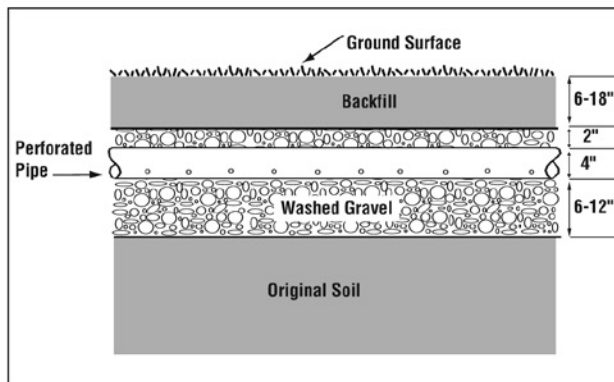


How the Drainfield Functions

The drainfield receives partially treated effluent from the septic tank. It consists of a network of perforated pipes laid in gravel-filled trenches about 2 or 3 feet wide or in beds that are over 3 feet wide and 6 to 18 inches (or more) deep. The size and type of drainfield are determined by the estimated daily wastewater flow and local soil conditions. Wastewater trickles out of the perforated pipes, through the gravel layer and into the soil.



Physical and biological purification processes take place as the effluent percolates down toward groundwater. These processes work best where the soil is somewhat dry and permeable and contains plenty of oxygen for several feet below the drainfield. Some systems include a dosing chamber or distribution box in the pipe leading from the septic tank to the drainfield for regulating the release of wastewater into the drainfield. This promotes optimal treatment and dispersal of the water and prolongs the life of the drainfield. The lifespan of a well-maintained system can be 20 to 30 years or more.

Signs of system failure

- Odors, surfacing sewage, wet spots or lush vegetation on or near the drainfield.
- Plumbing or septic tank backups.
- Slow-draining fixtures.
- Gurgling sounds in the plumbing system.

If you notice any of these signs or if you suspect any other problems with your septic system, contact the sanitarian at your county or regional health office or your septic system contractor for assistance.

Alternative systems

In some situations, it may be possible or necessary to treat and disperse effluent from the septic tank using something other than only a drainfield. Alternative systems in use today include sand filters, mounds, wetlands, gravelless drainfields, pressure dosing and aerobic units. Servicing requirements for these systems vary and should be obtained from your local sanitarian or septic system contractor.

Recommendations

These suggestions will help you prolong the life of your septic system.

- **Minimize the amount of water entering the septic system.** Practice water conservation by installing water-saving fixtures in your home, using the least amount of water to get the job done, and repairing leaky faucets and toilets. When possible, keep water softener backwash out of the septic system.
- **Avoid using a garbage disposal unit.** Make compost out of vegetable wastes, coffee grounds, eggshells and other compostable kitchen wastes.
- **Eliminate release of non-degradable materials** such as fats, paper towels, hair, tampons, sanitary napkins and disposable diapers.
- **Never release toxic chemicals** such as solvents, disinfectants, oils, paints, paint thinner and pesticides. Use boiling water and a drain snake to open clogged drains instead of caustic drain openers. Use commercial bathroom cleaners in moderation. Use mild detergent or baking soda when possible.
- **Pump septic tank regularly**, usually once every three to five years, and never allow solids or scum to leave the septic tank and enter the drainfield.
- **Keep surface of drainfield properly drained** by slightly mounding the soil over the drainfield, redirecting downspouts and sump pump outflow, and not stockpiling snow over the area.
- **Do not install automatic sprinklers** over the tank and drainfield.
- **Landscape over septic system** with dense grass cover and other **shallow-rooted** plants.
- **Avoid impermeable or compacted surfaces over the drainfield** such as concrete, asphalt, plastic or compacted soil from vehicular traffic.
- **Save fertilizer** by not fertilizing over the drainfield.
- **Stay away from additives.** Their benefits have not been demonstrated, and some may actually harm your system and contaminate groundwater.
- **If there are observation ports in your drainfield**, look in them during wet (spring) and dry weather and determine depth of ponded water, if any. Records over time will help you forecast and solve any developing problems.