

GLOSSARY OF TERMS

HSDS- Household Sewage Disposal System (this has been the standard term for home septic systems for a number of years. Just recently the EPA has chosen to begin using a new term HSTS).

HSTS- Household Sewage Treatment System (since our goal is to makes sure all systems are providing adequate treatment of the effluent produced by a household system, we have recently began using this term when discussing home septic systems. These terms (HSDS & HSTS) are often used interchangeably.

Alarm- An electromechanical device that provides an audible and visual indication that the water level in a pump or holding tank is above what it is supposed to be.

Alternating Leach Field- One of Two or more leach fields designed to be used while the other(s) rest. They are generally fed via a manually operated diverter valve / alternating device located in line from the septic tank.

Baffles- Pipe tees or partitions within a septic tank which reduce turbulence at the inlet and prevent floating greases and scum from escaping into the leaching system at the outlet. These are made from pre-formed concrete as part of the tank on older septic tanks. After many years, they commonly break off and fall into the tank. Your local septic hauler can inspect and replace these as needed when your tank is pumped. Newer septic tanks have baffles made of PVC pipe.

Cleanout- A removable plug or a tee in a sewer line, where a snake can be inserted to clear a blockage.

Distribution Box or D-box: Usually a small square concrete box within a leach field from which all pipes lead to disperse effluent within the field. Newer boxes should be marked at the surface to protect from vehicle traffic.

Drywell: Often pre-cast perforated rings surrounded by gravel to increase the absorption area. Clarified effluent from a septic tank enters and is allowed to leach through the gravel in a more vertical fashion than a leaching trench. These have not been commonly used in recent years due to the laws requiring a minimal distance between the bottom of a leaching system and the seasonal high-water table.

Dug Well: A water supply well that is simply a hole in the ground lined with stone, brick, concrete, plastic or steel to hold its shape. The lower portion of the lining is perforated or pierced to let in water from the Aquifer or ground water table. The upper portion of the lining is water tight to keep surface water from entering and contaminating the well. Dug wells are often called shallow wells to differentiate them from drilled or driven wells that extend much deeper into the ground. Dug wells in our area are often a minimum of ten feet into the ground and a maximum of 25-30 feet. Shallow wells for water supply are very similar in concept to drywells, which return wastewater or rainwater back to the

ground. Both are designed to exchange water between the structure and the soil. The major difference is that water wells are purposely built into the ground water table and dry wells are built **above** the water table to keep wastewater from entering untreated.

Effluent: The liquid that flows out of the septic tank after the tank has allowed the solids to settle out.

Leaching System: The part of the septic system that returns water to the ground for re-absorption. Could be a drywell, leach bed, trenches, chambers, etc.

Leach Bed: A leaching system which consists of a continuous layer of gravel about a foot deep, usually in a rectangular layout, with perforated pipes laid level throughout to disperse effluent as evenly as possible over the entire bed.

Leach Trenches: Built essentially like beds, except that each pipe is in its own stone-filled level trench, usually 24-36 inches. Each trench can be at a different level than the other trenches allowing them to follow the contour of the ground. These are very well suited for sloping ground.

Mound: A leach bed built on a mound of fine to medium-grained sand to elevate it above the seasonal high water table.

Pump Station or Lift Station: A watertight container, usually (but not always) separated from the septic tank, into which effluent flows by gravity and is then ejected by a submersible, electric, effluent pump through a pressure line to the leaching system. Pump stations are often hooked to an alarm to warn a homeowner of a pump failure.

Seasonal High Water Table: The highest elevation that the groundwater reaches within the year (usually in spring). Many states require the bottom of the leaching system to be at least 4 feet above this point.

Septic Tank: A watertight chamber, which all household wastewater enters for settling and anaerobic digestion of greases and solids. Original tanks were made of many materials including, steel and wood. Modern tanks are made of concrete or plastic. All tanks should have a set of baffles, which are critical to their operation. Most tanks have an inspection port at both the inlet and outlet and some have a third hatch in between for pumping access. These lids are required by local code to have risers installed in order to bring them to grade on tanks installed after July 1977. This allows access for regular inspection and maintenance.

Septic tanks should be pumped every 3-5 years. They should not be treated with any additives and should be protected from receiving any of the harmful chemicals used in many homes. This includes large amounts of disinfectants or bleaches, which can kill bacteria in the tank.