

## Short Sheet #1 Homeowner Checklist

### Your malfunctioning septic system - Failed or in need of a little TLC?

You've read the GUIDE TO FAILED WASTEWATER SYSTEMS and are pretty sure you have a malfunctioning or failed wastewater system. This document series (Sheets 1 -3) will help you through the process of identifying the problem, hiring a contractor to make repairs to a malfunction system, or hiring a Licensed Designer to design a repair or replacement system.

#### Information to gather:

Does the system have a Wastewater and Water Supply Permit? # \_\_\_\_\_

Date of System Installation (if known) \_\_\_\_\_

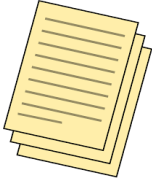
Do you have a copy of the permit or septic system design?      Yes      No

When was the septic tank last pumped? \_\_\_\_\_

Is the septic tank regularly pumped out? What kind of intervals? \_\_\_\_\_

Is the home used as short-term or long-term rental? (Circle one)

Have homeowners recently started to work from home? \_\_\_\_\_



#### Evidence your wastewater (septic system) has potentially malfunctioned/failed

Check if the answer is 'yes'. Add notes for details. Provide this information to your contractor & consultant

- You have test results that indicate a drinking water well has been impacted by wastewater.
- There is a surface discharge in your lawn you suspect is related to the septic system. Where is the surfacing (soggy area)?  
\_\_\_\_\_
- It looks like the septic system discharge reaches surface water (stream or pond) or a drainage ditch.  
\_\_\_\_\_
- Is the lawn above your leachfield much greener than the rest of the lawn?  
\_\_\_\_\_
- Are drains backing up into the house or do fixtures drain slowly?  
\_\_\_\_\_
- Is the problem occurring only in the wet season, after heavy rains, or throughout the year? (Circle)
- Does the problem occur every day, or only on weekends, or associated with high occupancy or large gatherings? (Circle) \_\_\_\_\_
- Has the system operated well for a number of years and failed just recently, or has it been getting worse for a while?

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Has water use in the home changed – a new baby, teenagers taking long showers, a new washing machine or dishwashers, if a seasonal home has it been used more frequently or for a longer period?

Notes: \_\_\_\_\_

Is anything new being discharged into sinks? A new home business or hobby? Examples include a hair salon, pet washing, taxidermy, home brewing, photography processing. Have cooking practices changed such that there is more fats, oils, and greases being sent down the drain? Have you added a water softener? Does anyone in the home have a serious illness that requires a significant amount of medication (Cancer treatments or long time antibiotic use can adversely impact biota of system, requiring more frequent pumping).

Notes: \_\_\_\_\_

Has anything been tied into the drain pipes to the septic system? (a sump pump, roof runoff, foundation drain, heat pump, swimming pool backwash, floor drains in a garage etc)

Notes: \_\_\_\_\_



### Have a qualified contractor check & fix the easy things first!

The cause of a Wastewater System malfunction can often be determined & repaired easily without complicated tests. Many problems can be solved by checking & fixing the easy things first. Call an expert!

### Go to Sheet #2 Who to call – Plumbing & Excavating/Wastewater Contractors

If no easy fixes are identified and repaired by a contractor (using Sheet 2), a more robust assessment should be undertaken and you should

### Go to Sheet # 3 Last but not least – Call a Licensed Designer

Licensed Designers design & get permits for major repairs or a replacement of a failed wastewater system

### Remember Homeowner follow up – it's up to you!

After the system has been repaired or replaced:



- Read and follow the *Homeowners Wastewater System* handout to maintain your septic system.
- Be sure you know what maintenance is necessary for your system.
- Encourage good wastewater/water habits: don't overload your system or dispose of non-domestic wastes into your sinks or toilets.

## Short Sheet #2 Who to call – Plumbers & Excavating/Wastewater Contractors Your malfunctioning septic system - Failed or in need of a little TLC?

### Have a qualified contractor check & fix the easy things first!

The cause of a Wastewater System malfunction can often be determined & repaired easily without complicated tests. Many problems can be solved by checking & fixing the easy things first. Call an expert!

