

Yamhill County

DEPARTMENT OF PLANNING AND DEVELOPMENT

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The following is a list of common questions from applicants regarding septic systems:

Q. What is Saprolite?

- A. Saprolite is the partially decomposed rock found under most of our soils in the hills. Soil is formed from the rock when temperature, water, plants, and animals slowly decompose the hard rock and it becomes fractured and soft enough to dig with a shovel and break by hand. This transition zone is not hard rock but still is not considered soil. If the sanitarian finds indications that this zone is dry year-round to a depth of 48 inches, he can approve the site for a saprolite system. This alternative system is installed exactly the same as a standard system. The permit fee is the same as for a standard system permit.

Q. What is a tile-dewatering system?

- A. When the proposed septic site is on nearly level ground (slope of 3% or less) and indications are that the seasonal water tables are within 24 inches of the ground surface, we can sometimes make the site acceptable for septic installation by lowering the water table. This is similar to what farmers do in wet agricultural fields. A drain tile is installed 20 feet from the drainfield on all four sides to collect the ground water, then it is piped off to the ground surface, usually to a ditch or creek bank.

Q. Can you plant a garden over the drainfield?

- A. In most cases a garden is not harmful to your drainfield. There are some drainfields installed very shallow (as little as six inches deep, and the distribution boxes are even shallower) and plowing or tilling can dig up the drainfield. Probing can show the depth of the drainlines. Fruits and vegetables are normally not affected when they are planted over a drainfield. However, washing the fruit and vegetables is always recommended prior to consumption (especially tuberous plants such as carrots, potatoes, turnips, etc.).

Q. How about trees in a drainfield area?

- A. Trees near the septic tank or tight lines can sometimes be a problem. Roots can seek out moisture through small openings in the tank or pipe and grow until they block the system. If there is a willow anywhere near this part of the system, you are probably in for trouble. Firs, maples, and most fruit trees do not seem to be a problem. Invasive roots can be kept in check by flushing Copper Sulfate (Bluestone) down the system every six months. Trees and shrubs further out in the drainfield can actually be beneficial since they transpire moisture. A mature oak can transpire 40 gallons per day.

Q. How do I find my existing septic tank and/or drainfield?

- A. First check the County's records. We should have as-built drawings of all systems installed since 1991 and for many of the older systems. Tanks installed in the last three or four years have a riser to the ground surface. For at least ten years a tracer wire has been required on the pipe from the dwelling to the tank. A metal detector should be able to locate this wire. An electrical charge can be placed on this wire to enhance the signal. Older tanks usually will be 1 to 2 feet deep. If the ground isn't too dry, probing is the best locating method. If nothing else works, some septic pumpers have devices that can be flushed or snaked down the sewer and emit a tracing signal. For a fee, most pumpers will attempt to locate your tank. It is necessary to know where your tank is for servicing when needed. Failure to pump the tank when needed can allow excessive solids to overflow the tank and ruin the drainfield. Drainlines often show up as green strips of vegetation during dry periods. This is not an indication the drainfield is malfunctioning unless the strips become mushy (usually the lowest line). Finding drainlines in bare ground during the wet

season, or deep drainlines that don't show on the ground surface, requires probing to locate the drainfield rock or pipe.

Q. Can a driveway go over a drainfield?

- A. It is not allowed to place a driveway over the disposal section of a drainfield. The weight of the vehicular traffic may crush the drain pipe or compact the soil, prohibiting air from getting to the drainfield. A driveway can cross the pipe between the tank and the drainfield if you properly protect the pipe from crushing. If you need to cross thru a drainfield, the area under the driveway may be allowed to be tight lined with drainfield on each side of the driveway. No cuts in the original soil may be made in this area.

Q. Should I use additives?

- A. We know of no studies indicating that the placement of yeast or other additives you have seen on television are of any substantial benefit to your septic system. In fact, some additives are so caustic they can damage your system. We do not recommend their use. Some people like to place something in a tank of a just pumped septic tank as a "starter". This is not necessary since the natural bacteria will multiply in the tank and drainfield and will soon begin digesting the available nutrients.

