



# Ensuring Septic System Quality

## Testing, failures, and caring for you septic

Lake friendly living  
means using lakeshore  
BEST MANAGEMENT  
PRACTICES

### BMP

Ensuring Septic System  
Quality

### STANDARDS

Structures/Septic

- Properly functioning leach field.

### LAKE BENEFITS

Ensuring septic system quality keeps lake biological systems functioning at an optimal level. Additional pollutants are also prevented from entering the lake making for a healthier and cleaner environment for you and your family.

### PERMITTING

More information on Regional Office Permits, permit conditions, and the importance of complying with permit conditions can be found at the Environmental Conservation's Drinking Water and Ground Water Protection at:

<http://dec.vermont.gov/water/programs/ww-systems/permitcompliance>



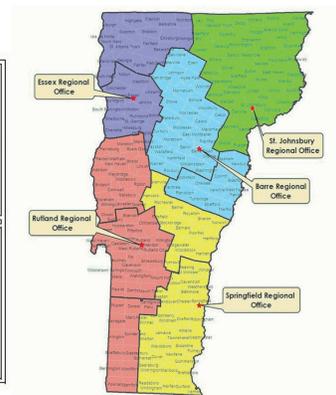
## Ensuring Septic System Quality

### Testing your septic system:

1. Learn where it is and what kind of system you have. Have it inspected for proper function. Septic pumping companies are experts at locating systems. They will examine the condition of the interior baffles and inlet and outlet to determine if they are functioning well. Also, once you know the size of the tank, you will know the number of users the system is designed to handle.
2. The location of the leachfield can be estimated based on the location of the tank. Use this information to estimate whether or not there is adequate setback from the lake shoreline and elevation above groundwater. For instance if your leachfield is in an area where the ground surface is 1 ½ feet above the lake level, it is probably not possible to have the needed separation distance from the bottom of the leachfield and the groundwater.
3. Observe plant and algae growth offshore of your property. If you have noticeably more than your neighbors, it's possible your septic system is a factor. Note, however, that this can also be a sign of other nutrient sources such as lawn fertilizer, driveway runoff etc., or increased sunlight due to removal of shoreland trees.
4. Bacteria testing in the lake has a very limited ability to verify the proper working of your septic system. For instance, leachate may be surfacing in a discreet location and unless you test right there when flows are occurring you may get a low concentration. Testing your well water for bacteria is a good idea if the separation distance between septic system and well are not met.
5. Dye testing is somewhat more effective test, however, it will only catch the worst systems. It is possible for a septic system to be polluting the lake by slowly introducing nutrient-rich wastewater into groundwater and thus into the lake, and pass a dye test simply because it takes more than 48 hours for this occur. Most plumbers can supply you with dye tablets and instructions, however, be aware that a poor system may pass this test.

### VTDEC Regional Offices for Drinking Water and Ground Water Protection

<b>Barre:</b> Vermont Dept. of Environmental Conservation 5 Perry Street, Suite 80 Barre, VT 05641-4268 <b>phone: 802-476-0190</b> <b>fax: 802-476-0131</b>	<b>Essex:</b> Vermont Dept. of Environmental Conservation 111 West St. Essex Junction, VT 05452 <b>phone: 802-879-5656</b> <b>fax: 802-879-3871</b>	<b>Rutland:</b> Vermont Dept. of Environmental Conservation 450 Asa Bloomer State Office Bldg. Rutland, VT 05701-5903 <b>phone: 802-786-5900</b> <b>fax: 802-786-5915</b>
<b>Springfield:</b> Vermont Dept. of Environmental Conservation 100 Mineral St., Suite 303 Springfield, VT 05156 <b>phone: 802-885-8855</b> <b>fax: 802-885-8890</b>	<b>St. Johnsbury:</b> Vermont Dept. of Environmental Conservation 1229 Portland St. Suite 201 St. Johnsbury, VT 05819-2099 <b>phone: 802-751-0130</b> <b>fax: 802-748-6687</b>	<p style="text-align: center;"><b>Questions?</b> call your regional office</p>





