

# SEPTIC SYSTEM

In rural areas or areas not serviced by the local municipality, the waste water and effluent is treated in a septic tank and the water seeps back into the soil. *Note that the overall condition of a septic system and leaching bed cannot be fully evaluated during a visual inspection.*

A septic system consists of three components:

**SEPTIC TANK** – a large watertight container, made of either concrete, fiberglass, PVC or galvanized steel (outdated), divided into two chambers with inspection ports at the top. It serves as the holding tank which allows sewage to be decomposed by bacterial action into a liquid and sludge. The sludge settles to the bottom; scum rises to the top and the liquid is dispersed into the leaching bed.

**DISTRIBUTION SYSTEM** – a series of pipes leading from the distribution box to the bed

**LEACHING BED** – also known as a *tile bed*, *disposal* or *drainage field*, is a network of connected perforated, or open joint, pipes in trenches surrounded by filtering materials. The leaching bed itself can be either **conventional bed**, natural soils are suitable for filtering and seepage; **raised bed**, appropriate soils/sand brought in; **filter bed**, instead of trenches the pipes are laid closer together on a bed of filter soil/sand.

## **SIGNS OF TROUBLE WITH YOUR SEPTIC SYSTEM:**

- **EXTRA PLANT GROWTH OVER LEACHING BED**  
this may be a sign that the bed still contains organic material and/or it may be saturated
- **BROWN OR “BURNT” PATCHES IN GRASS OVER LEACHING BED**  
although expected during severe droughts, at other times this indicates that the system is too full
- **SEWAGE ODORS IN SUMP PIT OR DRAINS IN HOME \***  
this indicates that the system is too full
- **LEACHING BED AREA IS FREQUENTLY WET AND SPONGY**  
clogged pipes; too much water through the system; effluent not draining properly;
- **SEWAGE ODORS IN THE LEACHING BED AREA**  
solids not broken down properly; effluent not draining properly; clogged pipes
- **BLACK OILY LIQUID POOLING OR BUBBLING ON SURFACE**  
extremely serious problem – solids not broken down properly; effluent not draining properly
- **WASTE WATER BACKING INTO THE HOUSE**  
extremely serious problem – clogged pipes; too much water; solids not broken down properly

*\* some jurisdictions do not permit the sump pump to discharge into the septic system.*

A leaching bed should be at least 100 feet from a well or other source of water; the septic tank should be at least 55 feet from a well or other source of water; and be no closer than five feet from the house

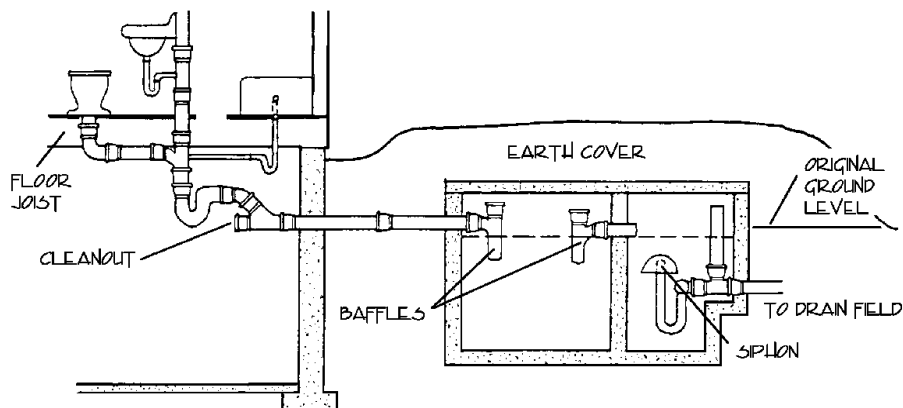
## **HOW TO ENSURE LONG LIFE OF YOUR SEPTIC SYSTEM:**

- Dispose of solids appropriately (don't flush cooking grease, cigarette butts, paper towels, etc.)
- Conserve and spread water loading (don't wash dishes and do two loads of laundry in one day)
- Divert other water such as rainwater, hot tubs, etc., away from leaching bed
- Waste water (salt brine) from a water softener does not break down and may clog voids in the distribution pipes or soil
- Dispose of chemicals and fuels at approved waste sites and use environmentally friendly products
- Annual inspections and pump out when necessary (sludge should be pumped out every 3-4 years)