Q. Can I use the new black plastic units in my new drainfield instead of rock and pipe? Are they any good?

- A. Infiltrator units are approved for use anywhere a standard drainfield is approved. They are not approved for sites approved for capping-fill, steep slope, or seepage trenches. They are very popular due to the ease of installation compared to rock trenches. They allow less impact on the soil during installation since rock is not being hauled over the site. They can be subject to damage by gophers and moles if not placed into use for a prolonged period of time. This is not a major problem, but does happen occasionally. Whether these units are better than rocked drainfields is still unknown. If the septic system was properly sited by the Sanitarian, installed and backfilled under good conditions, and maintained properly by the owner, the system could then be expected to last 20-30 years.

Q. Can I place extra fill dirt over my drainfield?

- A. Regulations do not allow for such filling except for capping-fill septic systems which are installed very shallow due to shallow restrictive soil layers or high water tables. This is because 90% of the soil organisms that decompose the sewage in the drainfield are within the first 16 inches of the ground surface due to oxygen availability. The deeper the drainline, the slower the breakdown of the sewage, which allows increased clogging of the drainfield sidewall and premature failure of the system. Your system will work, just not as long. We do allow simple landscaping of adding up to maybe six inches of soil to smooth out the site. Never remove soil from over your drainlines.

Q. What size tank is best?

- A. 1000 gallon tanks are acceptable for up to four bedroom dwellings. Dwellings with five or more bedrooms require a minimum 1500 gallon tank size. If you expect to increase the future size of the dwelling to more than four bedrooms, it is recommended you install a 1500 gallon tank initially. If you expect to place an unusually heavy use on the septic system (more than eight occupants, large jacuzzi bathtubs, teenagers, or professional cleaning services), you may wish to increase the minimum size of tank and drainfield required by the county.

Q. Is it a bad idea to allow animals on the drainfield area?

- A. If you have a capping-fill type septic system, do not pen any animals over the drainfield. Most drainfields are standard systems and are deep enough that animals will not greatly damage the drainfield. Do not place drainfields in areas of livestock concentration such as

feeding stations, barn entrances, or other high traffic areas. Livestock will cause much less damage during the dry season, so it is a good idea to rotate pasture use away from drainfield areas during the wet season if possible.

Q. How much drainfield is required?

- A. The minimum size is determined by the estimated amount of effluent to be discharged to the system and the soil conditions at the site. Currently there is a minimum size of four bedrooms even if your dwelling will contain fewer than four. Soil conditions with higher amounts of clay or shallower water tables require more drainfield. The majority of our soils require 375 linear feet of drainfield for a dwelling with up to four bedrooms.

Q. What items should not be placed into the septic system?

- A. Probably the most common item would be excessive amounts of kitchen waste thru the garbage disposal. Keep in mind the more garbage you place down the septic system the sooner the tank will fill with solids and require servicing. Large amounts of food and grease will somewhat shorten the life span of the drainfield. Excessive amounts of bleach, drain cleaner, or other chemicals that kill bacteria can kill the bacteria needed to digest the waste in the septic system. If you are not routinely using large amounts of these chemicals, the bacteria will be replaced when the chemicals are flushed thru the system. Occasionally a hobby such as photography is located in a dwelling on a septic system. Do not allow these chemicals to enter the system. They can harm the system and also contaminate the soil and groundwater. Excessive water use (in excess of what the system was designed to handle) will lessen the overall life expectancy of the drainfield.

Q. How far from the house should a septic tank be placed?

- A. Since the solids are removed by the septic tank, there is less chance of the pipes clogging after the tank. We recommend the tank be placed close to the dwelling if possible (5-10 feet). The tank should not be buried deeper than three feet if possible. You should also place the tank lower in elevation than any future outbuildings that will contain plumbing. If you have any plans of future expansion of the dwelling or decking, place the tank at least five feet outside this area.