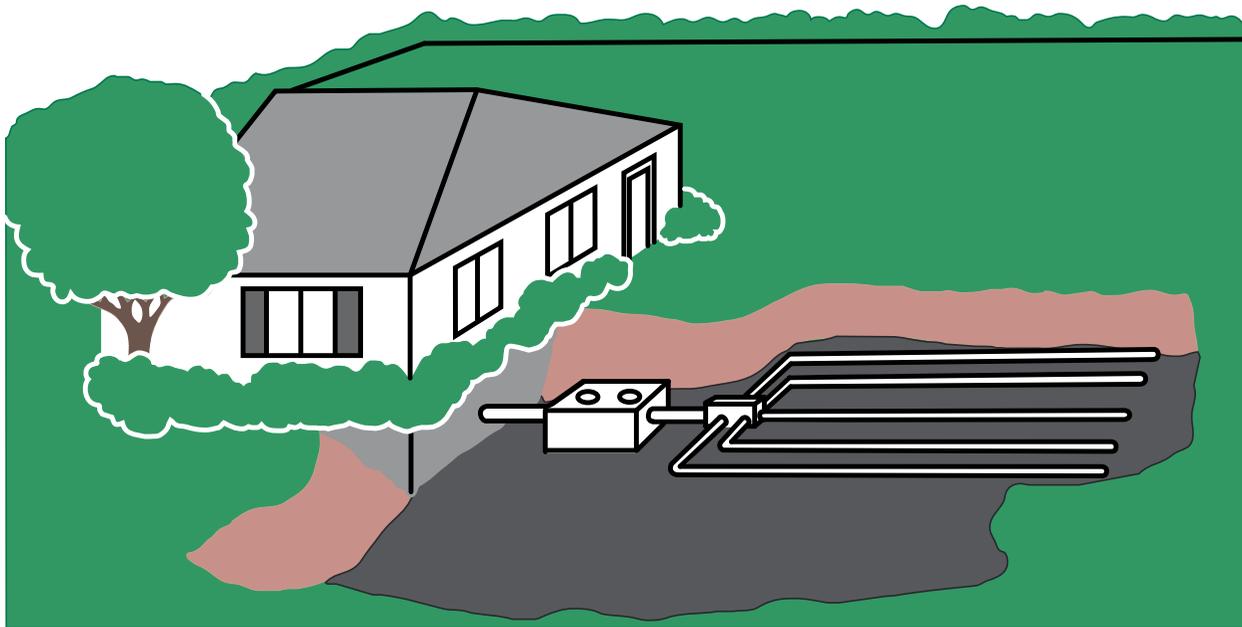


Conventional Septic Systems

Households that are not served by public sewers usually depend on septic tank systems to treat and dispose of wastewater. Septic systems are individual wastewater treatment systems that use the soil to treat small wastewater flows from your toilet, bath, kitchen, laundry, etc. A well designed, installed, and maintained septic system can provide years of reliable low-cost service.

There are many different types of septic tank systems that can fit a wide range of soil and site conditions. While all septic systems are individually designed for each site, most septic systems are based on the same principles.

A Conventional Septic System



A septic system consists of a **septic tank**, a **distribution system** and a **drainfield**, all connected by pipes. The typical septic tank is a large buried rectangular concrete container. Your septic system treats your household wastewater by temporarily holding it in the **septic tank** where heavy solids settle to the bottom and bacterial action partially decomposes them. Most of the lighter solids rise to the top and form a scum layer. The solids stored in the tank need to be removed by a professional septic tank pumper every three to five years. The wastewater leaving the septic tank is a liquid called **effluent**. It has been partially treated but still contains disease-causing bacteria and other pollutants.

The effluent flows into the **distribution system**, which separates the effluent flow evenly into a network of **drainfield trenches**. The drainfield is a network of perforated pipes laid in gravel-filled trenches, or beds in the soil. Drainage holes at the bottom of each pipe allow the effluent to drain into the gravel trenches for temporary storage. The effluent then slowly seeps into the soil where it is further treated and purified. Chemical and biological processes treat the effluent before it reaches groundwater. A properly functioning septic system does not pollute the groundwater.

Record of Service

Date	Work Done	Contractor

Prospective Home Buyers

When purchasing a home, prospective buyers should obtain the following information:

- septic system location
- septic system size
- replacement area location
- age of the system
- date of last septic tank pumping
- maintenance or repair records.

For More Information

For more information about septic system regulations, maintenance or inspection of your septic system, contact:



Benton-Franklin District
Health Department
Environmental Health Division
7102 W Okanogan Pl
Kennewick, WA 99336
(509)460-4205

Septic System Maintenance and Operation Guide



Benton Franklin District Health Department



Caring for Your Septic System

The accumulated solids in the bottom of the septic tank should be pumped out every three to five years to prolong the life of your system.

Neglect or abuse of your septic system can cause system failure. Failing systems can:

- reduce the value of your property,
- be very expensive to repair,
- cause a serious health threat to your family and neighbors,
- degrade the environment, especially groundwater, lakes and streams.

