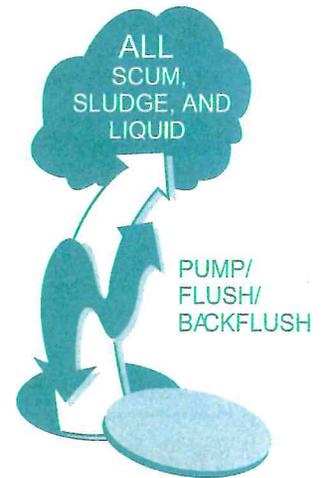
## Proper Cleaning Method

**Effluent Screen:** If the septic tank has an effluent screen on the outlet baffle, it should be cleaned periodically according to screen size, system use, and the condition when cleaned. Effluent screens may need to be cleaned more frequently than your septic tank. The screen can be cleaned by the owner or a septic professional but should always be done in a manner prescribed by the manufacturer or as suggested by the installer. ***Be sure to wear protective gloves, wash hands and clothing thoroughly, and return the rinse water and contents to the septic system or to a remote area where people and animals will not come in contact with it.***

**Septic Tank:** The pumping or cleaning of the septic tank must be done by a licensed and bonded professional. If there are multiple tanks in your system (septic and pump) make sure each one is properly cleaned. Proper pumping will remove ALL scum and sludge from the septic tank(s) and lift tanks. This requires pumping, flushing, and backflushing liquid contents back and forth between the truck's tank and the septic tank through the manhole several times. This process breaks up all scum and sludge in the tank, allowing all solids to be removed by the truck's suction line. Some contractors use special tools rather than backflushing to liquefy the solids. Floating scum left in the tank after pumping may plug baffles or allow solids to enter the soil treatment area when the tank refills. Pumping will leave a black film on the tank walls and a small amount of liquid on the tank floor. This liquid contains millions of bacteria, enough to quickly regenerate the bacterial activity following the pumping.

When the tank is pumped, be sure to have the contractor check for leaks and make sure the baffles are in place and functioning properly. Pumping a tank through the inspection pipes is a bad idea and will often leave solids in the tank and possibly damage baffles. **Insist** that the tank be pumped through the manhole if the tank has one. Most tanks have manholes but they may be covered with soil. ***Ask the contractor beforehand if the tank will be pumped through the manhole and, if it will not, find a contractor who will do it through the manhole.*** It may cost slightly more to have the tank pumped through the manhole, but this will save money in the long run. Adding risers to the manhole can reduce future costs and facilitate proper pumping.

**After pumping, it is not necessary to add a starter.** Bacteria present in sewage and in the tank will do the job.



# Pumping Frequency Guidelines

How often a septic tank needs to be pumped depends on the tank's design and how it is operated. In this chart, the negative factors that affect the pumping frequency are called EFFECTS and the positive factors that reduce the frequency of pumping are called CREDITS.

Consider the frequency guideline from this worksheet AND the conditions observed when the tank is pumped to decide when the tank will next need pumping. No tank should go more than 36 months between pumpings or evaluations! Local government rules must also be followed.

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## EFFECTS

FACTORS

Enter 10 points for wastewater that enters the septic system for each of these appliances:

- Water conditioning unit (water softener or iron filter) \_\_\_\_\_
- Garbage disposal \_\_\_\_\_
- Automatic clothes washer \_\_\_\_\_

Enter 10 points if you have:

- An in-home business (such as daycare, beauty shop) \_\_\_\_\_
- More than 4 overnight guests at a time, several times per year \_\_\_\_\_
- A laundry pattern of doing three or more loads/day \_\_\_\_\_

Enter 10 points if your septic tank is smaller than indicated for the size of the house:

| HOUSE SIZE   | TANK CAPACITY | POINTS |
|--------------|---------------|--------|
| 2-3 bedrooms | 1000 gallons  | _____  |
| 4-5 bedrooms | 1500 gallons  | _____  |
| 6-7 bedrooms | 1750 gallons  | _____  |
| 8-9 bedrooms | 2000 gallons  | _____  |

Enter the points indicated if the last cleaning was:

| FREQUENCY              | POINTS |
|------------------------|--------|
| 1-2 years ago          | 0      |
| 3-5 years ago          | 5      |
| 6-10 years ago         | 10     |
| more than 10 years ago | 12     |

The number of people living and using water in the household affects the cleaning frequency. Enter the number of people for the house size and do the calculation.

| HOUSE SIZE | # OF PEOPLE | LOAD  |       |
|------------|-------------|-------|-------|
| 2 bedroom  | _____       | - 3 = | _____ |
| 3 bedroom  | _____       | - 4 = | _____ |
| 4 bedroom  | _____       | - 5 = | _____ |
| 5 bedroom  | _____       | - 6 = | _____ |
| 6 bedroom  | _____       | - 7 = | _____ |
| 7 bedroom  | _____       | - 8 = | _____ |

} x3 = \_\_\_\_\_  
(subtract if number is negative)

TOTAL EFFECTS

## CREDITS

FACTORS

Enter 10 points if you:

- Use a suds-saving or front-loading clothes washer, or do 4 or fewer loads of laundry spread throughout the week \_\_\_\_\_
- Have two full-size septic tanks or one tank with 150% or more of the capacity required for your house \_\_\_\_\_

Enter 5 points if you:

- Are ULTRA-CONSERVATIVE on water use (see chart, p. 14) \_\_\_\_\_
- Use low-volume toilets (3 gallon or less per flush) \_\_\_\_\_
- Use low-flow shower heads \_\_\_\_\_
- Have two or fewer people in the house and bathe fewer than five times per week \_\_\_\_\_
- Have no one at home for 10 hours or more most days \_\_\_\_\_

TOTAL CREDITS

Enter your numbers in this equation to calculate how often your septic tank should be pumped.

$$36 - \text{Total Effects} + \text{Total Credits} = \text{_____} \text{ months between pumpings}$$

