

## RECOMMENDATIONS FOR CHECKING HOMES WITH SEPTIC FAILURES

### BASEMENT:

1. The basement is a good place to start. The sump pump must be checked to see that the water is not being pumped into the septic tank. Many older homes had what is known as a by-pass valve and only one sump and pump. The valve was to be turned one way when doing the laundry and back when the wash was completed. Laundry waste water was pumped to the septic tank while washing clothes but storm water from footing drains would be pumped to the ground surface or to the road ditch at all other times. If the valve was not returned after doing the laundry, storm flow would be pumped to the septic system and failure would result due to excess water. Recommend the installation of a separate sump and pump that discharges to the septic system to handle laundry waste exclusively.
2. The water softener should be checked to determine if backwash recharge brine is being discharged to the seepage field. The salt solution usually does not hurt the septic tank, however, it changes the soil structure and hastens plugging of the pores of the soil. The recharge operation also adds a large liquid flow to the system. Recharge water should discharge to the road ditch or otherwise away from the seepage field.
3. Humidifiers. Some humidifiers on furnaces are designed without shut-off valves. The amount of water that enters the furnace is supposed to be equivalent to the amount the warmed air will evaporate, however any excess is discharged to the floor drain and could result in large quantities of clear water being added to the septic system.
4. The laundry sump pump should be checked. It should have a sealed sump pit. The bottom should be intact and tight. Sometimes footing drain water enters the laundry sump pit through cracks and is pumped to the septic tank. This is especially true when the two sumps are adjacent to each other.

### HOUSE:

1. The float valves in all toilet tanks should be checked. If any are sticking, they should be repaired or replaced.
2. The water elevation line in the flush tank should be lowered approximately one inch from the top of the overflow pipe.
3. All faucets should be checked for dripping and washers replaced where needed. Even a small drip adds many gallons of excess water over a period of a month.

SEPTIC TANK:

1. During wet weather the septic tank should be pumped and a check made to see if any water is flowing into the tank when all water is shut off in the house. There is a possibility that foundation drains are connected to the building sewer or that water is flowing along the outside of the sewer line and infiltrating into the septic tank.
2. The outlet baffle should be checked to be sure it is in good condition.
3. The septic tanks may pick up subsurface water through the lid and inspection ports. This is especially so in soils that have a seasonally high water table.

YARD:

1. The downspouts should not drain toward the septic field or septic tank.
2. The sump pump discharge, if pumped to the ground surface, should be diverted away from the seepage field and septic tank area.
3. If the seepage field or septic tank is in a drainageway, even a slight one, a curtain drain should be installed above it to intercept this flow and divert it away from the field or septic tank.
4. One or more lines, especially the end of a deep one, can act like a field drain and pick up ground water instead of percolating sewage.
5. A one-inch depression over a seepage line will add large quantities of water to the field. Mound over seepage lines during initial construction and fill any depressions that subsequently occur.
6. Parking areas should not drain toward seepage fields.
7. Dry wells constructed for roof drains and sump pumps should be located below the field area.
8. The last or lowest line of the seepage field should fail first. When this occurs, all other lines should be checked to determine that they also are full to the overflow level. If one or more is not full, distribution to higher lines is defective and portions of the field are not working.