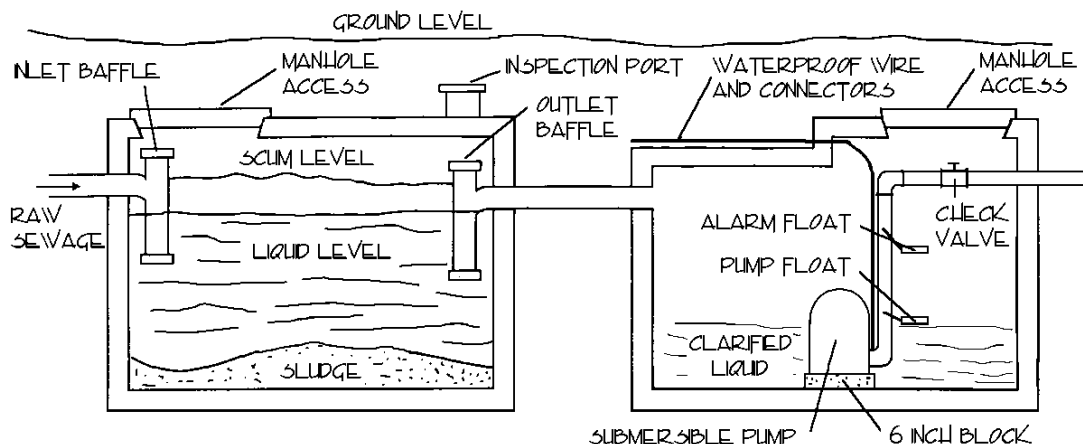
Homeowners should ensure they receive copies of appropriate certificates, a sketch showing the location of the septic tank and leaching bed on their lot and know the age of the system. A properly maintained septic system should last about 30 years; a 50 year lifespan is not uncommon.

For further information contact your local health/conservation unit, septic tank contractor or a licensed plumber.

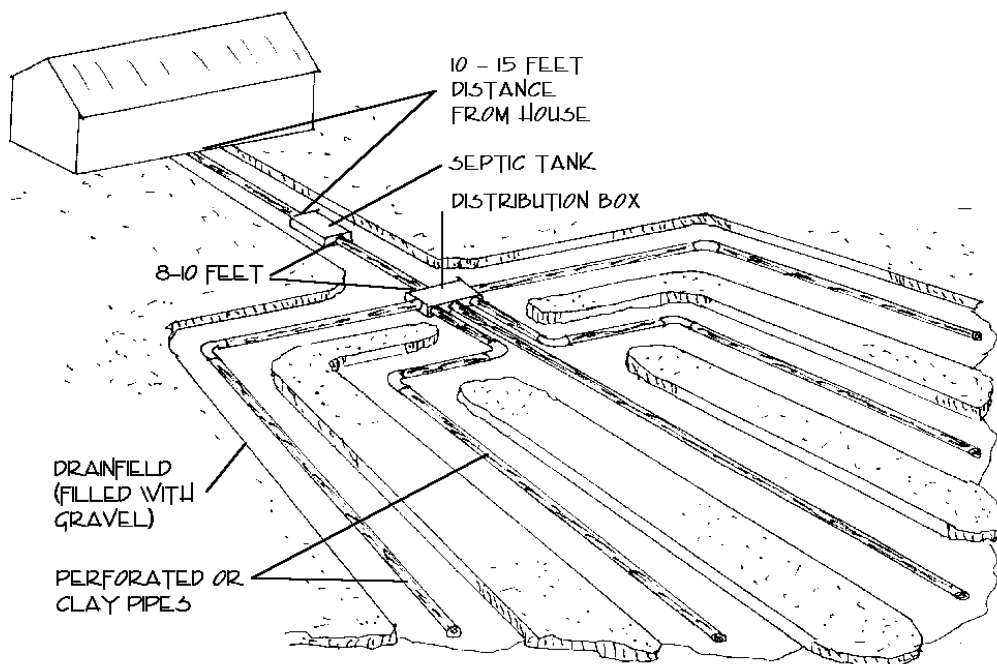
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Typical residential septic waste drainage system with a siphon type septic



Typical concrete septic tank and dosing tank



Typical septic tank and leaching bed system