- 1. Plumbers** check & fix problems inside your house
  - ✓ Plumbers are licensed in Vermont through the Department of Public Safety, Division of Fire Safety
  - ✓ Plumbing contractors do not have to be licensed plumbers to work on the plumbing in an owner-occupied single-family residence with its own water supply and wastewater system
- 2. Excavating/Wastewater Service contractors** check & fix problems outside your house
  - ✓ Excavating & Wastewater Service contractors are not currently certified or licensed in Vermont
  - ✓ Some excavating contractors also provide plumbing services
- 3. Licensed Designers** design & get permits for major repairs or a replacement of a failed wastewater system
  - ✓ If no easy fixes were identified and repaired by a contractor, additional assessment will be necessary. This may require excavation of the leachfield to assess conditions within the leachfield
  - ✓ Anything beyond a minor repair will require a permit from the Vermont State Drinking Water and Groundwater Protection Program
  - ✓ Licensed Designers are licensed for wastewater design through the Agency of Natural Resources, Drinking Water & Groundwater Protection Division



### Plumbing contractors can check and fix:

- Properly draining pipes from your toilet and sinks
- Clogged pipes or partially collapsed pipes heading outside the building
- Plugged vent pipes (may be on roof)
- Anything mistakenly tied into your septic system (sump pump, foundation drain, heat pump, floor drain)
- Your septic tank to see if its full or leaking



### Excavating contractors can check and fix:

- Pump not working correctly (if your system has a pump)
- Full or leaking septic tank or a clogged tank filter
- Malfunctioning distribution box
- Collapsed pipes
- Landscape changes that affect the leachfield
- \*Roots from brush or trees that may have impacted the leachfield
- \*Compaction of the leachfield from driving or parking on it

\*These will require a License Designer to inspect the leachfield to assess damage



**Contractors cannot complete a major repair or replace a leachfield without a permit – contact a Licensed Designer**

## Short Sheet # 3 Last but not least – call a Licensed Designer Your malfunctioning septic system - Failed or in need of a little TLC?

If no easy fixes were identified and repaired by a contractor (see Sheet 2), a more robust assessment should be undertaken.

### Have a Licensed Designer assess the malfunctioning or failed system.



A licensed designer will consider:

- ✓ The results from the contractor's inspection if available (or your notes from their visit)
- ✓ If the system has a permit, is the wastewater system installed correctly, in the specified location, and meets setbacks
- ✓ The type & location of the water source and if the water use in the home has changed (in quantity or in quality)
- ✓ The conditions surrounding the leachfield such as trees or shrubs, altered landscape drainage, or a compacted leachfield
- ✓ The conditions within the leachfield – correctly sized sand, presence of a biomat, high water table or flooding, impacts from roots or utility trenches. (This will require excavating at the edge and in the leachfield)

### If your Licensed Designer indicates you need to replace the leachfield system, they will consider several options:

- Can an already approved replacement or alternate system on your property be used instead of applying for a new system.
- Can dual alternating leachfields be utilized, alternating the flow between the old field and the new field. The old field may recover in a few months and be ready for use when the flow is turned on again.
- In certain circumstances, an easement on a neighbor's property can be used for an expanded or additional leachfield
- Alternative wastewater disposal methods can be investigated. For example, a mound system or bottomless sand filters can be utilized instead of an existing subsurface system.
- Approved Innovative/Alternative (IA) Systems can be proposed (See the ANR website for approved IA systems).



Your Licensed Designer will then submit the appropriate permit request and documentation to the Vermont State Drinking Water and Groundwater Protection Program for approval.

### What if my system needs a variance?

## Short Sheet # 3 Last but not least – call a Licensed Designer Your malfunctioning septic system - Failed or in need of a little TLC?

### If your system needs a variance

If a Failed System cannot be repaired or replaced with a wastewater treatment system that complies with current Standards and Rules, your Licensed Designer can design a system requiring a variance from the Rules.

- ✓ **This means all alternatives have been examined and full compliance with the technical standard cannot be achieved at your home**
- ✓ Your Licensed Designer may work in consultation with a Regional Engineer to design a replacement system that can obtain variance approval
- ✓ This approved replacement system must provide equal to or better protection to human health and the environment than the wastewater system it is replacing



### Homeowner follow up – it's up to you!

After the system has been repaired or replaced:



- Read and follow the *Homeowners Wastewater System* handout to maintain your septic system.
- Be sure you know what maintenance is necessary for your system.
- Encourage good wastewater/water habits: don't overload your system or dispose of non-domestic wastes into your sinks or toilets.