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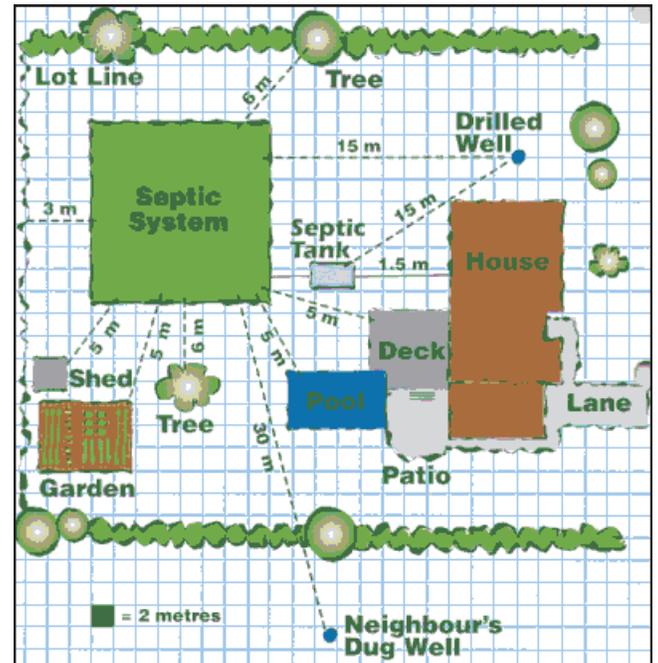
## Testing, failures, and caring for you septic

### Reasons for system failures:

1. You have an old "system" that does not meet current design or site standards and thus is not effectively treating the waste.
2. You have a system that has not been maintained (i.e. regular tank pumping). When solids and greases are not regularly pumped out of the septic tank, they eventually get into the leachfield and clog it, often causing surfacing.
3. Woody vegetation has been allowed to grow up in the leachfield area, thus disrupting the flow or cracking the leachfield pipes resulting in leaks.
4. The system has been misused through the introduction of excessive organic material (from garbage disposals), or through the disposal of chemicals that have killed the working bacteria of the system.
5. You used a septic tank additive that, while clearing out the tank, moved solids into the leachfield and clogged it.
6. The water usage of the camp has increased beyond the capacity of the septic system. Maybe the camp has been increased in size or converted to year-round use or maybe washing machines, dishwashers or a hot tub have been added, taxing an old system through excessive flows. If the flow into the septic tank exceeds its ability to settle solids and float greases, these materials get introduced to the leachfield and clog it.

### How to Take Care of a Septic System:

1. Learn where your system is and sketch out its location with measured distances from stationary objects such as the corner of the camp. Keep records of maintenance and inspection activities, as well as the original design specs if you have it.
2. Have your septic tank pumped and inspected at least once every three years by a professional. If your tank is small or the use is high, you may need to do it more often. The pumping company can advise you based on the tanks condition when it is pumped.
3. Do not use septic additives. They are not necessary and may damage your system necessitating expensive repair. It is not necessary to "seed" the tank after pumping.
4. Conserve water to avoid overloading the system. Use low-flow fixtures and appliances. Institute additional conservation measures when you have a full house.
5. Keep roof drains, basement sump pumps and other rainwater or surface water out of the septic system.
6. Do not use caustic drain openers. Instead use boiling water or a drain snake. Likewise use commercial bathroom and kitchen cleaners in moderation.
7. Avoid the use of a garbage disposal. It puts many solids into the septic tank and means you should have it pumped out perhaps twice as often.
8. A septic system is not a trash can. Do not put grease, oil, disposable diapers, sanitary napkins or tampons, paper towels, cat litter, paint, or pesticides into your system.
9. Plant only grass or other herbaceous plants over your leachfield and keep trees and shrubs away from the edge. Roots can invade the leachfield pipes and cause them to clog or crack.
10. Do not drive or park on the leachfield. It compacts the soil and might crack an underground pipe.



A simple map sketch of a septic system layout with recommended restriction distances for spacing.

Space your laundry washing out over the week. Excessive flow to the septic tank can cause flushing of solids into the leachfield, resulting in clogs and failure.