Septic Tank Additives

Many products on the market, such as solvents, yeast, bacteria, and enzymes claim to improve septic tank performance, or reduce the need for routine pumping.

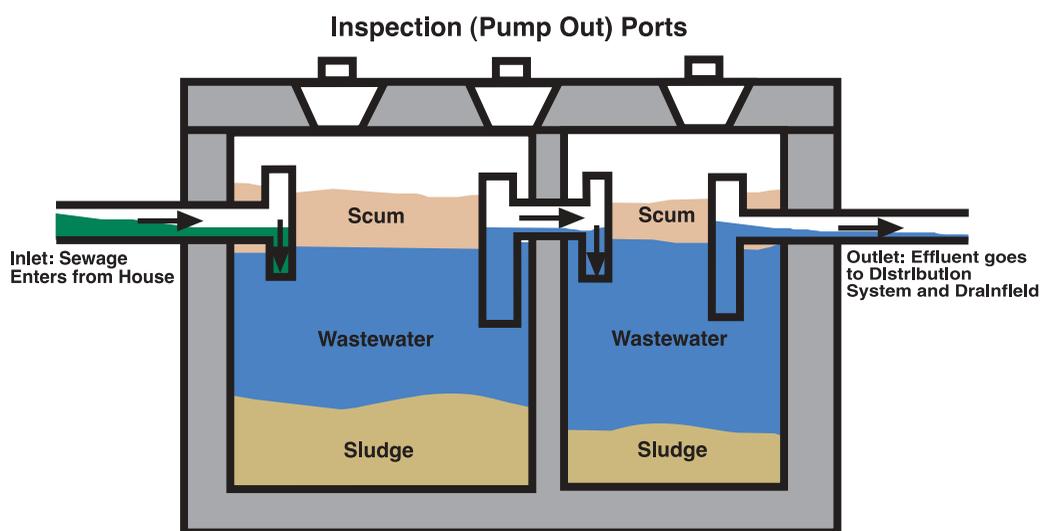
Do not use an additive unless it is specifically approved by the health department. Some can cause solids to carry over to the drainfield, which results in early soil clogging and the need for a new drainfield. Products containing organic solvents contribute to groundwater pollution.

System Failure

Warning signs of a failing system:

- surfacing sewage, or lush vegetation in the drainfield area,
- sewage back-ups in the house,
- slow draining toilets or drains,
- sewage odors.

If you notice any of these signs or if you suspect your septic tank system may be having problems - contact the Benton-Franklin Health District for assistance.



System Management

1. **Keep accurate records.** Know where your septic tank system is and keep a diagram of its location. Records of its size and location may be available at the Benton-Franklin Health District. Keep records of maintenance on the system. These records will be helpful if problems occur, and will be valuable to the next owner of your home.

2. **Inspect your system once every three years.** Have the level of solids and scum in your septic tank checked to assure that the layer of solids and scum are not within the early warning levels. The tank also should be checked to see if the baffles or tees are in good condition. Periodically inspect the drainfield and downslope areas for odors, wet spots, or surfacing sewage.

3. **Practice water conservation.** The more waste water you produce, the more the soil must treat and dispose. By reducing your use, you can extend the life of the drainfield, decrease the possibility of system failure, and avoid costly repairs.

To reduce your water use:

- Use water-saving devices in faucets, showerheads and toilets.
- Repair dripping faucets and leaking toilets.
- Take shorter showers or baths with a partially-filled tub.
- Wash only full loads of dishes and laundry.

4. **Pump out your septic tank every three to five years or as needed by a licensed septic contractor.** Don't wait until you have a problem. Routine pumping can prevent failures, such as clogging of the drainfield and sewage back-up into the home. Using a garbage disposal is not recommended because it will increase the amount of solids entering the septic tank and require more frequent pumping.

5. **Never flush harmful materials into your septic tank.** Grease, cooking fats, newspaper, paper towels, rags, coffee grounds, sanitary napkins, disposable diapers, plastics and cigarettes cannot easily decompose in the tank.

6. **Never flush harmful chemicals into your septic tank.** Chemicals such as gasoline, oil, paint, paint thinner, pesticides, antifreeze, etc. are harmful to the systems proper operation and can kill the beneficial bacteria that treat your wastewater.

7. **Divert all runoff away from your system.** Water from surfaces such as roofs, driveways, or patios should be diverted away from the septic tank and drainfield area. Soil over your system should be slightly mounded to help surface water runoff.

8. **Protect your system from damage.** Keep traffic such as vehicles, heavy equipment, or livestock off your drainfield or replacement area. The pressure can compact the soil or damage pipes. Consult the health department before you construct a building, plant a garden, or install a pool or underground sprinkler system.

9. **Landscape your system properly.** Grass is the best cover for your system. Do not place impermeable materials over your drainfield or replacement area. Materials, such as concrete or plastic, reduce evaporation and the supply of oxygen to the soil for proper treatment. Roots from nearby trees or shrubs may clog and damage your drain lines.

10. **Obtain the required health department permit before making system repairs.** Use professional licensed septic contractors when needed. Many problems can be corrected with a minimum amount of cost and effort if done properly.